The Clean Air Act and regulations promulgated thereunder require that major air pollution sources undergoing construction or modification comply with all applicable Prevention of Significant Deterioration (PSD) provisions and nonattainment area New Source Review requirements. The federal PSD rules govern emission increases in attainment areas for major sources, which are sources with the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act, or 100 tons per year or more if the source is included in one of 28 source categories. In nonattainment areas, the definition of major source is one having at least 100 tons per year potential emissions. A major modification is one resulting in a contemporaneous increase in emissions which exceeds the significance level of one or more pollutants. Any changes in actual emissions within a five-year period are considered to be contemporaneous. In addition, Ohio now has incorporated the PSD and NSR requirements by rule under OAC 3745-31.

Both PSD and nonattainment rules require that certain analyses be performed before a facility can obtain a permit authorizing construction of a new source or major modification to a major source. The principal requirements of the PSD regulations are:

1) Best Available Control Technology (BACT) review - A detailed engineering review must be performed to ensure that BACT is being installed for the pollutants for which the new source is a major source.

2) Ambient Air Quality Review - An analysis must be completed to ensure the continued maintenance of the National Ambient Air Quality Standards (NAAQS) and that any increases in ambient air pollutant concentrations do not exceed the incremental values set pursuant to the Clean Air Act.

For nonattainment areas, the requirements are:

1) Lowest Achievable Emissions Rate (LAER) - New major sources must install controls that represent the lowest emission levels (highest control efficiency) that has been achieved in practice.

2) The emissions from the new major source must be offset by a reduction of existing emissions of the same pollutant by at least the same amount, and a demonstration must be made that the resulting air quality shows a net air quality benefit. This is more completely described in the Emission Offset Interpretative Ruling as found in Appendix S of 40 CFR Part 51.

3) The facility must certify that all major sources owned or operated in the state by the same entity are either in compliance with the existing State Implementation Plan (SIP) or are on an approved schedule resulting in full compliance with the SIP.

For rural ozone nonattainment areas, the requirements are:

1) LAER - New major sources must install controls that represent the lowest emissions levels (highest control efficiency) that has been achieved in practice.

2) The facility must certify that all major sources owned or operated in the state by the same entity are either in compliance with the existing SIP or are on an approved schedule resulting in full compliance with the SIP.

Finally, New Source Performance Standards (NSPS), SIP emission standards and public participation requirements must be followed in all cases.
SITE DESCRIPTION

The facility is in Oregon, Ohio, which is located in Lucas County. This area is classified as attainment or unclassifiable for all of the criteria pollutants, particulate matter less than 10 microns, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds (ozone) and lead.

FACILITY DESCRIPTION

FDS Coke plant (FDS) will be located on property owned by Toledo-Lucas County Port Authority located between West of Otter Creek Road, North of Millard Avenue, East of the Maumee River, and South of Lake Erie.

FDS is designed to consume approximately 2.06 MMT wet coal per year and will produce approximately 1.34 million tons (MMT) of furnace coke per year. The plant is estimated to also produce 57,000 tons of nut coke and 43,000 tons of coke breeze per year.

FDS is comprised of a total of 168 non-recovery coke making ovens constructed in two batteries (A & B). It will be constructed in such a way as to allow the facility to recover heat from the coking process and produce steam to provide to an unnamed entity for producing electric power. The proposed coke plant also includes coal handling, processing and transfer processes, coke quenching, and coke handling, processing, and transfer processes.

ADMINISTRATIVE MODIFICATIONS

FDS’s is overall coal and coke processing parameters are not being changed as part of the requested administrative modifications. The plant will continue to consume a maximum of 2.06 MMT wet coal per year. In addition, based on design operating factors and this wet coal consumption, the plant will continue to produce a maximum of 1.44 million tons (MMT) of pushed coke per year.

FDS will also remain a continuous operation totaling 8,760 hours per year. Furthermore, the Project Site boundaries are generally unchanged from the original application on which the final PTI was issued, with the exception of the incorporation of additional area on the prior western boundary. This additional area is associated with Port of Toledo land that has ongoing material handling operations and available space for FDS coal and coke handling operations.

The requested administrative modifications include changes to specific components of the coke battery design and operation, coal handling, processing and storage, and coke handling, processing, and storage. The primary affected PTI Emission Units include the following:

1. Emission Unit B901 – Coke Battery with Charging and Pushing Operations;
2. Emission Unit F002 – Coal and Coke Storage Piles with Load-in and Load-out;
3. Emission Unit F003: - Coal Handling, Transfer, and Processing; and
4. Emission Unit F004 – Coke Handling, Transfer, and Processing.

The remaining operations and permitted emission units are unchanged from the application with the exception of minor relocations.
PROJECT DESCRIPTION

BATTERY DESIGN CHANGES

The administrative modification of the coke battery includes the reduction in the number of non-recovery ovens from 240 to 168 with the resulting elimination of two batteries. The reduction in coke ovens and associated coke batteries results in a proposed new straight-line battery configuration with the 168 proposed ovens in two batteries of 84 ovens each. Each battery of ovens is further subdivided into banks of 14 ovens. Each pair of connected oven banks, consisting of 28 ovens, then forms an independent process module for operating purposes.

Each of the six process modules (28 coke ovens) will have their waste gas exhausted to the afterburner tunnel routed to a heat-recovery steam generator (HRSG). The afterburner tunnel system routes the hot gases to six HRSGs for cooling prior to SOx and particulate removal followed by venting out a single 200-foot tall main stack. The six HRSGs will also produce steam for sale to nearby customer.

During time periods when a HRSG is undergoing repair or maintenance, the waste gases from the afterburner tunnel will be exhausted thru a pair of emergency by-pass vents located before the HRSG. The emergency by-pass vents are located at the coke oven modules and exhaust 125 feet above ground level. Waste gases exhausted out the by-pass vents are not subject to additional air pollution control for SOx or particulates. FDS will require emergency by-pass vents at each oven module to open for an estimated maximum of 8 days per year during annual HRSG boiler maintenance activities.

The straight-line battery configuration will also be moved approximately 300 feet west and 250 feet south from the battery footprint as included in the original PTI application. The primary air emission points (i.e., coke oven doors, by-pass vents, quench towers, main waste gas stack) in the new layout with the locations continue to be generally aligned with but south of the locations that were evaluated in the ambient air impact analysis in the original PTI application.

COKE OVEN DESIGN AND OPERATION

FDS is proposing to construct 168 non-recovery ovens based on innovative heat recovery design that generally consists of a flat-bed carbonization process that is operated under negative pressure. The ovens use of negative pressure to effectively eliminate air emissions from the oven doors during the coking process. During the coking process the volatile fraction of the coal is driven off within the oven and oxidized at oven temperatures as high as 2,200° F.

Coal is charged onto the coke oven floor at the beginning of the coking cycle. Air is added to the oven crown and partially combusted gases pass into a sole flue system beneath the oven floor where combustion of the gases is continued. The oven waste gases then pass into an afterburner tunnel where any combustion products in the waste gases are further oxidized at a temperature of approximately 1,800° to 2,000° F.

MODIFICATIONS TO COAL CHARGING

In addition to changes in the overall design of the coke battery, FDS is requesting modifications to the coke oven charging process. As a result of the smaller number of coke ovens, FDS will use an average of 67 tons of coal per charge verses 47 tons in the original application. However, charging (and pushing) will be conducted over a
24-hour basis which results in a net reduction in the tons of coal charged per hour.

Based on the 24-hour charging cycle, FDS will have a reduction in the maximum tons of coal charged to the coke battery per hour from 376 to 337. The average hourly coal charging rate is also reduced under the proposed administrative modifications to the PTI from 352.5 to 247 tons.

FDS is requesting a 4.5% increase in the maximum allowable daily coal charge rate to the coke batteries of 5,640 tons to 5,897 tons. This small increase in the daily allowable coal charge will provide FDS with important operational flexibility to accommodate commercial aspects of the project. Based on the revised ambient air modeling results, emission reductions provided by the process improvements requested for the charging and pushing operations more than offset the small increase in the 24-hour charging or pushing emissions. Furthermore, FDS is not seeking an increase in the maximum hourly or annual PTI allowable pollutant emissions rates from any of the battery operations (i.e., Main Stack, Charging, or Pushing) as part of the administrative modification.

As an important manufacturing and environmental improvement to the coke making process, FDS is also requesting changes in coal handling equipment and the plant layout to facilitate the use of an innovative stamping process to compact the coal charged to the coke ovens into a cake. The use of the coal cake will result in the reduction of charging PE and PM10 emissions from the loose coal previously used for charging. The elimination of loose coke during pushing will also reduce PE and PM10 emissions from this operation.

As part of the requested PTI modification for the coke battery charging operation, the pushing and charging machine (PCM) contained in the current PTI will be replaced with a stamped coal carrier and separate pushing machine. The ovens at FDS will be charged on the side with a horizontal stamped block of coal the same approximate width and length of the ovens.

The stamping process relies on the charging coal having a minimum moisture content of 6%. The normal coal moisture for FDS is expected to range from 8 to 10%. Under this moisture condition, the surface of the coal cake becomes sealed by compaction such that dust formation does not occur. The stamped coal charge is transported to an oven using the stamped coal carrier. The carrier is designed as a rail car with side and rear walls to effectively eliminate PE and PM10 during the rail transfer of the coal cake to the coke oven.

The front of the stamp coal carrier will align approximately 1 meter from the coal side door and the gap will be bridged to within a few millimeters by the lowering of the car’s front wall. The stamped coal carrier will then index forward to obtain a close fit between the oven face and the front wall of the carrier.

When positioned in front of the coke oven, the door will be opened and the front wall of the coal carrier will be lowered toward the oven sole. An emission control hood then provides for the capture of potential gas emissions generated during charging that exit the oven. Within a few seconds the coal cake will begin to be moved into the oven while supported on a metal plate (the coke side door remains closed). FDS estimates that the stamped coal charging process into the oven will take approximately 3 minutes during which time the coke oven door will be open. Although the coal-side door is open, the coke oven is under suction during charging from the approximately 0.7 inch WC suction maintained in the waste gas duct. No dampers are installed between the oven chamber and the common waste gas duct.

FDS estimates that the face velocity of air movement into the oven would be approximately 4.6 meters per second (m/s). As the oven is under negative pressure; the coal side door will effectively act as a hood, pulling an estimated 4,200 cfm around the edges of the cake as it passes through the oven door.

Based on this designed induction, when the surface of the stamped coal bed ignites and the coal begins to
devolatize at the entrance of the coke oven, any particulate and volatized charging emissions including VOCs are effectively pulled into the coke oven and drawn into the waste gas collection system. The waste gas then undergoes secondary combustion effectively reducing VOC emissions in the waste gas. The use of a stamped coal charge in combination with the non-recovery oven optimizes the carbonization process resulting in an increase in oven productivity and

promotes even heating of the coal charge providing further assurance regarding the elimination of problems with green coke pushes.

As provided for the PCM in the existing PTI, the coal carrier car will include a collection hood connected to a dust collector for PE and PM10 control. However, based on the reduction in PE and PM10 generation from charging with a coal cake verses loose coal, the induction fan on the collection hood will be reduced to 3,000 cfm.

**COKE PUSHING MODIFICATIONS**

After the stamped coal cake is completely carbonized, a pusher car is positioned in front of the coal charging side oven door, and the quenching flat push hot car (FPHC) is positioned in front of the corresponding coke side oven door. The FPHC is designed to receive coke in a single spot horizontal position as the coke is pushed out of the oven, and without allowing the fall and break-up of the coke cake.

During the pushing operation, the coke carrier of the FPHC car, which is enclosed on all sides, will index forward to provide a close fit between the coke oven face and the car’s front wall. After the coke side door is opened, the car’s front wall will lower toward the oven sole.

After alignment of the pusher and quench cars, the pusher side and coke side doors are opened and the pusher car operator slowly moves the pusher ram into the oven until contact is made with the coke cake. Gradual pressure is applied until the entire stamped coke cake begins to move horizontally from the oven and into the waiting covered quench car.

As with the coal charging process, the coke oven remains under suction during the coke pushing from the approximately 0.7 inch of WC suction maintained in the waste gas duct. FDS estimates that the face velocity of air movement into the oven would be approximately 0.36 meters per second (m/s) during coke pushing. The lower face velocity results from both the pushing and coke side doors being open during the pushing process. Again, the coke side door will effectively act as a hood, pulling approximately 1,000 cfm around the edges of the carbonized cake as it passes through the oven door.

Based on the coke-side door face velocity, FDS estimate that the negative pressure combined with the horizontal pushing into a FPHC will provide additional control efficiency (CE) for VOC emissions and particulate emissions. This is based on reduced VOC and particulate pushing emissions being drawn back into the oven for secondary combustion and waste gas particulate control.

As provided for in the existing PTI, the FPHC will include a collection hood for PM control. However, the collection hood will now be connected to and the pushing emissions controlled by a baghouse dust collector. Based on recent engineering studies, a revised hood design and changes to the operation of the FPHC have been identified that will reduce the high temperatures of the gases collected from the FPHC during pushing and travel to the quench tower to allow for PM control using a baghouse.

FDS believes the requested modification from a multiclone to a baghouse on the FPHC will provide greater assurance of the control of potential PM10 or smaller particulates.
Given changes in the pushing process and the further reduction in PM generation, the induction fan for the baghouse will be changed to 9,500 cfm from the 50,000 cfm provided for the multiclone in the current PTI. As discussed above, the FPHC will continue to be equipped with a cover and controlled with the baghouse as it is transported to the quench tower.

EMISSION UNIT F002 MODIFICATIONS

The administrative modifications to Emission Unit F002 consisting of coke pile including load-in and load-out include overall relocation of the storage and coke barge loading operation to the far western side of the Project Site. These modifications result in a substantial reduction in the estimated ambient air impact of the open coke pile on the surrounding area.

EMISSION UNIT F003 MODIFICATIONS

The administrative modifications to Emission Unit F003 include overall changes to the design of these operations that have resulted a substantial reduction in both the estimated emissions associated with the FDS Coking Plant and the overall potential environmental impact of the project on the surrounding area.

The changes requested by FDS include the full enclosure of the coal piles inside an open span building to be constructed on the western side of the new straight-line battery configuration. The coal storage building will use interior cyclones that vent to the inside to further control PE and PM10 generated within the building.

Based on construction of the coal storage building, the load-in and load-out of all coal stored within the building will also be fully enclosed. A single conveyor will bring coal into the storage building for distribution within the building to various storage piles. For safety purposes selected operations within the building may also have point PM and PM10 collection to a baghouse that will also be used by the coal crushing and blending building. Coal will be loaded-out from the storage building to the attached coal crushing and blending building without exiting the storage building. At this time, coal load-out is expected to use reclaim units and other low PM/PM10 emitting equipment.

The requested administrative modification to these operations results in a decrease in the total number of transfer points. These transfer points include emission points that are not located inside a processing building with cyclone control. Conveyor to conveyor transfer points are located inside transfer towers (i.e., fully enclosed and inside buildings) or partially enclosed.

The railcar unloading operation specified in the PTI and described in the original PTI application remains unchanged with the exception of the inclusion of additional equipment. The coal unloading area will operate on an intermittent basis to empty 10,000 to 15,000 ton coal trains supplying the coke plant. However, based on the elimination of the exterior coal piles a number of coal conveyor transfer points have been eliminated.

As shown in Figure 1 and 3 of the permit application, the requested changes result in coal unloaded from the rail car dumper being conveyed directly to the Storage Building on the west side of the battery using three transfer towers. Coal within the Storage Building is then transferred for processing to the Coal Crushing and Blending Building.

Changes to the coal crushing and blending operation requested as part of the administrative modification include the separation of these two operations into two different buildings. The final blended coal will also be transferred to new day storage consisting of two 1,000-ton Coal Silos for use by the battery.
Finally, the innovative coal cake charging technique will require the addition of a Coal Stamping Station (See Figure 2 of the permit application). The Coal Stamping Station is also located adjacent to the battery and coal is fed to the Stamping Station from the Coal Silos to a Coal Bin associated with the Stamping Station. Potential PE and PM10 emissions from Coal Stamping Station operations will be controlled with a fabric filter baghouse with the same specifications as on the Secondary Coke Screening Building that is being eliminated as part of the requested modifications.

EMISSION UNIT F004 MODIFICATIONS

A preliminary design of the proposed changes to the coke handling and transfer operations at FDS as provided in Figures 1 and 4 of the permit application. The requested administrative modification to these operations results in a decrease in emissions from the transfer permits and coke processing operations included in the PTI. The number of total transfer points has been reduced from 27 included in the PTI (for emission calculation the coke wharf was divided into 2 transfer points) to a revised number of 17 transfer points.

These transfer points include emission points that are not located inside the Coke Screening Building. Conveyor to conveyor transfer points are located inside transfer towers (i.e., fully enclosed and inside buildings) or partially enclosed in most cases. The coke handling, transfer, and processing activities at FDS will continue to operate on a continuous basis.

After coke is pushed, the FPHC will travel to one of two quench towers. The hot coke is then quenched using water and transferred the coke wharf located adjacent to the quench towers. The coke wharf feeds fully enclosed conveyors that eventually transfer coke to the Coke Sizing Tower. The Coke Sizing Building contains both primary and secondary coke crushing and screening that is fully enclosed in a building. As part of the Administrative Modification, we are eliminating the filter baghouse and replacing this PE and PM10 control with cyclones that vent back into the building. The Coke Sizing Building then feeds fully enclosed conveyors that transfer furnace coke to the coke load-out rail hoppers or back into the Storage Building.

As part of the administrative modification, FDS is eliminating the Breeze Sizing Tower. This will also eliminate a baghouse point source of PM and PM10 emissions.

Based on the separation of nut coke and coke breeze in the Coke Sizing Tower fully enclosed conveyors will transfer these materials to load-out hoppers for expected truck or potential rail load-out or back into the Storage Building. The coke load-out operation includes a fully enclosed conveyor that transfers coke to storage hoppers for rail and truck load-out. The coke handling and transfer operations also include a relocated potential barge load-out operation on the west side of the Project Site. The specific volume of coke to rail or barge has not changed from the PTI.

NEW SOURCE REVIEW (NSR)/PSD APPLICABILITY

This facility will generate significant levels of criteria pollutant emissions including SO2, NOx, CO, PM10 and VOC. For PSD purposes, the installation of this project makes FDS coke a major facility. A PSD analysis was required for any increase in emissions of a pollutant exceeding the PSD threshold emissions level, or the significance levels. Non-Attainment New Source Review was not applicable, due to attainment status.

Lucas County was attainment for ozone at the time of issuance of the original PTI. Lucas County is now non-attainment for ozone, however, since this modification does not result in a major increase of VOC and NOx emissions from the original PTI, non-attainment area new source review is not applicable.
FDS is subject to MACT. The facility is subject to 40 CFR Part 63 Subpart CCCCC and 40 CFR Part 63 Subpart L.

Short term emissions from this Project are based upon worst case operating conditions. The annual emissions are based on pounds per hour emissions at average operating conditions at 8760 hours or synthetically limited through a throughput restriction.

**Emissions From the Proposed Modification are as follows:**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Existing Emissions</th>
<th>Proposed Emissions</th>
<th>PSD Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>306</td>
<td>285</td>
<td>100</td>
</tr>
<tr>
<td>NOX</td>
<td>1050</td>
<td>1032</td>
<td>40</td>
</tr>
<tr>
<td>SO2</td>
<td>1071</td>
<td>1297</td>
<td>40</td>
</tr>
<tr>
<td>VOC</td>
<td>94</td>
<td>90</td>
<td>40</td>
</tr>
<tr>
<td>PM(^a)</td>
<td>740</td>
<td>690</td>
<td>25</td>
</tr>
<tr>
<td>PM(_{10})(^a)</td>
<td>283</td>
<td>249</td>
<td>15</td>
</tr>
<tr>
<td>Lead(^a)</td>
<td>0.13</td>
<td>0.20</td>
<td>0.6</td>
</tr>
</tbody>
</table>

\(^a\) Includes fugitive and point emissions.

CO = Carbon Monoxide  
NO\(_X\) = Nitrogen Oxides  
PM\(_{10}\) = Particulate Matter <10 microns  
SO2 = Sulfur Dioxide  
TSP = Total Suspended Particulates  
VOC = Volatile Organic Compound

Based upon the above information, PSD review is required for PM, PM\(_{10}\), NO\(_x\), SO\(_2\), VOC, and CO.

**BACT REVIEW**

As part of the application for any source regulated under the PSD requirements, an analysis must be conducted that demonstrates that Best Available Control Technology will be employed by the source. In this specific case, the BACT analysis was conducted for particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic compound. Each pollutant will be reviewed separately.

The application used a "top-down" approach to determine an appropriate level of control.

The basic steps to be followed are:

- Identify all available potential control options;
- Eliminate technically infeasible options;
- Rank remaining technologies by control effectiveness;
- Evaluate the feasible controls by performance and cost analysis; and
Select BACT

Discussion of NO\textsubscript{x} control options

Nitrogen oxide emissions from coking or coal combustion are primarily nitric oxide, with only a fraction of the NO\textsubscript{x} as nitrogen dioxide (NO\textsubscript{2}). Nitrogen oxide formation results from thermal fixation of atmospheric nitrogen in the combustion flame and from oxidation of nitrogen bound in the coal. Bituminous and sub-bituminous coals usually contain from 0.5 to 2 percent nitrogen, mainly present in aromatic ring structures.

The primary sources of NO\textsubscript{x} emissions are the waste heat gases. Although NO\textsubscript{x} is also present in the emissions from pushing and charging, the concentrations are very dilute (less than 2 ppm). Therefore, a BACT analysis was only performed for the waste gases. NO\textsubscript{x} emission controls are not technically feasible for pushing and charging.

Identification of NO\textsubscript{x} Control Options

The following technology options were identified for controlling NO\textsubscript{x} emissions in the waste gas from the coking process:

1. Low NO\textsubscript{x} burners
2. Selective Non-catalytic Reduction (SNCR)
3. Staged combustion
4. Selective Catalytic Reduction (SCR).

Technical Feasibility of NO\textsubscript{x} Control Options

Low NO\textsubscript{x} Burners

Low NO\textsubscript{x} burners limit NO\textsubscript{x} formation by controlling the stoichiometric and temperature profiles of the combustion process in each burner zone. The burner design of a low NO\textsubscript{x} burner may create (1) a reduced oxygen level in the combustion zone to limit fuel NO\textsubscript{x} formation, (2) a reduced flame temperature that limits thermal NO\textsubscript{x} formation, and/or (3) a reduced residence time at peak temperature, which also limits thermal NO\textsubscript{x} formation.

Low NO\textsubscript{x} burners are not technically feasible for the coking process because the coal is not burned. The volatile fraction of the coal migrates from the coal bed and the gases are burned inside the oven system. The coal bed is converted to a coke bed and remains in the oven.

SNCR

SNCR requires the addition of ammonia or a similar type of selective reductant in the combustion where the temperature is in the 1500\textdegree F to 2000\textdegree F range. In the case of the heat recovery coking process, the required temperature window is available only for a brief period of time during the combustion cycle and may occur anywhere along the coke oven battery. Injection of a reductant into the gas stream that is within the temperature window is not possible, since the location is highly variable. For this reason, SNCR is not technically feasible.
Based on the above discussion, low NO\textsubscript{x} burners and SNCR are considered technically infeasible.

*Staged Combustion*

Staged combustion reduces NO\textsubscript{x} by limiting the oxygen present at temperatures where NO\textsubscript{x} formation is likely and/or suppressing peak temperatures that increase NO\textsubscript{x} formation during gas combustion. Staged combustion is an inherent part of the heat recovery coking process. Compared to the baseline NSPS NO\textsubscript{x} emission standard for coal-fired boilers, staged combustion results in the reduction of NO\textsubscript{x} formation for this process by approximately 85%.

*SCR*

SCR is a post-combustion control technology in which ammonia reacts with NO\textsubscript{x} in the presence of a catalyst to form water and nitrogen. The active surface of the catalyst is usually a noble metal, base metal (titanium or vanadium) oxide, or a zeolite-based material. Most SCR systems operate in the 500° F to 800° F range, which is much lower than the temperature of the coke oven waste gas. An ammonia injection grid is located upstream of the catalyst bed and designed to disperse ammonia throughout the exhaust flow before it enters the catalyst unit. The desired level of NO\textsubscript{x} control is a function of the catalyst volume and ammonia-to-NO\textsubscript{x} ratio. Increasing the ammonia-to-NO\textsubscript{x} ratio for a given catalyst volume can achieve higher NO\textsubscript{x} emission reductions but can also result in undesired levels of unreacted ammonia, which is emitted as ammonia slip.

The performance of SCR is influenced by waste gas temperature, coal sulfur content, ammonia-to-NO\textsubscript{x} ratio, inlet NO\textsubscript{x} concentration, space velocity, and catalyst condition. In the utility industry, SCR has a demonstrated ability to remove 75 to 86% of the NO\textsubscript{x} emissions from low-sulfur firing boilers. SCR is theoretically feasible for the coking process, and a similar NO\textsubscript{x} reduction is expected. However, SCR has not been demonstrated for the coking process.

Therefore, technically feasible NO\textsubscript{x} control technologies are staged combustion and SCR.

**Effectiveness of Technically Feasible NO\textsubscript{x} Control Options**

The following table presents a summary of the technically feasible control options for NO\textsubscript{x} emissions from the coking process.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control option</th>
<th>Control efficiency</th>
<th>Approximate outlet NO\textsubscript{x} concentration (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Staged combustion</td>
<td>85%</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>SCR</td>
<td>80%</td>
<td>69</td>
</tr>
</tbody>
</table>

**Economic Evaluation of NO\textsubscript{x} Control Options**

Staged combustion does not present an economic impact since it is inherent to the heat recovery coking process.

In the preconstruction permit application prepared and submitted for the recently-permitted Haverhill facility,
capital and annualized costs (2003 basis) associated with installation of an SCR system were developed using the procedures presented in Ohio EPA's Guidance for Estimating Capital and Annual Costs of Air Pollution Control Systems (presented in Engineering Guide 46). The cost-effectiveness of an SCR system was determined to be $13,600 to $16,200 per ton of NO\textsubscript{x} removed.

**Determination of BACT for NO\textsubscript{x}**

The use of SCR produces an ammonia emission that would not otherwise occur. In addition, SCR produces a catalyst that must be disposed. Because no significant air pollutant impacts are expected to result after application of the staged combustion technology, no environmental benefit would be realized with the purchase and operation of SCR, which is unproven.

It was demonstrated that, for the heat recovery coking process, SCR is cost prohibitive, additional energy is required, other pollutants (ammonia) may be emitted, and environmental impact could result from the production of a hazardous waste from spent catalyst.

Therefore, a NO\textsubscript{x} emission based on application of staged combustion is considered BACT for NO\textsubscript{x} for FDS.

**Discussion of CO and VOC control options**

*Identification and Effectiveness of CO and VOC Control Options*

*Coking Process*

In the heat recovery coking process, volatile matter is released from the coal bed and combusted within the coke oven. The goal of the heat recovery coking process is complete combustion, and thereby, the release of all the available energy. This approach inherently produces low emissions of CO and VOCs. The gases remain in the sole flues and common tunnel approximately 7 seconds where they are exposed to oxidizing conditions and temperatures from 1,600° to 2,500°F. These operating conditions can be compared to controlled-air incineration, which is considered state-of-the art for destroying organic compounds and CO.

Proposed operations also meet MACT for HAPs. Specific requirements for heat recovery batteries are 0% leaks for doors and daily monitoring of negative pressure in each oven or in a common battery tunnel. The heat recovery ovens proposed for FDS will be operated under negative pressure, which ensure the 0% door leakage standard is met.

Like incineration, the destruction of CO and VOCs is approximately 98% for the coke ovens. This destruction is inherent to the coking process.

*Pushing*

An advantage of the heat recovery coking process is that "green" pushes can be virtually eliminated. Green pushes result when coke is pushed that has not been fully carbonized. The uncarbonized material ignites when the oven is pushed. Standard work practice for heat recovery ovens is for the operator to look in the oven to determine whether carbonization is complete prior to pushing.

The level of VOC emissions historically associated with byproduct coke ovens is reduced by more than 80% with the heat recovery ovens. This same mechanism also ensures minimal CO emissions.

These controls are consistent with the MACT standards for pushing.
**Determination of BACT for CO and VOC**

The inherent CO and VOC emission rates for the heat recovery coking process are considered BACT for CO and VOC for FDS. In addition, CO and VOC emission rates based on standard operator work practices for pushing are considered BACT for FDS.

**Discussion of SO$_2$ control options**

The primary sources of SO$_2$ emissions are the waste heat gases. Although SO$_2$ is also present in the emissions from pushing and charging, the concentrations are very dilute (less than 2 ppm). A BACT analysis was performed for the waste heat gases. No SO$_2$ controls are technically feasible for pushing and charging.

**Identification of SO$_2$ Control Options**

The control technologies available for controlling SO$_2$ emissions from the coking process waste gases include the following:

1. Flue gas desulfurization;
2. Dry scrubber (lime injection and spray dryer/absorber);
3. Wet scrubber;
4. Limestone injection; and
5. Processing low sulfur coal.

The control technologies available for controlling SO$_2$ emissions from the coking process maintenance vents include the following:

**Options using primary control system:**

1. Spray quenches at each HRSG to cool vent gas, then routed to primary control system;
2. Central spray quench and refractory ductwork to cool vent gas, then routed to primary control system; and
3. Larger HRSGs and waste heat tunnel, then routed to primary control system.

**Options using individual stack controls:**

1. Addition of HRSGs;
2. Individual dry scrubbing systems; and
3. Individual wet scrubbing systems.

**Technical Feasibility of SO$_2$ Control Options**

**Coking Process**

*Dry Scrubber (Lime injection and spray dryer/absorber)*
In dry scrubbers, a calcium hydroxide slurry (lime mixed with water) is introduced into a spray dryer tower. The slurry is atomized and injected into the gases, where droplets react with SO\(_2\) as the liquid evaporates. This produces a dry product that is collected in the bottom of the spray dryer and in the particulate removal equipment (i.e., fabric filter). A fabric filter or ESP downstream of the spray dryer removes the PM, ash, CaSO\(_3\), CaSO\(_4\), and unreacted lime. The collected solids are either recycled back through the process or used for other off-site applications.

This system is categorized as a "dry" system, because the end product of the SO\(_2\) conversion reaction is a dry material. Although termed a dry system, this control system uses water for evaporative cooling and for the SO\(_2\) reaction. Unlike a wet scrubbing system, however, no liquid blow-down stream is produced by the dry system. Dry scrubbers can achieve SO\(_2\) removal efficiencies of 90 to 95%.

This control technology (lime injection and spray dryer/absorber) is considered technically feasible for controlling SO\(_2\) emissions from the coking process waste gas stream, and a level of 91% was selected for the BACT analysis.

**Wet Scrubber**

In wet scrubbers, the waste gas enters a large vessel (spray tower or absorber), where it is sprayed with water slurry (approximately 10% lime or limestone). The calcium in the slurry reacts with the SO\(_2\) to form CaSO\(_3\). A portion of the slurry from the reaction tank is pumped into the thickener, where the solids settle before going to a filter for final dewatering to about 50% solids. The CaSO\(_3\) waste product is usually mixed with fly ash (approximately 1:1) and fixative lime (approximately 5%) and typically disposed of in landfills.

Wet scrubbers are usually designed for efficiency of 80 to 90% SO\(_2\) removal. Some disadvantages of wet scrubbing techniques are (1) the cost of neutralizing chemicals, (2) disposal of the liquid stream containing soluble sulfur-containing salts, and (3) energy costs.

This control technology is considered technically feasible for controlling SO\(_2\) emissions from the coking process waste gas stream.

**Limestone Injection**

In the utility industry, SO\(_2\) may be removed by injecting a sorbent (lime, limestone, or dolomite) into the combustion gases, typically above the burners or in the backpass before the air heater. Furnace sorbent injection involves injection of the sorbent into the boiler above the combustion zone through special injection ports. The sorbent decomposes into lime, which reacts in suspension with SO\(_2\) to form CaSO\(_4\). The CaSO\(_4\), unreacted sorbent, and fly ash are removed at the PM control device (either an ESP or fabric filter) downstream from the boiler. In the utility industry, SO\(_2\) removal is 30 to 60% when injected into the combustion zone, but this still must be demonstrated on a large scale.

The heat recovery ovens are not designed for suspension burning. Sorbent injected into the oven would settle onto the coal bed and produce contaminated coke. Similarly, the sole flues and afterburner tunnel are designed for gas combustion, and the sorbent would likely settle out. For these reasons, limestone injection is not technically feasible for the waste gas stream.

**Low-Sulfur Coal**
Emissions of SO$_2$ from the coking process may vary with the nature or origin of the coal. Reducing the sulfur content of the coal proportionally reduces the generation of SO$_2$ in the coking process.

The use of the low-sulfur coal is technically feasible and is an integral part of the heat recovery coking process.

**Maintenance Vents**

The waste gas from each of the maintenance vents can either be treated in the primary dry scrubber system, treated in individual treatment systems, or be vented uncontrolled. However, to allow treatment in the primary dry scrubber, the vented gas must be cooled from approximately 1,800° F to 400° F before it reaches the primary dry scrubber. If the waste gas from the maintenance vents is not cooled before it reaches the primary dry scrubber, it increases the temperature of the combined gas (from the maintenance vents and the main stack) entering the primary dry scrubber by approximately 500° F. This temperature is above the operating range of the primary dry scrubber system.

**Primary Dry Scrubber System following Individual Spray Quenches to Cool Vent Gas**

This option connects each maintenance vent to a spray quench tower to cool the flue gas before it is routed to the primary dry scrubber system.

In this option, water is sprayed into the flue gas stream to cool the gas that usually goes through the HRSG to an operating point of approximately 400° F via evaporative cooling. The cooled gas is then routed to the existing collection duct and combined with the flue gases from the five operating HRSGs for treatment in the primary emission control system.

The SO$_2$ control efficiency for this option is the same as the primary system. Bypassing the HRSGs using individual spray quenches to cool the waste heat gas and route it to the primary system is a technically feasible option for controlling SO$_2$ and PM emissions during maintenance venting.

**Primary Dry Scrubber System following Central Spray Quench and Refractory Lined Collection Duct**

This option differs from the previous option in that all the maintenance vents share a central spray quench tower, and all the ductwork between the individual HRSGs and the spray quench must be refractory lined. At a location near the primary dry scrubber system, water is sprayed into the flue gas stream to cool the gas to an operating point of approximately 400° F via evaporative cooling. The cooled gas is then combined with the flue gases from the five operating HRSGs for treatment in the primary emission control system.

The SO$_2$ control efficiency for this option is the same as the primary system. Bypassing the HRSGs in refractory lined ductwork followed by evaporative cooling in a central spray quench and routing the waste gas to the primary system is a technically feasible option for controlling SO$_2$ and PM emissions during maintenance venting.

**Primary Dry Scrubber System following Larger HRSGs and Waste Heat Tunnel**

This option allows one of the HRSGs to shut down for maintenance while routing waste gases to the remaining five HRSGs. To accommodate the shutdown of HRSGs at the end of the common waste heat tunnel, the
HRSGs in the end sections are double in size (compared to the sizing required for operation of all six HRSGs).

The HRSGs in the interior sections are 50% oversized, since shutdown of the HRSGs in the interior sections of the common waste heat tunnel could have gases routed to each adjoining HRSG. This option requires that the waste heat tunnels be increased in size and changed from a cylindrical design to rectangular design. This tunnel serves as the final combustion chamber for the off-gas generated during the process, and use of a cylindrical design is critical to the mixing inside the tunnel.

A change in the configuration of the waste heat tunnel is therefore a major change in the coking process, with an unknown effect on emission rates of VOCs, NO\textsubscript{x}, and CO. This is a significant design change to the waste heat tunnel and ovens, with a potential risk to affect performance of the heat recovery coking process.

Based on the requirement for a rectangular waste heat tunnel and the need to radically redesign the ovens, this option for larger HRSGs and a larger common tunnel is considered to technically infeasible.

*Primary Dry Scrubber System following Additional HRSGs*

This option incorporates additional HRSGs along the length of the common tunnel to accommodate displaced gas when any one HRSG is taken offline. This option assumes that the HRSGs are the same size as those in the current design and that the waste heat tunnel is the maximum size cylindrical tunnel that may be accommodated by the oven design. The additional HRSGs will be equipped with ducting, dampers, maintenance vent stack, and controls identical to the HRSGs planned for the current design.

The option for adding HRSGs allows the use of the primary emission control system and is considered technically feasible.

*Individual Dry Scrubbing Systems*

This option connects each maintenance vent to an individual dry scrubber system. These individual systems are like the primary dry scrubbing system option but smaller than the primary system. This option is considered technically feasible.

*Individual Wet Scrubbing Systems*

This option connects each maintenance vent to an individual wet scrubber system. Following an evaporative quench, these individual systems are like the primary wet scrubbing system option but smaller than the primary system. This option is considered technically feasible.

Effectiveness of Technically Feasible SO\textsubscript{2} Control Options

*Coking Process*

The top control option available for the coking process provides a 91% reduction of SO\textsubscript{2} when compared to the uncontrolled baseline. The following table summarizes the technically feasible SO\textsubscript{2} control options for the coking process waste gas.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control option</th>
<th>Control efficiency</th>
</tr>
</thead>
</table>


Outlet SO\textsubscript{2} emissions (lb/ton coal)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control option</th>
<th>Control efficiency</th>
<th>Outlet SO\textsubscript{2} emissions (lb/ton coal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Limestone injection and spray dryer/absorber (dry scrubber)</td>
<td>91%</td>
<td>0.99</td>
</tr>
<tr>
<td>2</td>
<td>Wet scrubber</td>
<td>90%</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>Uncontrolled baseline (use of low-sulfur coal)</td>
<td>--</td>
<td>11</td>
</tr>
</tbody>
</table>

**Maintenance Vents**

The top control option available for the maintenance vents provides a 91% reduction of SO\textsubscript{2} when compared to the uncontrolled baseline. The following table summarizes the technically feasible SO\textsubscript{2} control options for the maintenance vents.

**Economic Evaluation of SO\textsubscript{2} Control Options**

**Coking Process**

The top two SO\textsubscript{2} controls for the coking process present similar removal efficiencies, however, the dry scrubber system is the preferred option, due to its manageable waste stream. The dry scrubber system will be installed at FDS, and it is the top control technology.

Since the most effective system will be installed at FDS, it unnecessary to develop capital and annualized costs to demonstrate that a dry scrubber system is cost-effective. In addition, no costs are presented for the use of low-sulfur coal since it is inherent to the coking process.

**Maintenance Vents**

The capital and annualized costs (2003 basis) for all five technically feasible SO\textsubscript{2} control options for the maintenance vents were developed. Those cost estimates were developed based on comparable vent gas properties at the proposed FDS, which are 52,000 dscfm and 215 lb SO\textsubscript{2}/hr.

Based on the annualized costs, the cost-effectiveness of the technically feasible control options for the
maintenance vents range from approximately $12,000 to $80,000/ton of SO₂ removed.

The following table summarizes the cost-effectiveness of SO₂ control options for maintenance vents at FDS.

<table>
<thead>
<tr>
<th>Control option</th>
<th>Control efficiency</th>
<th>Cost-effectiveness ($/ton SO₂ removed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Options using primary control system</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual spray quenches</td>
<td>91%</td>
<td>$12,022</td>
</tr>
<tr>
<td>Central spray quench</td>
<td>91%</td>
<td>$12,622</td>
</tr>
<tr>
<td>Addition of HRSGs</td>
<td>91%</td>
<td>$29,272</td>
</tr>
<tr>
<td><strong>Options using individual maintenance vent controls</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone injection and spray dryer/absorber (dry scrubber)</td>
<td>91%</td>
<td>$42,926</td>
</tr>
<tr>
<td>Wet scrubber</td>
<td>90%</td>
<td>$79,673</td>
</tr>
</tbody>
</table>

**Determination of BACT for SO₂**

*Coking Process*

A dry scrubber system, the top option, was selected as BACT for control of SO₂ and PM from the coking process waste gas. FDS will also use low-sulfur coal (i.e., coal containing less than 1.3% sulfur by weight).

**Maintenance Vents**

With cost-effectiveness of $12,000 to $80,000/ton of SO₂ removed, all options for controlling emissions from maintenance venting are cost prohibitive. These options also have additional energy impacts, and in the case of wet scrubbing, environmental impacts. Therefore, all add-on equipment options to control emissions from venting during the 8 days of maintenance for each HRSG are rejected.

**BACT for controlling SO₂ and PM emissions from venting are:**

1. Use low-sulfur coal;
2. Minimize venting by bringing only one HRSG off-line at a time; and
3. Limit venting to 8 days/year per HRSG.

**DISCUSSION OF PM₁₀ CONTROL OPTIONS**

Particulate matter (PM₁₀) controls were evaluated in this BACT analysis for the coking process, pushing, charging, quenching, and material handling activities. Material handling activities include coal and coke crushing and screening, roadways, and several miscellaneous sources such as coal unloading, coal storage piles, and coal and coke transfer, which combined account for less than 15% of the particulate emissions. Sweeping and wetting will be used to reduce emissions from roadways, and a BACT analysis will not be performed for roadways and these miscellaneous sources.

**Identification and Effectiveness of PM₁₀ Control Options**
Coking Process

PM controls for the coking process were discussed in SO\(_2\) controls, as they are inherently part of the SO\(_2\) controls determined to be BACT for the coking process.

Pushing, Charging, and Crushing and Screening Operations

The principal control techniques for PM emissions associated with the crushing and screening sources are the application of capture and control devices. Fabric filtration has been widely applied to coal material handling emission sources and consists of a number of filtering elements along with a bag cleaning system.

The system is contained in a main shell structure and incorporates dust hoppers. Collection efficiencies of fabric filters can be as high as 99.9%. Variability in overall control efficiencies associated with fabric filters is due to the efficiency of the capture device (e.g., hood) used to route the air stream to the fabric filter.

Electrostatic precipitator (ESP) technology offers a control efficiency that is comparable to fabric filters. ESP is a proven technology for a variety of coal combustion sources. Because of their modular design, ESPs, like fabric filters, can be applied to a wide range of system sizes. The operating parameters that influence ESP performance include fly ash mass loading, particle size distribution, fly ash electrical resistivity, and precipitator voltage and current. Data for ESPs applied to coal-fired sources show fractional collection efficiencies greater than 99% for fine (less than 0.1 micrometer) and coarse particles (greater than 10 micrometers). These data show a reduction in collection efficiency for particle diameters between 0.1 and 10 micrometers.

FDS has proposed installation of cyclones vented indoors as BACT. FDS estimates that the overall control efficiency using cyclones vented indoors will be 98%.

Quenching

Coke quenching entrains PM from breakup of the hot coke when it is cooled with water. The PM is carried up the quench tower by the velocity of the steam plume. In addition, dissolved solids from the quench water may become entrained in the steam plume rising from the tower. The typical control is to install baffles in the quench tower to reduce these emissions.

The towers contain two rows of baffles. Another control is to use clean water (total dissolved solids must not exceed 1,100 mg/liter) to quench the coke. These controls are consistent with the MACT standards, and the control range for these activities is 50 to 90%. A control level of 70% has been assumed for this analysis.

Maintenance Vents

The same options evaluated to control SO\(_2\) emissions during maintenance venting also reduce PM emissions. However, since PM emissions during venting are about five times less than SO\(_2\) emissions (approximately 60 tons PM/year and approximately 300 tons SO\(_2\)/year), the cost of control per ton of pollutant is approximately five times higher. Since the additional controls were cost prohibitive for SO\(_2\), the PM/PM\(_{10}\) controls are also cost prohibitive.

Determination of BACT for PM\(_{10}\)
The following table presents a summary of the BACT selections for PM emissions.

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>Control Technology</th>
<th>Control Level</th>
<th>Expected Emission Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coking Process</td>
<td>Fabric filter on waste gas stream</td>
<td>99%</td>
<td>0.008 gr/dscf</td>
</tr>
<tr>
<td>Coking Process Maintenance Vents</td>
<td>Combustion optimization</td>
<td>Baseline</td>
<td></td>
</tr>
<tr>
<td>Charging</td>
<td>Oven negative pressure and fabric filter with traveling hood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushing</td>
<td>Oven negative pressure with flat bed pushing and fabric filter with traveling hood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quenching</td>
<td>Baffles and clean water</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>Crushing/Screening Operation</td>
<td>Fully Enclosed Building + Cyclone</td>
<td>98%</td>
<td></td>
</tr>
<tr>
<td>Rail Car Coal Unloading</td>
<td>FE(^{a})+Inside</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>Coal Conveying</td>
<td>FE or FE+Inside</td>
<td>85-95%</td>
<td></td>
</tr>
<tr>
<td>Coal Storage Pile and Loading</td>
<td>Minimum Drop, Wet, or Minimum Drop/Wet</td>
<td>50-75%</td>
<td></td>
</tr>
<tr>
<td>Coke Pile and Loading</td>
<td>PE(^{b}) or Wet or PE/Chute</td>
<td>50-85%</td>
<td></td>
</tr>
<tr>
<td>Coke Yard Conveying</td>
<td>FE+Inside, PE+Inside, or PE</td>
<td>70-95%</td>
<td></td>
</tr>
<tr>
<td>Coke Breeze and Nut Coke Storage and Loading</td>
<td>PE, FE Hopper, or PE/Chute</td>
<td>70-99%</td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\) FE – Fully enclosed  
\(^{b}\) PE – Partially enclosed

**SUMMARY OF BACT EVALUATIONS FOR FDS:**

The following table summarizes the BACT evaluations for FDS.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Unit</th>
<th>BACT Determination</th>
<th>Emission Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO(_2)</td>
<td>Waste gas from coking process</td>
<td>Lime spray dryer</td>
<td>0.99 lb/ton coal</td>
</tr>
</tbody>
</table>
|           | Waste gas from maintenance venting | Low sulfur coal  
                                    | Combustion optimization  
<pre><code>                                | Limit annual venting to 8 days/HRSG | 11 lb/ton coal |
</code></pre>
<p>| NO(_x)  | Waste gas from coking process   | Staged combustion                                         | 1.0 lb/ton coal  |
|           | Waste gas from maintenance venting | Staged combustion | 1.0 lb/ton coal |</p>
<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Period</th>
<th>Predicted Concentration</th>
<th>Monitoring De minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>Annual</td>
<td>2.5 ug/m³</td>
<td>14 ug/m³</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>24-hour</td>
<td>21.2 ug/m³</td>
<td>10 ug/m³</td>
</tr>
<tr>
<td>SO₂</td>
<td>24-hour</td>
<td>48.7 ug/m³</td>
<td>13 ug/m³</td>
</tr>
<tr>
<td>CO</td>
<td>8-hour</td>
<td>484 ug/m³</td>
<td>575 ug/m³</td>
</tr>
</tbody>
</table>

Potential impacts for PM₁₀ and SO₂ exceeded the PSD monitoring de minimus concentration. The Ohio EPA has provided data from monitoring sites 26-163-0019 (NOx), 39-095-0024 (PM₁₀), 39-095-0024 (SO₂), and 39-113-0028 (CO) provide conservative estimates of the unmodeled source impact for the

respective pollutants within the ambient air quality modeling analysis and represent acceptable substitutes for the pre-construction monitoring requirements. Local ozone monitoring data are also available (39-095-0024 and 39-095-0081).

MODELING

Air quality dispersion modeling was conducted to assess the effect of this modification on the national ambient air quality standards (NAAQS) and PSD increments. ISCST3 (version 02035) was used in the regulatory default, urban dispersion mode. Five years of meteorological data (1985-1987, 1990 and 1991) from Toledo (94830) surface and Flint, MI (14826) upper were used. Building downwash from nearby structures was incorporated into the ISCST3 estimates.

Predicted impacts of NOx, PM$_{10}$ and SO$_2$ were above their corresponding PSD significant impact increments so additional modeling to demonstrate protection of both the NAAQS and PSD increments was required. Predicted CO concentrations were below the PSD significant impact increments so no further CO modeling was performed.

INCREMENT

All areas surrounding the FDS Coke facility are Class II PSD areas. It is the Ohio EPA policy that no individual project consumes more than 50% of the available PSD increment. The following is the summary of the impact of increment consuming sources (peak annual, PM$_{10}$ 6th high 24-hour concentration over five years, SO$_2$ 2nd high 3-hour and 24-hour concentrations):

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Period</th>
<th>Project Concentration</th>
<th>PSD Increment Concentration</th>
<th>Percent Increment Consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>Annual</td>
<td>2.5</td>
<td>25</td>
<td>10.0 %</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>24-hour</td>
<td>21.2</td>
<td>30</td>
<td>70.7 %</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>3.6</td>
<td>17</td>
<td>21.2 %</td>
</tr>
<tr>
<td>SO$_2$</td>
<td>3-hour</td>
<td>126</td>
<td>512</td>
<td>24.6 %</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>48.7</td>
<td>91</td>
<td>53.5 %</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>4.9</td>
<td>20</td>
<td>24.5 %</td>
</tr>
</tbody>
</table>

Predicted PM$_{10}$ and SO$_2$ 24-hour PSD increment impacts exceed ½ of the available increment. Although impacts from the facility exceed Ohio EPA's policy which provides for future growth by limiting increment consumption, the areal extent of the receptors exceeding ½ the SO$_2$, 24-hour PSD increment is limited to the property adjacent to the proposed facility. Ohio EPA initially required the applicant to lower impacts by either reducing emission rates or modifying the source or facility layout. The results of this analysis indicate lower constraining impacts which are below 75 ug/m3 and provide additional assurance that future growth in the area will not be constrained.

NAAQS

Sources at the proposed facility, existing sources above the PSD significant rates within the FDS Coke
significant impact area (SIA) and sources greater than 100 tons/year outside of the SIA are modeled to
determine the combined impact relative to the NAAQS. A background value is added to account for
minor sources not explicitly included in the modeling.

**NAAQS Modeling Results (all concentrations are in ug/m3)**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Period*</th>
<th>Modeled</th>
<th>Background</th>
<th>Total</th>
<th>NAAQS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx***</td>
<td>Annual</td>
<td>31.6</td>
<td>35.7</td>
<td>72.6</td>
<td>100</td>
</tr>
<tr>
<td>PM$_{10}$**</td>
<td>24-hour</td>
<td>98.1</td>
<td>76.0</td>
<td>174.1</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>11.9</td>
<td>24.0</td>
<td>35.9</td>
<td>50</td>
</tr>
<tr>
<td>SO2</td>
<td>3-hour</td>
<td>1,137</td>
<td>144.1</td>
<td>1281.1</td>
<td>1300</td>
</tr>
<tr>
<td></td>
<td>24-hour</td>
<td>490</td>
<td>44.5</td>
<td>534.5</td>
<td>365</td>
</tr>
<tr>
<td></td>
<td>Annual</td>
<td>43.2</td>
<td>12.1</td>
<td>55.3</td>
<td>80</td>
</tr>
</tbody>
</table>

* Annual averaging periods present the highest concentrations, and short-term averaging periods present
the highest 2nd high concentrations.

** Modeling for PM$_{10}$ and SO2 identified modeled violations to which FDS Coke has demonstrated
insignificant impact. A nearby facility, Kraft Flour Mill, has been identified by Ohio EPA as the sole
contributor to the modeled PM$_{10}$ violations. Kraft will requested to verify the inventory and the modeled
results and, if necessary, to submit revised modeling demonstrating attainment of the NAAQS. Any
emission reductions on the part of Kraft will be incorporated in their future operating permits. A facility in
Michigan has been identified by Ohio EPA as the sole contributor to the modeled SO2 violations.

*** NOx modeling results are from the initial submittal. The downsizing of the revised proposed facility
and the movement of the footprint of the proposed facility closer to the western fenceline and the
placement of the some PM$_{10}$ materials handling transfer points prompted Ohio EPA to request revised
modeling for the two pollutants (PM$_{10}$ and SO2) which had presented initial facility impacts closer to
specific modeling goals (specifically, PSD increments).

**SECONDARY IMPACT ANALYSIS**

FDS Coke Toledo has demonstrated that the predicted pollutant concentrations throughout the study area
are below the secondary NAAQS thresholds. The secondary NAAQS are designed to limit the amount of
pollutants in the ambient air to levels below those which could have an adverse impact on human welfare,
soils and vegetation. The modeling analyses demonstrate that no significant impacts on human welfare,
soils or vegetation will occur from the proposed modification.

Soil and Vegetation: EPA Air Quality Criteria documents were reviewed for information on pollutants
and adverse effects on the type of vegetation and soils in the area. No adverse impact upon soils or
vegetation is expected. The modeled concentrations are below the primary and secondary NAAQS limits.

Visibility: The FDS Coke Toledo facility is located nearly 300 kilometers from the closest class I area.
Primary or secondary pollutants associated with this project are not anticipated to affect local or class I
visibility.

**TOXICS ANALYSIS**
The Ohio Air Toxics Policy requires evaluation of increases in air toxics above the one ton/year threshold. Emissions rates are modeled to determine whether they exceed the Maximum Acceptable Ground Level Concentration (MAGLC) which is defined under the Review of New Sources of Toxic Air Pollutants. The MAGLC applies to those toxic pollutants which have a Threshold Limit Value in the Association of American Congress of Governmental and Industrial Hygienists handbook and is not subject to a MACT or other federal requirement. Impacts of toxic pollutants subject to the modeling review met the MAGLC.

CONCLUSION

Based upon the review of the permit to install application and the supporting documentation provided by the applicant, the Ohio EPA staff has determined the installation will comply with all applicable State and Federal environmental regulations and that the requirements for BACT are satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to the FDS Coke facility for the proposed modification as described in the PTI # 04-01360 permit recommendation.
RE: DRAFT PERMIT TO INSTALL MODIFICATION  
LUCAS COUNTY 
Application No: 04-01360  
Fac ID: 0448020084  
DATE: 5/10/2005

FDS Coke Plant, L.L.C.  
Francis Lyons  
191 N Wacker Drive, Ste 3700  
Chicago, IL 60606-1698

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of $3825 will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA  TDES  Toledo Met Area Council of Govs  IN  MI
Public notice is hereby given that the Ohio Environmental Protection Agency (EPA) has issued, on May 10, 2005, a revised draft action of the existing permit-to-install (PTI) application number 04-01360 to the FDS Coke (FDS) plant located in Oregon, Lucas County, Ohio. A number of changes have been made to the original permit, which was approved in June 2004.

FDS appealed the final permit to Ohio’s Environmental Review Appeals Commission last year. The changes in the draft permit are the result of negotiations between the FDS and the Ohio EPA to resolve the issues raised in the appeal, and are a result of design improvements proposed by FDS.

FDS has proposed to reduce the number of coke ovens from 248 ovens configured into four batteries to 168 ovens configured into two batteries. Under this new configuration, the capacity of the plant would remain the same at 1.44 million tons of coke per year because the reconfigured batteries are slight larger than previously proposed.

All of the other changes in the draft permit result in reductions in most air emissions, including particulate matter, nitrogen oxide, carbon monoxide and volatile organic compounds. However, there would be emission increases in sulfur dioxide, lead and hazardous air pollutants due to limited bypassing allowed in the proposed permit. The mercury emission limit is proposed to remain the same.

The existing and the proposed emissions are in tons per year:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Existing Emissions</th>
<th>Proposed Emissions</th>
<th>PSD Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>306</td>
<td>285</td>
<td>100</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>1050</td>
<td>1032</td>
<td>40</td>
</tr>
<tr>
<td>SO\textsubscript{2}</td>
<td>1071</td>
<td>1297</td>
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<td>VOC</td>
<td>94</td>
<td>90</td>
<td>40</td>
</tr>
<tr>
<td>PM\textsuperscript{a}</td>
<td>740</td>
<td>690</td>
<td>25</td>
</tr>
<tr>
<td>PM\textsubscript{10}\textsuperscript{a}</td>
<td>283</td>
<td>249</td>
<td>15</td>
</tr>
<tr>
<td>Lead\textsuperscript{a}</td>
<td>0.13</td>
<td>0.20</td>
<td>0.6</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Includes fugitive and point emissions.

This facility is subject to the applicable attainment provisions of the Ohio EPA PTI requirements (OAC 3745-31).

The proposed project exceeds the prevention of significant deterioration (PSD) significant emission rates for CO, NO\textsubscript{x}, PM\textsubscript{10} and SO\textsubscript{2}. The project will have an insignificant impact for CO, so a full NAAQS modeling analysis was not required. The remaining pollutants did have impacts above the significant impact levels and were further modeled to determine the impact of the project and other sources on the NAAQS and the PSD increments. The facility was modeled both under normal operating conditions with pollution controls in operation and under planned boiler outages with some coke oven emissions exiting through bypass vents. Under all conditions, the worst case facility impacts were as follows. SO\textsubscript{2} 24-hour increments were predicted to consume 54 % of the available PSD increment. The PM\textsubscript{10} impacts exceeded 1/2 the PSD increment (71%) over a limited area near the facility. These limited modeled impacts above 1/2 of the increment are not
expected to limit new source growth to facilities other than FDS Coke. The NOx modeled impacts did not exceed one-half the PSD increments even under venting conditions. Based on this analysis the project complies with the increment consumption requirements.

A public hearing on the draft air permit is scheduled for 7:00 p.m., Tuesday, June 14, 2005, at Clay High School, 5665 Seaman Road, Oregon, OH 43616. A presiding officer will be present and may limit oral testimony to ensure that all parties are heard.

All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments must be received by Ohio EPA/Toledo Division of Environmental Services by June 20, 2005. Comments received after June 20, 2005 may not be considered to be a part of the official record. Written comments may be submitted at the hearing or sent to Matt Stanfield, Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio, 43602. Fax number: (419) 936-3959.

Further information concerning this application, which is available for public inspection, may be secured from Matt Stanfield, Toledo Division of Environmental Services at the above address during normal business hours. Telephone number: (419) 936-3015. A copy of the application and draft permit will be available for review at the Oregon Branch of the Toledo-Lucas County Public Library, 3340 Dustin Road, Oregon. An electronic copy of the permit can be obtained directly by accessing the 2005 issued permits link on the following web page:

http://www.epa.state.oh.us/dapc/pti_issued/pti.html
DRAFT MODIFICATION OF PERMIT TO INSTALL 04-01360

Application Number: 04-01360
Facility ID: 0448020084
Permit Fee: To be entered upon final issuance
Name of Facility: FDS Coke Plant, L.L.C.
Person to Contact: Francis Lyons
Address: 191 N Wacker Drive, Ste 3700
Chicago, IL 606061698

Location of proposed air contaminant source(s) [emissions unit(s)]:
Millard and Otter Creek Rd
Oregon, Ohio

Description of proposed emissions unit(s):
Modification of coke oven battery configuration, storage piles, and material handling.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

________________________________________
Director
Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

   a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

      i. The date, place (as defined in the permit), and time of sampling or measurements.

      ii. The date(s) analyses were performed.

      iii. The company or entity that performed the analyses.

      iv. The analytical techniques or methods used.

      v. The results of such analyses.

      vi. The operating conditions existing at the time of sampling or measurement.

   b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

   c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

      i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

      ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or
local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. (“Act”), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.
8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

   a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

   b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally
Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Tons Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>690</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>249</td>
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<tr>
<td>SO₂</td>
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<td>HAPs</td>
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<tr>
<td>Hg</td>
<td>0.018</td>
</tr>
</tbody>
</table>
Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

Subpart A—General Provisions

1. 40 CFR 63.1 Applicability.

40 CFR 63.1(a)
   (a) General.

40 CFR 63.1(a)(1)
   (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.

40 CFR 63.1(a)(2)
   (2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

40 CFR 63.1(a)(3)
   (3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

40 CFR 63.1(a)(4)
   (4) (i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

40 CFR 63.1(a)(4)(ii)
   (ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

40 CFR 63.1(a)(4)(iii)
   (iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

40 CFR 63.1(a)(5)
   (5) [Reserved]

40 CFR 63.1(a)(6)
   (6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and

40 CFR 63.1(a)(7)
   (7) [Reserved]

40 CFR 63.1(a)(8)
   (8) [Reserved]

40 CFR 63.1(a)(9)
   (9) [Reserved]

40 CFR 63.1(a)(10)
   (10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

40 CFR 63.1(a)(11)
   (11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

40 CFR 63.1(a)(12)
   (12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).

40 CFR 63.1(a)(13)
   (13) [Removed]

40 CFR 63.1(a)(14)
   (14) [Removed]

40 CFR 63.1(b)
   (b) Initial applicability determination for this part.

40 CFR 63.1(b)(1)
   (1) The provisions of this part apply to the owner or operator of any stationary source that—

40 CFR 63.1(b)(1)(i)
   (i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

40 CFR 63.1(b)(1)(ii)
   (ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

40 CFR 63.1(b)(2)
   (2) [Reserved]
40 CFR 63.1(b)(3)

(3) An owner or operator of a stationary source who is in the relevant source category and who
determines that the source is not subject to a relevant standard or other requirement established under this
part must keep a record as specified in §63.10(b)(3).

40 CFR 63.1(c)

(c) Applicability of this part after a relevant standard has been set under this part.

40 CFR 63.1(c)(1)

1) If a relevant standard has been established under this part, the owner or operator of an affected source
must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this
section.

40 CFR 63.1(c)(2)

2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the
owner or operator of an affected source may be required to obtain a title V permit from a permitting authority
in the State in which the source is located. Emission standards promulgated in this part for area sources
pursuant to section 112(c)(3) of the Act will specify whether—

40 CFR 63.1(c)(2)(i)

(i) States will have the option to exclude area sources affected by that standard from the requirement to
obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the
permitting requirement);

40 CFR 63.1(c)(2)(ii)

(ii) States will have the option to defer permitting of area sources in that category until the
Administrator takes rulemaking action to determine applicability of the permitting requirements; or

40 CFR 63.1(c)(2)(iii)

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by
such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain
a title V permit without any deferral.

40 CFR 63.1(c)(3)

3) [Reserved]

40 CFR 63.1(c)(4)

4) [Reserved]

40 CFR 63.1(c)(5)

5) If an area source that otherwise would be subject to an emission standard or other requirement
established under this part if it were a major source subsequently increases its emissions of hazardous air
pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is
subject to the emission standard or other requirement, such source also shall be subject to the notification
requirements of this subpart.

40 CFR 63.1(d)

(d) [Reserved]

40 CFR 63.1(e)

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is
applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act,
and the requirements under the section 112(j) emission limitation are substantially as effective as the
promulgated emission standard, the owner or operator may request the permitting authority to revise the
source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the
promulgated emission standard. The process by which the permitting authority determines whether the section
112(j) emission limitation is substantially as effective as the promulgated emission standard must include,
consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review
(including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative
determination by the permitting authority constitutes final action for purposes of review and appeal under the
applicable title V operating permit program.

2. 40 CFR 63.2 Definitions.
The terms used in this part are defined in the Act or in this section as follows:
Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an
early reduction of hazardous air pollutants.
Administrator means the Administrator of the United States Environmental Protection Agency or his or her
authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this
part).
Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a
single contiguous area and under common control that is included in a section 112(c) source category or
subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section
112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a
different definition is warranted based on a published justification as to why this definition would result in
significant administrative, practical, or implementation problems and why the different definition would resolve
those problems. The term "affected source," as used in this part, is separate and distinct from any other use of
that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined
differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This
definition of "affected source," and the procedures for adopting an alternative definition of "affected source,"
shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator
after June 30, 2002.
Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the
Act by the Administrator or by a State with an approved permit program.
Alternative emission standard means an alternative means of emission limitation that, after notice and
opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's
satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in
emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational
emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.
Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test
method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in
Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used
in place of a test method specified in this part.
Approved permit program means a State permit program approved by the Administrator as meeting the
requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title
Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance plan [Removed]

Compliance schedule means: (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
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(1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

_Emission standard_ means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

_Emissions averaging_ is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

_EPA_ means the United States Environmental Protection Agency.

_Equivalent emission limitation_ means any maximum achievable control technology emission limitation or requirements which are applicable to major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

_Excess emissions and continuous monitoring system performance report_ is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

_Existing source_ means any affected source that is not a new source.

_Federally enforceable_ means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are
(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise "federally enforceable";

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

**Fixed capital cost** means the capital needed to provide all the depreciable components of an existing source. **Fugitive emissions** means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source. **Hazardous air pollutant** means any air pollutant listed in or pursuant to section 112(b) of the Act. **Issuance** of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit. **Lesser quantity** [Removed]

**Major source** means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence. **Malfunction** means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. **Monitoring** means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance—the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques—the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making
(3) Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;
(2) Cost effectiveness of controlling individual equipment;
(3) Flexibility to accommodate common control strategies;
(4) Cost/benefits of emissions averaging;
(5) Incentives for pollution prevention;
(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
(7) Feasibility and cost of monitoring; and
(8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

One-hour period, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to

**Permit program** means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

**Permit revision** means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

**Permitting authority** means: (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or (2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

**Potential to emit** means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

**Reconstruction**, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

**Regulation promulgation schedule** means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

**Relevant standard** means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by §63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

**Responsible official** means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:
(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or
(ii) The delegation of authority to such representative is approved in advance by the Administrator.
(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).
(4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Standard conditions means a temperature of 293 K (68°F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source or portion of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:
(1) The provisions of this part and/or
(2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of Appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

3. 40 CFR 63.3 Units and abbreviations.
   Used in this part are abbreviations and symbols of units of measure. These are defined as follows:
   40 CFR 63.3(a)
   (a) System International (SI) units of measure:
       A = ampere
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

g = gram  
Hz = hertz  
J = joule  
°K = degree Kelvin  
kg = kilogram  
l = liter  
m = meter  
m³ = cubic meter  
mg = milligram = 10⁻³ gram  
ml = milliliter = 10⁻³ liter  
mm = millimeter = 10⁻³ meter  
Mg = megagram = 10⁶ gram = metric ton  
MJ = megajoule  
mol = mole  
N = newton  
ng = nanogram = 10⁻⁹ gram  
nm = nanometer = 10⁻⁹ meter  
Pa = pascal  
s = second  
V = volt  
W = watt  
V = ohm  
μg = microgram = 10⁻⁶ gram  
μl = microliter = 10⁻⁶ liter  
40 CFR 63.3(b)  
(b) Other units of measure:  
Btu = British thermal unit  
°C = degree Celsius (centigrade)  
cal = calorie  
cfm = cubic feet per minute  
cc = cubic centimeter  
cu ft = cubic feet  
d = day  
dcf = dry cubic feet  
dcm = dry cubic meter  
dscf = dry cubic feet at standard conditions  
dscm = dry cubic meter at standard conditions  
eq = equivalent  
°F = degree Fahrenheit  
ft = feet  
ft² = square feet  
ft³ = cubic feet  
gal = gallon  
gr = grain
FDS Coke Plant, L.L.C.

PTI Application: 04-01360

Issued: To be entered upon final issuance

g-eq = gram equivalent

g-mole = gram mole

hr = hour

in. = inch

in. H2O = inches of water

K = 1,000

kcal = kilocalorie

lb = pound

lpm = liter per minute

meq = milliequivalent

min = minute

MW = molecular weight

oz = ounces

ppb = parts per billion

ppbw = parts per billion by weight

ppbv = parts per billion by volume

ppm = parts per million

ppmw = parts per million by weight

ppmv = parts per million by volume

psia = pounds per square inch absolute

psig = pounds per square inch gage

°R = degree Rankine

scf = cubic feet at standard conditions

scfh = cubic feet at standard conditions per hour

scm = cubic meter at standard conditions

scmm = cubic meter at standard conditions per minute

sec = second

sq ft = square feet

std = at standard conditions

v/v = volume per volume

yd² = square yards

yr = year

40 CFR 63.3(c)

(c) Miscellaneous:

act = actual

avg = average

I.D. = inside diameter

M = molar

N = normal

O.D. = outside diameter

% = percent
4. 40 CFR 63.4 Prohibited activities and circumvention.

40 CFR 63.4(a)
(a) Prohibited activities.

40 CFR 63.4(a)(1)
(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

40 CFR 63.4(a)(2)
(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

40 CFR 63.4(a)(3)
(3) [Reserved]

40 CFR 63.4(a)(4)
(4) [Reserved]

40 CFR 63.4(a)(5)
(5) [Reserved]

40 CFR 63.4(b)
(b) Circumvention. No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to—

40 CFR 63.4(b)(1)
(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

40 CFR 63.4(b)(2)
(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

40 CFR 63.4(b)(3)
(3) [Removed]

40 CFR 63.4(c)
(c) Fragmentation. Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

5. 40 CFR 63.5 Preconstruction review and notification requirements.

40 CFR 63.5(a)
(a) Applicability.
This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

Requirements for existing, newly constructed, and reconstructed affected sources.

(1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of
affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

40 CFR 63.5(c)
(c) [Reserved]

40 CFR 63.5(d)
(d) Application for approval of construction or reconstruction. The provisions of this paragraph implement section 112(i)(1) of the Act.

40 CFR 63.5(d)(1)
(1) General application requirements.

40 CFR 63.5(d)(1)(i)
(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of §63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

40 CFR 63.5(d)(1)(ii)
(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

40 CFR 63.5(d)(1)(ii)(A)
(A) The applicant's name and address;

40 CFR 63.5(d)(1)(ii)(B)
(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in §63.2 or in the relevant standard;

40 CFR 63.5(d)(1)(ii)(C)
(C) The address (i.e., physical location) or proposed address of the source;

40 CFR 63.5(d)(1)(ii)(D)
(D) An identification of the relevant standard that is the basis of the application;

40 CFR 63.5(d)(1)(ii)(E)
(E) The expected date of the beginning of actual construction or reconstruction;

40 CFR 63.5(d)(1)(ii)(F)
(F) The expected completion date of the construction or reconstruction;

40 CFR 63.5(d)(1)(ii)(G)
(G) [Reserved]

40 CFR 63.5(d)(1)(ii)(H)
(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner
or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

40 CFR 63.5(d)(1)(ii)(I)
  (I) [Reserved]

40 CFR 63.5(d)(1)(ii)(J)
  (J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

40 CFR 63.5(d)(1)(iii)
  (iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in §63.9(h) [see §63.9(h)(5)].

40 CFR 63.5(d)(2)
  (2) Application for approval of construction. Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

40 CFR 63.5(d)(3)
  (3) Application for approval of reconstruction. Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section—

40 CFR 63.5(d)(3)(i)
  (i) A brief description of the affected source and the components that are to be replaced;

40 CFR 63.5(d)(3)(ii)
  (ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

40 CFR 63.5(d)(3)(iii)
  (iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

40 CFR 63.5(d)(3)(iv)
  (iv) The estimated life of the affected source after the replacements; and

40 CFR 63.5(d)(3)(v)
  (v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently
detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

40 CFR 63.5(d)(3)(vi)

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

40 CFR 63.5(d)(4)

(4) Additional information. The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

40 CFR 63.5(e)

(e) Approval of construction or reconstruction.

40 CFR 63.5(e)(1)

(1) (i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

40 CFR 63.5(e)(1)(ii)

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

40 CFR 63.5(e)(1)(ii)(A)

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

40 CFR 63.5(e)(1)(ii)(B)

(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;

40 CFR 63.5(e)(1)(ii)(C)

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

40 CFR 63.5(e)(1)(ii)(D)

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

40 CFR 63.5(e)(2)

(2) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

40 CFR 63.5(e)(2)(ii)

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant
to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

40 CFR 63.5(e)(3)

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with—

40 CFR 63.5(e)(3)(i)

(i) Notice of the information and findings on which the intended denial is based; and

40 CFR 63.5(e)(3)(ii)

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

40 CFR 63.5(e)(4)

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

40 CFR 63.5(e)(5)

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall—

40 CFR 63.5(e)(5)(i)

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

40 CFR 63.5(e)(5)(ii)

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

40 CFR 63.5(f)

(f) Approval of construction or reconstruction based on prior State preconstruction review.

40 CFR 63.5(f)(1)

(1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

40 CFR 63.5(f)(1)(i)

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

40 CFR 63.5(f)(1)(ii)

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

40 CFR 63.5(f)(2)

(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of
this section (see also §63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

6. **40 CFR 63.6 Compliance with standards and maintenance requirements.**

40 CFR 63.6(a)

(a) **Applicability.**

40 CFR 63.6(a)(1)

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with §63.1(a)(4) unless—

40 CFR 63.6(a)(1)(i)

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

40 CFR 63.6(a)(1)(ii)

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

40 CFR 63.6(a)(2)

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

40 CFR 63.6(b)

(b) **Compliance dates for new and reconstructed affected sources.**

40 CFR 63.6(b)(1)

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

40 CFR 63.6(b)(2)

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

40 CFR 63.6(b)(3)

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to sections 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the
relevant emission standard not later than the date 3 years after the effective date if:
40 CFR 63.6(b)(3)(i)
   (i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and
40 CFR 63.6(b)(3)(ii)
   (ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.
40 CFR 63.6(b)(4)
   (4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.
40 CFR 63.6(b)(5)
   (5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with §63.9(d).
40 CFR 63.6(b)(6)
   (6) [Reserved]
40 CFR 63.6(b)(7)
   (7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.
40 CFR 63.6(c)
   (c) Compliance dates for existing sources.
40 CFR 63.6(c)(1)
   (1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.
40 CFR 63.6(c)(2)
   (2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii)of this section, whichever is later.
40 CFR 63.6(c)(3)
   (3) [Reserved]
40 CFR 63.6(c)(4)
40 CFR 63.6(c)(5)

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

40 CFR 63.6(d)

(d) [Reserved]

40 CFR 63.6(e)

(e) Operation and maintenance requirements.

40 CFR 63.6(e)(1)

(1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

40 CFR 63.6(e)(1)(ii)

(ii) Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

40 CFR 63.6(e)(1)(iii)

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

40 CFR 63.6(e)(2)

(2) [Reserved]

40 CFR 63.6(e)(3)

(3) Startup, Shutdown, and Malfunction Plan.

40 CFR 63.6(e)(3)(i)

(i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source
during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—

40 CFR 63.6(e)(3)(i)(A)

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section; 40 CFR 63.6(e)(3)(i)(B)

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and 40 CFR 63.6(e)(3)(i)(C)

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

40 CFR 63.6(e)(3)(ii)

(ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.

40 CFR 63.6(e)(3)(iii)

(iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in §63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).

40 CFR 63.6(e)(3)(iv)

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

40 CFR 63.6(e)(3)(v)

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the
Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(vii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Administrator must request that the owner or operator submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

40 CFR 63.6(e)(3)(vi)

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.

40 CFR 63.6(e)(3)(vii)

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

40 CFR 63.6(e)(3)(vii)(A)

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

40 CFR 63.6(e)(3)(vii)(B)

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

40 CFR 63.6(e)(3)(vii)(C)

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

40 CFR 63.6(e)(3)(vii)(D)

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in §63.2.

40 CFR 63.6(e)(3)(viii)

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or
procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

40 CFR 63.6(e)(3)(ix)

(ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

40 CFR 63.6(f)

(f) Compliance with nonopacity emission standards—

40 CFR 63.6(f)(1)

(1) Applicability. The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

40 CFR 63.6(f)(2)

(2) Methods for determining compliance.

40 CFR 63.6(f)(2)(i)

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.

40 CFR 63.6(f)(2)(ii)

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by
evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.

40 CFR 63.6(f)(2)(iii)

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

40 CFR 63.6(f)(2)(iii)(A)

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

40 CFR 63.6(f)(2)(iii)(B)

(B) The performance test was conducted under representative operating conditions for the source;

40 CFR 63.6(f)(2)(iii)(C)

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and

40 CFR 63.6(f)(2)(iii)(D)

(D) The performance test was appropriately quality-assured, as specified in §63.7(c).

40 CFR 63.6(f)(2)(iv)

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

40 CFR 63.6(f)(2)(v)

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

40 CFR 63.6(f)(3)

Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

40 CFR 63.6(g)

(g) Use of an alternative nonopacity emission standard.

40 CFR 63.6(g)(1)

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any FEDERAL REGISTER notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for
compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

40 CFR 63.6(g)(2)

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in §63.7 and §63.8.

40 CFR 63.6(g)(3)

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

40 CFR 63.6(h)

(h) Compliance with opacity and visible emission standards—

40 CFR 63.6(h)(1)

(1) Applicability. The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

40 CFR 63.6(h)(2)

(2) Methods for determining compliance.

40 CFR 63.6(h)(2)(i)

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

40 CFR 63.6(h)(2)(ii)

(ii) [Reserved]

40 CFR 63.6(h)(2)(iii)

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

40 CFR 63.6(h)(2)(iii)(A)

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;
The opacity or visible emission test was conducted under representative operating conditions for the source;
40 CFR 63.6(h)(2)(iii)(C)

The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e); and
40 CFR 63.6(h)(2)(iii)(D)

The opacity or visible emission test was appropriately quality-assured, as specified in §63.7(c) of this section.
40 CFR 63.6(h)(3)

[Reserved]
40 CFR 63.6(h)(4)

(4) Notification of opacity or visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with §63.9(f), if such observations are required for the source by a relevant standard.
40 CFR 63.6(h)(5)

(5) Conduct of opacity or visible emission observations. When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:
40 CFR 63.6(h)(5)(i)

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in §63.7 unless one of the following conditions applies:
40 CFR 63.6(h)(5)(i)(A)

(A) If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or
40 CFR 63.6(h)(5)(i)(B)

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in Appendix A of part 60 of this chapter.
40 CFR 63.6(h)(5)(ii)

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for
fugitive-type emission sources subject only to an opacity emission standard).  

40 CFR 63.6(h)(5)(iii)  
(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of §63.10(d).  

40 CFR 63.6(h)(5)(iv)  
(iv) [Reserved]  

40 CFR 63.6(h)(5)(v)  
(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.  

40 CFR 63.6(h)(6)  
(6) Availability of records. The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.  

40 CFR 63.6(h)(7)  
(7) Use of a continuous opacity monitoring system.  

40 CFR 63.6(h)(7)(i)  
(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of §63.10(e)(4).  

40 CFR 63.6(h)(7)(ii)  
(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see Appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under §63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under §63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under §63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under §63.7(b) of the date the subsequent performance test is scheduled to begin.  

40 CFR 63.6(h)(7)(iii)  
(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under §63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.  

40 CFR 63.6(h)(7)(iv)  
(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible
for demonstrating that he/she has complied with the performance evaluation requirements of §63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in §63.8(c) and §63.8(d), and that the resulting data have not been altered in any way.

40 CFR 63.6(h)(7)(v)

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in §63.8(c), and met Performance Specification 1 in Appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

40 CFR 63.6(h)(8)

(8) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by §63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

40 CFR 63.6(h)(9)

(9) Adjustment to an opacity emission standard.

40 CFR 63.6(h)(9)(i)

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under §63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

40 CFR 63.6(h)(9)(ii)

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that—

40 CFR 63.6(h)(9)(ii)(A)

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

40 CFR 63.6(h)(9)(ii)(B)

(B) The performance tests were performed under the conditions established by the Administrator; and

40 CFR 63.6(h)(9)(ii)(C)

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

40 CFR 63.6(h)(9)(iii)

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the FEDERAL REGISTER.

40 CFR 63.6(h)(9)(iv)
After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

40 CFR 63.6(i)

(i) *Extension of compliance with emission standards.*

40 CFR 63.6(i)(1)

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

40 CFR 63.6(i)(2)

(2) *Extension of compliance for early reductions and other reductions*—

40 CFR 63.6(i)(2)(i)

(i) *Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

40 CFR 63.6(i)(2)(ii)

(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) [as defined in section 169(3) of the Act] or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

40 CFR 63.6(i)(3)

(3) *Request for extension of compliance.* Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part [except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part].

40 CFR 63.6(i)(4)

(4) (i) (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661),
whichever are applicable.

40 CFR 63.6(i)(4)(i)(B)

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

40 CFR 63.6(i)(4)(i)(C)

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

40 CFR 63.6(i)(4)(ii)

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

40 CFR 63.6(i)(5)

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

40 CFR 63.6(i)(6)

(6) (i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

40 CFR 63.6(i)(6)(i)(A)

(A) A description of the controls to be installed to comply with the standard;
(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

40 CFR 63.6(i)(6)(i)(B)(1)
(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

40 CFR 63.6(i)(6)(i)(B)(2)
(2) The date by which final compliance is to be achieved.

40 CFR 63.6(i)(6)(i)(B)(3)
(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

40 CFR 63.6(i)(6)(i)(B)(4)
(4) The date by which final compliance is to be achieved;

40 CFR 63.6(i)(6)(i)(C)
(C) [Reserved]

40 CFR 63.6(i)(6)(i)(D)
(D) [Reserved]

40 CFR 63.6(i)(6)(ii)
(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

40 CFR 63.6(i)(7)
(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

40 CFR 63.6(i)(8)
(8) Approval of request for extension of compliance. Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

40 CFR 63.6(i)(9)
(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

40 CFR 63.6(i)(10)
(10) The extension will be in writing and will—

40 CFR 63.6(i)(10)(i)
(i) Identify each affected source covered by the extension;

40 CFR 63.6(i)(10)(ii)
(ii) Specify the termination date of the extension;

40 CFR 63.6(i)(10)(iii)
(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

40 CFR 63.6(i)(10)(iv)
(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

40 CFR 63.6(i)(10)(v)
(v) (A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or
40 CFR 63.6(i)(10)(v)(B)

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.
40 CFR 63.6(i)(11)

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.
40 CFR 63.6(i)(12)

(12) (i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.
40 CFR 63.6(i)(12)(ii)

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.
40 CFR 63.6(i)(12)(iii)

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with—
40 CFR 63.6(i)(12)(iii)(A)

(A) Notice of the information and findings on which the intended denial is based; and
40 CFR 63.6(i)(12)(iii)(B)

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.
40 CFR 63.6(i)(12)(iv)

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or
within 30 calendar days after the final date specified for the presentation if no presentation is made.

40 CFR 63.6(i)(13)

(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

40 CFR 63.6(i)(13)(ii)

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

40 CFR 63.6(i)(13)(iii)

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

40 CFR 63.6(i)(13)(iii)(A)

(A) Notice of the information and findings on which the intended denial is based; and

40 CFR 63.6(i)(13)(iii)(B)

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

40 CFR 63.6(i)(13)(iv)

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

40 CFR 63.6(i)(14)

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

40 CFR 63.6(i)(14)(i)

(i) Notice of the reason for termination; and

40 CFR 63.6(i)(14)(ii)

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

40 CFR 63.6(i)(14)(iii)

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date
specified for the presentation if no presentation is made.

40 CFR 63.6(i)(15)
(15) [Reserved]

40 CFR 63.6(i)(16)
(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

40 CFR 63.6(j)
(j) Exemption from compliance with emission standards. The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

7. 40 CFR 63.7 Performance testing requirements.

40 CFR 63.7(a)
(a) Applicability and performance test dates.

40 CFR 63.7(a)(1)
(1) The applicability of this section is set out in §63.1(a)(4).

40 CFR 63.7(a)(2)
(2) If required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

40 CFR 63.7(a)(2)(ix)
(ix) When an emission standard promulgated under this part is more stringent than the standard proposed [see §63.6(b)(3)], the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

40 CFR 63.7(a)(3)
(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

40 CFR 63.7(b)
(b) Notification of performance test.

40 CFR 63.7(b)(1)
(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially
scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

40 CFR 63.7(b)(2)

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

40 CFR 63.7(c)

(c) Quality assurance program.

40 CFR 63.7(c)(1)

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

40 CFR 63.7(c)(2)

(2) (i) Submission of site-specific test plan. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

40 CFR 63.7(c)(2)(ii)

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

40 CFR 63.7(c)(2)(iii)

(iii) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

40 CFR 63.7(c)(2)(iv)

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

40 CFR 63.7(c)(2)(v)

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.
40 CFR 63.7(c)(3)

(3) Approval of site-specific test plan.

40 CFR 63.7(c)(3)(i)

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with—

40 CFR 63.7(c)(3)(i)(A)

(A) Notice of the information and findings on which the intended disapproval is based; and

40 CFR 63.7(c)(3)(i)(B)

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

40 CFR 63.7(c)(3)(ii)

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

40 CFR 63.7(c)(3)(ii)(A)

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i)of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

40 CFR 63.7(c)(3)(ii)(B)

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

40 CFR 63.7(c)(3)(iii)

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

40 CFR 63.7(c)(3)(iii)(A)

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

40 CFR 63.7(c)(3)(iii)(B)

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

40 CFR 63.7(c)(4)
(4) (i) **Performance test method audit program.** The owner or operator must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. Audit materials including cylinder audit gases may be obtained by contacting the appropriate EPA Regional Office or the responsible enforcement authority.

40 CFR 63.7(c)(4)(ii)

(ii) The Administrator will have sole discretion to require any subsequent remedial actions of the owner or operator based on the PA results.

40 CFR 63.7(c)(4)(iii)

(iii) If the Administrator fails to provide required PA materials to an owner or operator of an affected source in time to analyze the PA samples during a performance test, the requirement to conduct a PA under this paragraph shall be waived for such source for that performance test. Waiver under this paragraph of the requirement to conduct a PA for a particular performance test does not constitute a waiver of the requirement to conduct a PA for future required performance tests.

40 CFR 63.7(d)

(d) **Performance testing facilities.** If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

40 CFR 63.7(d)(1)

(1) Sampling ports adequate for test methods applicable to such source. This includes:

40 CFR 63.7(d)(1)(i)

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

40 CFR 63.7(d)(1)(ii)

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

40 CFR 63.7(d)(2)

(2) Safe sampling platform(s);

40 CFR 63.7(d)(3)

(3) Safe access to sampling platform(s);

40 CFR 63.7(d)(4)

(4) Utilities for sampling and testing equipment; and

40 CFR 63.7(d)(5)

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

40 CFR 63.7(e)

(e) **Conduct of performance tests.**

40 CFR 63.7(e)(1)

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under §63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
40 CFR 63.7(e)(2)  
(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61 and 63 of this chapter unless the Administrator—

40 CFR 63.7(e)(2)(i)  
(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

40 CFR 63.7(e)(2)(ii)  
(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

40 CFR 63.7(e)(2)(iii)  
(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

40 CFR 63.7(e)(2)(iv)  
(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

40 CFR 63.7(e)(3)  
(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that—

40 CFR 63.7(e)(3)(i)  
(i) A sample is accidentally lost after the testing team leaves the site; or

40 CFR 63.7(e)(3)(ii)  
(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

40 CFR 63.7(e)(3)(iii)  
(iii) Extreme meteorological conditions occur; or

40 CFR 63.7(e)(3)(iv)  
(iv) Other circumstances occur that are beyond the owner or operator's control.

40 CFR 63.7(e)(4)  
(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

40 CFR 63.7(f)  
(f) Use of an alternative test method—

40 CFR 63.7(f)(1)  
(1) General. Until authorized to use an intermediate or major change or alternative to a test method, the
owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

40 CFR 63.7(f)(2)

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator—

40 CFR 63.7(f)(2)(i)

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

40 CFR 63.7(f)(2)(ii)

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

40 CFR 63.7(f)(2)(iii)

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

40 CFR 63.7(f)(3)

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2)(i) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

40 CFR 63.7(f)(4)

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

40 CFR 63.7(f)(5)

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under §63.7(f).

40 CFR 63.7(f)(6)

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.
40 CFR 63.7(g)

(g) Data analysis, recordkeeping, and reporting.

40 CFR 63.7(g)(1)

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator [see §63.9(i)]. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

40 CFR 63.7(h)

(h) Waiver of performance tests.

40 CFR 63.7(h)(1)

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

40 CFR 63.7(h)(2)

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

40 CFR 63.7(h)(3)

(3) Request to waive a performance test.

40 CFR 63.7(h)(3)(i)

(i) If a request is made for an extension of compliance under §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

40 CFR 63.7(h)(3)(ii)

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least
60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

40 CFR 63.7(h)(3)(iii)

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

40 CFR 63.7(h)(4)

(4) Approval of request to waive performance test. The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she—

40 CFR 63.7(h)(4)(i)

(i) Approves or denies an extension of compliance under §63.6(i)(8); or

40 CFR 63.7(h)(4)(ii)

(ii) Approves or disapproves a site-specific test plan under §63.7(c)(3); or

40 CFR 63.7(h)(4)(iii)

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

40 CFR 63.7(h)(4)(iv)

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

40 CFR 63.7(h)(5)

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

8. 40 CFR 63.8 Monitoring requirements.

40 CFR 63.8(a)

(a) Applicability.

40 CFR 63.8(a)(1)

(1) The applicability of this section is set out in §63.1(a)(4).

40 CFR 63.8(a)(2)

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

40 CFR 63.8(a)(3)

(3) [Reserved]

40 CFR 63.8(a)(4)

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in §63.11.

40 CFR 63.8(b)

(b) Conduct of monitoring.

40 CFR 63.8(b)(1)
Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator—
40 CFR 63.8(b)(1)(i)
   (i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see §63.90(a) for definition); or
40 CFR 63.8(b)(1)(ii)
   (ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see §63.90(a) for definition).
40 CFR 63.8(b)(1)(iii)
   (iii) Owners or operators with flares subject to §63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.
40 CFR 63.8(b)(2)
   (2) (i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.
40 CFR 63.8(b)(2)(ii)
   (ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is—
40 CFR 63.8(b)(2)(ii)(A)
   (A) Approved by the Administrator; or
40 CFR 63.8(b)(2)(ii)(B)
   (B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).
40 CFR 63.8(b)(3)
   (3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.
40 CFR 63.8(c)
   (c) Operation and maintenance of continuous monitoring systems.
40 CFR 63.8(c)(1)
   (1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.
40 CFR 63.8(c)(1)(i)
   (i) The owner or operator of an affected source must maintain and operate each CMS as specified in §63.6(e)(1).
40 CFR 63.8(c)(1)(ii)
   (ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.
40 CFR 63.8(c)(1)(iii)  
(iii) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan for CMS as specified in §63.6(e)(3).

40 CFR 63.8(c)(2)  
(2) (i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

40 CFR 63.8(c)(2)(ii)  
(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

40 CFR 63.8(c)(3)  
(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

40 CFR 63.8(c)(4)  
(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

40 CFR 63.8(c)(4)(i)  
(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

40 CFR 63.8(c)(4)(ii)  
(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

40 CFR 63.8(c)(5)  
(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

40 CFR 63.8(c)(6)  
(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level
drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.  

40 CFR 63.8(c)(7)

(7) (i) A CMS is out of control if—

40 CFR 63.8(c)(7)(i)(A)

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

40 CFR 63.8(c)(7)(i)(B)

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

40 CFR 63.8(c)(7)(i)(C)

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

40 CFR 63.8(c)(7)(ii)

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

40 CFR 63.8(c)(8)

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in §63.10(e)(3).

40 CFR 63.8(d)

(d) Quality control program.

40 CFR 63.8(d)(1)

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

40 CFR 63.8(d)(2)

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS.
performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

40 CFR 63.8(d)(2)(i)
(i) Initial and any subsequent calibration of the CMS;

40 CFR 63.8(d)(2)(ii)
(ii) Determination and adjustment of the calibration drift of the CMS;

40 CFR 63.8(d)(2)(iii)
(iii) Preventive maintenance of the CMS, including spare parts inventory;

40 CFR 63.8(d)(2)(iv)
(iv) Data recording, calculations, and reporting;

40 CFR 63.8(d)(2)(v)
(v) Accuracy audit procedures, including sampling and analysis methods; and

40 CFR 63.8(d)(2)(vi)
(vi) Program of corrective action for a malfunctioning CMS.

40 CFR 63.8(d)(3)
(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

40 CFR 63.8(e)
(e) Performance evaluation of continuous monitoring systems—

40 CFR 63.8(e)(1)
(1) General. When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

40 CFR 63.8(e)(2)
(2) Notification of performance evaluation. The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

40 CFR 63.8(e)(3)
(3) (i) Submission of site-specific performance evaluation test plan. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.
(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

40 CFR 63.8(e)(3)(iii)

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

40 CFR 63.8(e)(3)(iv)

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

40 CFR 63.8(e)(3)(v)

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in §63.7(c)(3), the following conditions shall apply:

40 CFR 63.8(e)(3)(v)(A)

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart, using the specified method(s);

40 CFR 63.8(e)(3)(v)(B)

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

40 CFR 63.8(e)(3)(vi)

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

40 CFR 63.8(e)(3)(vi)(A)

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

40 CFR 63.8(e)(3)(vi)(B)

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

40 CFR 63.8(e)(4)

(4) Conduct of performance evaluation and performance evaluation dates. The owner or operator of an
affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under §63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under §63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.

40 CFR 63.8(e)(5)

(5) Reporting performance evaluation results.

40 CFR 63.8(e)(5)(i)

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

40 CFR 63.8(e)(5)(ii)

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under §63.7 is conducted.

40 CFR 63.8(f)

(f) Use of an alternative monitoring method—

40 CFR 63.8(f)(1)

(1) General. Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in §63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

40 CFR 63.8(f)(2)

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

40 CFR 63.8(f)(2)(i)

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

40 CFR 63.8(f)(2)(ii)

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

40 CFR 63.8(f)(2)(iii)

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;
40 CFR 63.8(f)(2)(iv)
   (iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

40 CFR 63.8(f)(2)(v)
   (v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

40 CFR 63.8(f)(2)(vi)
   (vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

40 CFR 63.8(f)(2)(vii)
   (vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

40 CFR 63.8(f)(2)(viii)
   (viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

40 CFR 63.8(f)(2)(ix)
   (ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

40 CFR 63.8(f)(3)
(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

40 CFR 63.8(f)(4)
(4) (i) Request to use alternative monitoring procedure. An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under §63.7(f).

40 CFR 63.8(f)(4)(ii)
   (ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in §63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

40 CFR 63.8(f)(4)(iii)
   (iii) The owner or operator may submit the information required in this paragraph well in advance of the
submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.  

40 CFR 63.8(f)(4)(iv)  
(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.  

40 CFR 63.8(f)(5)  
(5) Approval of request to use alternative monitoring procedure.  

40 CFR 63.8(f)(5)(i)  
(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—  

40 CFR 63.8(f)(5)(i)(A)  
(A) Notice of the information and findings on which the intended disapproval is based; and  

40 CFR 63.8(f)(5)(i)(B)  
(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.  

40 CFR 63.8(f)(5)(ii)  
(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.  

40 CFR 63.8(f)(5)(iii)  
(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).  

40 CFR 63.8(f)(6)  
(6) Alternative to the relative accuracy test. An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:  

40 CFR 63.8(f)(6)(i)  
(i) Criteria for approval of alternative procedures. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of
the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

40 CFR 63.8(f)(6)(ii)

(ii) Petition to use alternative to relative accuracy test. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

40 CFR 63.8(f)(6)(iii)

(iii) Rescission of approval to use alternative to relative accuracy test. The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

40 CFR 63.8(g)

(g) Reduction of monitoring data.

40 CFR 63.8(g)(1)

(1) The owner or operator of each CEMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

40 CFR 63.8(g)(2)

(2) The owner or operator of each CEMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

40 CFR 63.8(g)(3)

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant).
(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

40 CFR 63.8(g)(5)

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

9. 40 CFR 63.9 Notification requirements.

40 CFR 63.9(a)
(a) Applicability and general information.
40 CFR 63.9(a)(1)
(1) The applicability of this section is set out in §63.1(a)(4).

40 CFR 63.9(a)(2)
(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

40 CFR 63.9(a)(3)
(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

40 CFR 63.9(a)(4)
(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

40 CFR 63.9(a)(4)(ii)
(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

40 CFR 63.9(b)
(b) Initial notifications.
40 CFR 63.9(b)(1)
(1) (i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

40 CFR 63.9(b)(1)(ii)
(ii) If an area source that otherwise would be subject to an emission standard or other requirement
established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

40 CFR 63.9(b)(1)(iii)

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

40 CFR 63.9(b)(2)

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

40 CFR 63.9(b)(2)(i)

(i) The name and address of the owner or operator;

40 CFR 63.9(b)(2)(ii)

(ii) The address (i.e., physical location) of the affected source;

40 CFR 63.9(b)(2)(iii)

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

40 CFR 63.9(b)(2)(iv)

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

40 CFR 63.9(b)(2)(v)

(v) A statement of whether the affected source is a major source or an area source.

40 CFR 63.9(b)(3)

(3) [Reserved]

40 CFR 63.9(b)(4)

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under §63.5(d) must provide the following information in writing to the Administrator:

40 CFR 63.9(b)(4)(i)

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i); and

40 CFR 63.9(b)(4)(ii)

(ii) [Reserved]

40 CFR 63.9(b)(4)(iii)

(iii) [Reserved]

40 CFR 63.9(b)(4)(iv)

(iv) [Reserved]

40 CFR 63.9(b)(4)(v)
(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

40 CFR 63.9(b)(5)

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under §63.5(d) must provide the following information in writing to the Administrator:

40 CFR 63.9(b)(5)(i)

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

40 CFR 63.9(b)(5)(ii)

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

40 CFR 63.9(b)(5)(iii)

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in §63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i).

40 CFR 63.9(c)

(c) Request for extension of compliance. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).

40 CFR 63.9(d)

(d) Notification that source is subject to special compliance requirements. An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

40 CFR 63.9(e)

(e) Notification of performance test. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.

40 CFR 63.9(f)

(f) Notification of opacity and visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the
opacity or visible emission observations are scheduled to take place.

40 CFR 63.9(g)

(g) Additional notification requirements for sources with continuous monitoring systems. The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

40 CFR 63.9(g)(1)

(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

40 CFR 63.9(g)(2)

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

40 CFR 63.9(g)(3)

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

40 CFR 63.9(h)

(h) Notification of compliance status.

40 CFR 63.9(h)(1)

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

40 CFR 63.9(h)(2)

(2) (i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—

40 CFR 63.9(h)(2)(i)(A)

(A) The methods that were used to determine compliance;

40 CFR 63.9(h)(2)(i)(B)

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

40 CFR 63.9(h)(2)(i)(C)

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

40 CFR 63.9(h)(2)(i)(D)

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if
specified in the relevant standard), reported in units and averaging times and in accordance with the test
methods specified in the relevant standard;
40 CFR 63.9(h)(2)(i)(E)
   (E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether
   the affected source is a major source (using the emissions data generated for this notification);
40 CFR 63.9(h)(2)(i)(F)
   (F) A description of the air pollution control equipment (or method) for each emission point, including
each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each
control device (or method); and
40 CFR 63.9(h)(2)(i)(G)
   (G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to
   whether the source has complied with the relevant standard or other requirements.
40 CFR 63.9(h)(2)(ii)
   (ii) The notification must be sent before the close of business on the 60th day following the completion
   of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting
   period is specified in the standard, in which case the letter must be sent before the close of business on the day
   the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example,
   the notification shall be sent before close of business on the 60th (or other required) day following completion
   of the initial performance test and again before the close of business on the 60th (or other required) day
   following the completion of any subsequent required performance test. If no performance test is required but
   opacity or visible emission observations are required to demonstrate compliance with an opacity or visible
   emission standard under this part, the notification of compliance status shall be sent before close of business on
   the 30th day following the completion of opacity or visible emission observations. Notifications may be
   combined as long as the due date requirement for each notification is met.
40 CFR 63.9(h)(3)
   (3) After a title V permit has been issued to the owner or operator of an affected source, the owner or
   operator of such source shall comply with all requirements for compliance status reports contained in the
   source's title V permit, including reports required under this part. After a title V permit has been issued to the
   owner or operator of an affected source, and each time a notification of compliance status is required under
   this part, the owner or operator of such source shall submit the notification of compliance status to the
   appropriate permitting authority following completion of the relevant compliance demonstration activity
   specified in the relevant standard.
40 CFR 63.9(h)(4)
   (4) [Reserved]
40 CFR 63.9(h)(5)
   (5) If an owner or operator of an affected source submits estimates or preliminary information in the
   application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions
data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of §63.5, the owner or operator shall
submit the actual emissions data and other correct information as soon as available but no later than with the
initial notification of compliance status required in this section.
40 CFR 63.9(h)(6)
   (6) Advice on a notification of compliance status may be obtained from the Administrator.
40 CFR 63.9(i)
   (i) Adjustment to time periods or postmark deadlines for submittal and review of required communications.
40 CFR 63.9(i)(1)

(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

40 CFR 63.9(i)(1)(ii)

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

40 CFR 63.9(i)(2)

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

40 CFR 63.9(i)(3)

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

40 CFR 63.9(i)(4)

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

40 CFR 63.9(j)

(j) Change in information already provided. Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

10. 40 CFR 63.10  Recordkeeping and reporting requirements.

40 CFR 63.10(a)

(a) Applicability and general information.

40 CFR 63.10(a)(1)

(1) The applicability of this section is set out in §63.1(a)(4).

40 CFR 63.10(a)(2)

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

40 CFR 63.10(a)(3)

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

40 CFR 63.10(a)(4)

(4) (i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State
subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the
attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).
40 CFR 63.10(a)(4)(ii)

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting
requirements established under this part, the owner or operator of an affected source in such State subject to
such requirements shall submit reports to the delegated State authority (which may be the same as the
permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator
shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as
specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports
at its discretion.
40 CFR 63.10(a)(5)

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit
periodic reports under this part to the State, and if the State has an established timeline for the submission of
periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part,
the owner or operator may change the dates by which periodic reports under this part shall be submitted
(without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement
between the owner or operator and the State. For each relevant standard established pursuant to section 112 of
the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected
source's compliance date for that standard. Procedures governing the implementation of this provision are
specified in §63.9(i).
40 CFR 63.10(a)(6)

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard
established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or
operator and the Administrator (or the State permitting authority) a common schedule on which periodic
reports required for each source shall be submitted throughout the year. The allowance in the previous
sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard
established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the
implementation of this provision are specified in §63.9(i).
40 CFR 63.10(a)(7)

(7) If an owner or operator supervises one or more stationary sources affected by standards established
pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60 part 61 or
both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and
the Administrator (or the State permitting authority) a common schedule on which periodic reports required by
each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous
sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with
the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the
applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this
provision are specified in §63.9(i).
40 CFR 63.10(b)

(b) General recordkeeping requirements.
40 CFR 63.10(b)(1)
(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

40 CFR 63.10(b)(2)

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

40 CFR 63.10(b)(2)(i)

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

40 CFR 63.10(b)(2)(ii)

(ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;

40 CFR 63.10(b)(2)(iii)

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

40 CFR 63.10(b)(2)(iv)

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));

40 CFR 63.10(b)(2)(v)

(v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

40 CFR 63.10(b)(2)(vi)

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

40 CFR 63.10(b)(2)(vii)

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

40 CFR 63.10(b)(2)(vii)(A)

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under
paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

40 CFR 63.10(b)(2)(vii)(B)

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

40 CFR 63.10(b)(2)(vii)(C)

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

40 CFR 63.10(b)(2)(viii)

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

40 CFR 63.10(b)(2)(ix)

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

40 CFR 63.10(b)(2)(x)

(x) All CMS calibration checks;

40 CFR 63.10(b)(2)(xi)

(xi) All adjustments and maintenance performed on CMS;

40 CFR 63.10(b)(2)(xii)

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

40 CFR 63.10(b)(2)(xiii)

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under §63.8(f)(6); and

40 CFR 63.10(b)(2)(xiv)

(xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

40 CFR 63.10(b)(3)

(3) Recordkeeping requirement for applicability determinations. If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations.
to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under §63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

40 CFR 63.10(c)

(c) *Additional recordkeeping requirements for sources with continuous monitoring systems.* In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of—

40 CFR 63.10(c)(1)  
(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

40 CFR 63.10(c)(2)  
(2) [Reserved]

40 CFR 63.10(c)(3)  
(3) [Reserved]

40 CFR 63.10(c)(4)  
(4) [Reserved]

40 CFR 63.10(c)(5)  
(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

40 CFR 63.10(c)(6)  
(6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

40 CFR 63.10(c)(7)  
(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

40 CFR 63.10(c)(8)  
(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

40 CFR 63.10(c)(9)  
(9) [Reserved]

40 CFR 63.10(c)(10)  
(10) The nature and cause of any malfunction (if known);

40 CFR 63.10(c)(11)
(11) The corrective action taken or preventive measures adopted;  
40 CFR 63.10(c)(12)  
(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;  
40 CFR 63.10(c)(13)  
(13) The total process operating time during the reporting period; and  
40 CFR 63.10(c)(14)  
(14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).  
40 CFR 63.10(c)(15)  
(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in §63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).  
40 CFR 63.10(d)  
(d) General reporting requirements.  
40 CFR 63.10(d)(1)  
(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).  
40 CFR 63.10(d)(2)  
(2) Reporting results of performance tests. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).  
40 CFR 63.10(d)(3)  
(3) Reporting results of opacity or visible emission observations. The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under §63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under §63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.  
40 CFR 63.10(d)(4)  
(4) Progress reports. The owner or operator of an affected source who is required to submit progress
40 CFR 63.10(d)(5)

(5) (i) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Such a report shall identify any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's Title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

40 CFR 63.10(d)(5)(ii)

(ii) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or
parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of
the previous sentence, after the effective date of an approved permit program in the State in which an affected
source is located, the owner or operator may make alternative reporting arrangements, in advance, with the
permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements
under this paragraph (d)(5)(ii) are specified in §63.9(i).

40 CFR 63.10(e)

(e) Additional reporting requirements for sources with continuous monitoring systems—

40 CFR 63.10(e)(1)

(1) General. When more than one CEMS is used to measure the emissions from one affected source (e.g.,
multiple breechings, multiple outlets), the owner or operator shall report the results as required for each
CEMS.

40 CFR 63.10(e)(2)

(2) Reporting results of continuous monitoring system performance evaluations.

40 CFR 63.10(e)(2)(i)

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall
furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as
required under §63.8(e), simultaneously with the results of the performance test required under §63.7, unless
otherwise specified in the relevant standard.

40 CFR 63.10(e)(2)(ii)

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during
any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or,
upon request, three copies of a written report of the results of the COMS performance evaluation conducted
under §63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required
under §63.7 is conducted.

40 CFR 63.10(e)(3)

(3) Excess emissions and continuous monitoring system performance report and summary report.

40 CFR 63.10(e)(3)(i)

(i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner
or operator of an affected source required to install a CMS by a relevant standard shall submit an excess
emissions and continuous monitoring system performance report and/or a summary report to the Administrator
semiannually, except when—

40 CFR 63.10(e)(3)(i)(A)

(A) More frequent reporting is specifically required by a relevant standard;

40 CFR 63.10(e)(3)(i)(B)

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to
accurately assess the compliance status of the source; or

40 CFR 63.10(e)(3)(i)(C)

(C) [Reserved]

40 CFR 63.10(e)(3)(ii)

(ii) Request to reduce frequency of excess emissions and continuous monitoring system performance
reports. Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this
section, an owner or operator who is required by a relevant standard to submit excess emissions and
continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may
reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
40 CFR 63.10(e)(3)(i)(A)  
(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

40 CFR 63.10(e)(3)(i)(B)  
(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the relevant standard; and

40 CFR 63.10(e)(3)(i)(C)  
(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

40 CFR 63.10(e)(3)(iv)  
(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.

40 CFR 63.10(e)(3)(v)  
(v) Content and submittal dates for excess emissions and monitoring system performance reports. All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §63.8(c)(7) and §63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

40 CFR 63.10(e)(3)(vi)
(vi) **Summary report.** As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

40 CFR 63.10(e)(3)(vi)(A)

(A) The company name and address of the affected source;

40 CFR 63.10(e)(3)(vi)(B)

(B) An identification of each hazardous air pollutant monitored at the affected source;

40 CFR 63.10(e)(3)(vi)(C)

(C) The beginning and ending dates of the reporting period;

40 CFR 63.10(e)(3)(vi)(D)

(D) A brief description of the process units;

40 CFR 63.10(e)(3)(vi)(E)

(E) The emission and operating parameter limitations specified in the relevant standard(s);

40 CFR 63.10(e)(3)(vi)(F)

(F) The monitoring equipment manufacturer(s) and model number(s);

40 CFR 63.10(e)(3)(vi)(G)

(G) The date of the latest CMS certification or audit;

40 CFR 63.10(e)(3)(vi)(H)

(H) The total operating time of the affected source during the reporting period;

40 CFR 63.10(e)(3)(vi)(I)

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

40 CFR 63.10(e)(3)(vi)(J)

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

40 CFR 63.10(e)(3)(vi)(K)

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

40 CFR 63.10(e)(3)(vi)(L)

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

40 CFR 63.10(e)(3)(vi)(M)

(M) The date of the report.
(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.
40 CFR 63.10(e)(3)(viii)

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.
40 CFR 63.10(e)(4)

(4) Reporting continuous opacity monitoring system data produced during a performance test. The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.
40 CFR 63.10(f)

(f) Waiver of recordkeeping or reporting requirements.
40 CFR 63.10(f)(1)

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.
40 CFR 63.10(f)(2)

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
40 CFR 63.10(f)(3)

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under §63.6(i), any required compliance progress report or compliance status report required under this part [such as under §63.6(i) and §63.9(h)] or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.
40 CFR 63.10(f)(4)

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she—
40 CFR 63.10(f)(4)(i)

(i) Approves or denies an extension of compliance; or
40 CFR 63.10(f)(4)(ii)
(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
40 CFR 63.10(f)(4)(iii)
(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
40 CFR 63.10(f)(5)
(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.
40 CFR 63.10(f)(6)
(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

11. **40 CFR 63.11 Control device requirements.**

40 CFR 63.11(a)
(a) **Applicability.** The applicability of this section is set out in §63.1(a)(4).

40 CFR 63.11(b)
(b) **Flares.**

40 CFR 63.11(b)(1)
(1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

40 CFR 63.11(b)(2)
(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

40 CFR 63.11(b)(3)
(3) Flares shall be operated at all times when emissions may be vented to them.

40 CFR 63.11(b)(4)
(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in Appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

40 CFR 63.11(b)(5)
(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

40 CFR 63.11(b)(6)
(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

40 CFR 63.11(b)(6)(i)
(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity $V_{\text{max}}$, as determined by the following equation:
\[ V_{\text{max}} = (X_{\text{H}_2} - K_1) \times K_2 \]

Where:
- \( V_{\text{max}} \) = Maximum permitted velocity, m/sec.
- \( K_1 \) = Constant, 6.0 volume-percent hydrogen.
- \( K_2 \) = Constant, 3.9 (m/sec)/volume-percent hydrogen.
- \( X_{\text{H}_2} \) = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §63.14).

40 CFR 63.11(b)(6)(i)(B)

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

40 CFR 63.11(b)(6)(ii)

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

\[ H_1 = \text{Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C.} \]

\[ K = \text{Constant= - } \]

where the standard temperature for (g-mole/scm) is 20°C.

\[ C_i = \text{Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).} \]

\[ H_i = \text{Net heat of combustion of sample component i, kcal/g-mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.} \]

\[ n = \text{Number of sample components.} \]

40 CFR 63.11(b)(7)

(7) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Methods 2, 2A, 2C, or 2D in Appendix A to 40 CFR part 60, of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

40 CFR 63.11(b)(7)(ii)

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec)
but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

40 CFR 63.11(b)(7)(iii)

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity $V_{\text{max}}$, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, $V_{\text{max}}$, for flares complying with this paragraph shall be determined by the following equation:

$$\log_{10}(V_{\text{max}}) = \frac{H_T + 28.8}{31.7}$$

Where:
- $V_{\text{max}}$ = Maximum permitted velocity, m/sec.
- 28.8 = Constant.
- 31.7 = Constant.
- $H_T$ = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity $V_{\text{max}}$. The maximum permitted velocity, $V_{\text{max}}$, for air-assisted flares shall be determined by the following equation:

$$V_{\text{max}} = 8.71 + 0.708(H_T)$$

Where:
- $V_{\text{max}}$ = Maximum permitted velocity, m/sec.
- 8.71 = Constant.
- 0.708 = Constant.
- $H_T$ = The net heating value as determined in paragraph (b)(6)(ii) of this section.

12. 40 CFR 63.12 State authority and delegations.

40 CFR 63.12(a)

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from—

40 CFR 63.12(a)(1)

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

40 CFR 63.12(a)(2)

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

40 CFR 63.12(a)(3)

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

40 CFR 63.12(b)

(b) (1) section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.
106

FDS Coke Plant, L.L.C.  Facility ID: 0448020084
PTI Application: 04-01360
Issued: To be entered upon final issuance

40 CFR 63.12(b)(2)

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

40 CFR 63.12(c)

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

13. 40 CFR 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

40 CFR 63.13(a)

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices.

EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Air, Pesticides and Toxics Division, J.F.K. Federal Building, Boston, MA 02203-2211.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303-3104.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202-2733.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), Director, Air and Toxics Division, 999 18th Street, 1 Denver Place, Suite 500, Denver, CO 80202-2405.

EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam), Director, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

40 CFR 63.13(b)

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the
mailing addresses for those States whose delegation requests have been approved.

40 CFR 63.13(c)

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.


40 CFR 63.14(a)

(a) The materials listed in this section are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the Office of the Federal Register, 800 North Capital Street, NW, suite 700, Washington, DC, at the Air and Radiation Docket and Information Center, U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC, and at the EPA Library (MD-35), U.S. EPA, Research Triangle Park, North Carolina.

40 CFR 63.14(b)

(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.

40 CFR 63.14(b)(1)


40 CFR 63.14(b)(2)


40 CFR 63.14(b)(3)


40 CFR 63.14(b)(4)

(4) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §63.788, Appendix A.

40 CFR 63.14(b)(5)

(5) ASTM D1946-77, 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §63.11(b)(6).

40 CFR 63.14(b)(6)

(6) ASTM D2369-93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for §63.788, Appendix A.

40 CFR 63.14(b)(7)

(7) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §63.11(b)(6).

40 CFR 63.14(b)(8)

(8) ASTM D2879-83, 96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §63.111 of Subpart G.
40 CFR 63.14(b)(9)  
(9) ASTM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for §63.786(b).

40 CFR 63.14(b)(10)  
(10) ASTM 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for §63.365(e)(1) of Subpart O.

40 CFR 63.14(b)(11)  
(11) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for §63.788, Appendix A.

40 CFR 63.14(b)(12)  

40 CFR 63.14(b)(13)  
(13) ASTM D4017-90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for §63.788, Appendix A.

40 CFR 63.14(b)(14)  

40 CFR 63.14(b)(15)  

40 CFR 63.14(b)(16)  
(16) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §63.11(b)(6).

40 CFR 63.14(b)(17)  
(17) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for §63.786(b).

40 CFR 63.14(b)(18)  
(18) ASTM E260-91, 96, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b)(2) and 63.786(b)(5).

40 CFR 63.14(b)(19)  
(19) [Reserved]

40 CFR 63.14(b)(20)  
(20) [Reserved]

40 CFR 63.14(b)(21)  
(21) ASTM D2099-00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for §63.5350.

40 CFR 63.14(b)(22)  
(22) [Reserved]

40 CFR 63.14(b)(23)  
(23) [Reserved]

40 CFR 63.14(b)(24)  
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

63.4941(b)(1), and 63.5160(c).

40 CFR 63.14(b)(25)
40 CFR 63.14(b)(26)
   (26) ASTM D1475-98, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, IBR approved for §§63.4141(b)(3) and 63.4141(c).
40 CFR 63.14(b)(27)
40 CFR 63.14(b)(28)
   (28) [Reserved]
40 CFR 63.14(b)(29)
40 CFR 63.14(b)(30)
40 CFR 63.14(c)
   (c) The materials listed below are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.
40 CFR 63.14(c)(1)
40 CFR 63.14(c)(2)
40 CFR 63.14(d)
   (d) State and Local Requirements. The materials listed below are available at the Air and Radiation Docket and Information Center, U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC.
40 CFR 63.14(d)(1)
   (1) California Regulatory Requirements Applicable to the Air Toxics Program, January 5, 1999, IBR approved for §63.99(a)(5)(ii) of subpart E of this part.
40 CFR 63.14(d)(2)
   (2) New Jersey's Toxic Catastrophe Prevention Act Program, (July 20, 1998), Incorporation By Reference approved for §63.99(a)(30)(i) of subpart E of this part.
40 CFR 63.14(d)(3)
   (3) (i) Letter of June 7, 1999 to the U.S. Environmental Protection Agency Region 3 from the Delaware Department of Natural Resources and Environmental Control requesting formal full delegation to take over primary responsibility for implementation and enforcement of the Chemical Accident Prevention Program under Section 112(r) of the Clean Air Act Amendments of 1990.
(ii) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for §63.99(a)(8)(i) of subpart E of this part.
40 CFR 63.14(d)(3)(iii)

(iii) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for §63.99(a)(8)(ii)-(v) of subpart E of this part.
40 CFR 63.14(d)(4)

(4) Massachusetts Regulations Applicable to Hazardous Air Pollutants (July 2002). Incorporation By Reference approved for §63.99(a)(21)(ii) of subpart E of this part.
40 CFR 63.14(d)(5)

40 CFR 63.14(e)

(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553-6847.
40 CFR 63.14(e)(1)

40 CFR 63.14(e)(2)

(2) [Reserved]
40 CFR 63.14(f)

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P. O. Box 133318, Research Triangle Park, NC 27709-3318 or at http://www.ncasi.org: NCASI Method DI/MEOH-94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for §63.457(c)(3)(ii) of subpart S of this part.
40 CFR 63.14(g)

(g) The materials listed below are available for purchase from AOAC International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia, 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.
40 CFR 63.14(g)(1)

40 CFR 63.14(g)(2)

40 CFR 63.14(g)(3)

40 CFR 63.14(g)(4)

40 CFR 63.14(g)(5)

for §63.626(d)(3)(vi).
40 CFR 63.14(g)(6)
40 CFR 63.14(g)(7)
40 CFR 63.14(h)
(h) The materials listed below are available for purchase from The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida, 33830, Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991, IBR.
40 CFR 63.14(h)(1)
(1) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
40 CFR 63.14(h)(2)
(2) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus—P2O5 or Ca3(PO4)2, Method A—Volumetric Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
40 CFR 63.14(h)(3)
(3) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
40 CFR 63.14(h)(4)
(4) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method C—Spectrophotometric Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
40 CFR 63.14(h)(5)
(5) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method A—Volumetric Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
40 CFR 63.14(h)(6)
(6) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
40 CFR 63.14(h)(7)
(7) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method C—Spectrophotometric Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
40 CFR 63.14(i)
(i) The following materials are available for purchase from at least one of the following addresses: ASME International, Orders/Inquiries, P.O. Box 2900, Fairfield, NJ 07007-2900; or Global Engineering Documents, Sales Department, 15 Inverness Way East, Englewood, CO 80112.
40 CFR 63.14(i)(1)
(1) ASME standard number QHO-1-1994, "Standard for the Qualification and Certification of Hazardous
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

Waste Incinerator Operators," IBR approved for §63.1206(c)(6)(iii).

40 CFR 63.14(i)(2)


40 CFR 63.14(i)(3)


40 CFR 63.14(j)

(j) The following material is available for purchase from: British Standards Institute, 389 Chiswick High Road, London W4 4AL, United Kingdom.

40 CFR 63.14(j)(1)

(1) BS EN 1593:1999, Non-destructive Testing: Leak Testing—Bubble Emission Techniques, IBR approved for §63.425(i)(2).

40 CFR 63.14(j)(2)

(2) [Reserved]

40 CFR 63.14(k)

(k) The following material may be obtained from U.S. EPA, Office of Solid Waste (5305W), 1200 Pennsylvania Avenue, NW., Washington, DC 20460:

40 CFR 63.14(k)(1)


15. **40 CFR 63.15 Availability of information and confidentiality.**

40 CFR 63.15(a)

(a) **Availability of information.**

40 CFR 63.15(a)(1)

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

40 CFR 63.15(a)(2)

(2) The availability of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

40 CFR 63.15(b)

(b) **Confidentiality.**

40 CFR 63.15(b)(1)

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.
40 CFR Part 63 Subpart L—National Emission Standards for Coke Oven Batteries

16. 40 CFR 63.300 Applicability.

40 CFR 63.300(a)

(a) Unless otherwise specified in §§63.306, 63.307, and 63.311, the provisions of this subpart apply to existing by-product coke oven batteries at a coke plant and to existing nonrecovery coke oven batteries at a coke plant on and after the following dates:

40 CFR 63.300(a)(1)

(1) December 31, 1995, for existing by-product coke oven batteries subject to emission limitations in §63.302(a)(1) or existing nonrecovery coke oven batteries subject to emission limitations in §63.303(a);

40 CFR 63.300(a)(2)

(2) January 1, 2003, for existing by-product coke oven batteries subject to emission limitations in §63.302(a)(2);

40 CFR 63.300(a)(3)

(3) 90 days after publication of the final rule amendments in the Federal Register, for existing by-product coke oven batteries subject to emission limitations in §63.302(a)(3) and for nonrecovery coke oven batteries subject to the emission limitations and requirements in §63.303(b)(3) or (c);

40 CFR 63.300(a)(4)

(4) Upon startup for a new nonrecovery coke oven battery subject to the emission limitations and requirements in §63.303(b), (c), and (d). A new nonrecovery coke oven battery subject to the requirements in §63.303(d) is one for which construction or reconstruction commenced on or after August 9, 2004;

40 CFR 63.300(a)(5)

(5) November 15, 1993, for existing by-product and nonrecovery coke oven batteries subject to emission limitations in §§63.304(b)(1) or 63.304(c);

40 CFR 63.300(a)(6)

(6) January 1, 1998, for existing by-product coke oven batteries subject to emission limitations in §§63.304(b)(2) or 63.304(b)(7); and

40 CFR 63.300(a)(7)

(7) January 1, 2010, for existing by-product coke oven batteries subject to emission limitations in §§63.304(b)(3) or 63.304(b)(7).

40 CFR 63.300(b)

(b) The provisions for new sources in §§63.302(b), 63.302(c), and 63.303(b) apply to each greenfield coke oven battery and to each new or reconstructed coke oven battery at an existing coke plant if the coke oven battery results in an increase in the design capacity of the coke plant as of November 15, 1990, (including any capacity qualifying under §63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993.

40 CFR 63.300(c)

(c) The provisions of this subpart apply to each brownfield coke oven battery, each padup rebuild, and each
cold-idle coke oven battery that is restarted.

40 CFR 63.300(d)
(d) The provisions of §§63.304(b)(2)(i)(A) and 63.304(b)(3)(i) apply to each foundry coke producer as follows:
40 CFR 63.300(d)(1)
(1) A coke oven battery subject to §63.304(b)(2)(i)(A) or §63.304(b)(3)(i) must be a coke oven battery that on January 1, 1992, was owned or operated by a foundry coke producer; and
40 CFR 63.300(d)(2)
(2) (i) A coke oven battery owned or operated by an integrated steel producer on January 1, 1992, and listed in paragraph (d)(2)(ii) of this section, that was sold to a foundry coke producer before November 15, 1993, shall be deemed for the purposes of paragraph (d)(1) of this section to be owned or operated by a foundry coke producer on January 1, 1992.
40 CFR 63.300(d)(2)(ii)
(ii) The coke oven batteries that may qualify under this provision are the following:
40 CFR 63.300(d)(2)(ii)(A)
(A) The coke oven batteries at the Bethlehem Steel Corporation's Lackawanna, New York facility; and
40 CFR 63.300(d)(2)(ii)(B)
(B) The coke oven batteries at the Rouge Steel Company's Dearborn, Michigan facility.
40 CFR 63.300(e)
(e) The emission limitations set forth in this subpart shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Administrator and shall not exceed 180 days.
40 CFR 63.300(f)
(f) After October 28, 1992, rules of general applicability promulgated under section 112 of the Act, including the General Provisions, may apply to coke ovens provided that the topic covered by such a rule is not addressed in this subpart.

17. 40 CFR 63.301 Definitions.
Terms used in this subpart are defined in the Act or in this section as follows:
Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this subpart or its designated agent).
Brownfield coke oven battery means a new coke oven battery that replaces an existing coke oven battery or batteries with no increase in the design capacity of the coke plant as of November 15, 1990 (including capacity qualifying under §63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993.
Bypass/bleeder stack means a stack, duct, or offtake system that is opened to the atmosphere and used to relieve excess pressure by venting raw coke oven gas from the collecting main to the atmosphere from a by-product coke oven battery, usually during emergency conditions.
By-product coke oven battery means a source consisting of a group of ovens connected by common walls,
where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas, from which by-products are recovered. Coke oven batteries in operation as of April 1, 1992, are identified in appendix A to this subpart.

Certified observer means a visual emission observer, certified under (if applicable) Method 303 and Method 9 (if applicable) and employed by the Administrator, which includes a delegated enforcement agency or its designated agent. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.

Charge or charging period means, for a by-product coke oven battery, the period of time that commences when coal begins to flow into an oven through a topside port and ends when the last charging port is recapped. For a nonrecovery coke oven battery, charge or charging period means the period of time that commences when coal begins to flow into an oven and ends when the push side door is replaced.

Coke oven battery means either a by-product or nonrecovery coke oven battery.

Coke oven door means each end enclosure on the pusher side and the coking side of an oven. The chuck, or leveler-bar, door is part of the pusher side door. A coke oven door includes the entire area on the vertical face of a coke oven between the bench and the top of the battery between two adjacent buckstays.

Cold-idle coke oven battery means an existing coke oven battery that has been shut down, but is not dismantled.

Collecting main means any apparatus that is connected to one or more offtake systems and that provides a passage for conveying gases under positive pressure from the by-product coke oven battery to the by-product recovery system.

Collecting main repair means any measure to stop a collecting main leak on a long-term basis. A repair measure in general is intended to restore the integrity of the collecting main by returning the main to approximately its design specifications or its condition before the leak occurred. A repair measure may include, but is not limited to, replacing a section of the collecting main or welding the source of the leak.

Consecutive charges means charges observed successively, excluding any charge during which the observer's view of the charging system or topside ports is obscured.

Design capacity means the original design capacity of a coke oven battery, expressed in megagrams per year of furnace coke.

Foundry coke producer means a coke producer that is not and was not on January 1, 1992, owned or operated by an integrated steel producer and had on January 1, 1992, an annual design capacity of less than 1.25 million megagrams per year (1.38 million tons per year) (not including any capacity satisfying the requirements of §63.300(d)(2) or §63.304(b)(6)).

Greenfield coke oven battery means a coke oven battery for which construction is commenced at a plant site (where no coke oven batteries previously existed) after December 4, 1992.

Integrated steel producer means a company or corporation that produces coke, uses the coke in a blast furnace to make iron, and uses the iron to produce steel. These operations may be performed at different plant sites within the corporation.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions.

New shed means a shed for which construction commenced after September 15, 1992. The shed at Bethlehem Steel Corporation's Bethlehem plant on Battery A is deemed not to be a new shed.

Nonrecovery coke oven battery means a source consisting of a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke,
and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

**Offtake system** means any individual oven apparatus that is stationary and provides a passage for gases from an oven to a coke oven battery collecting main or to another oven. Offtake system components include the standpipe and standpipe caps, goosenecks, stationary jumper pipes, mini-standpipes, and standpipe and gooseneck connections.

**Oven** means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

**Padup rebuild** means a coke oven battery that is a complete reconstruction of an existing coke oven battery on the same site and pad without an increase in the design capacity of the coke plant as of November 15, 1990 (including any capacity qualifying under §63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993. The Administrator may determine that a project is a padup rebuild if it effectively constitutes a replacement of the battery above the pad, even if some portion of the brickwork above the pad is retained.

**Pushing**, for the purposes of §63.305, means that coke oven operation that commences when the pushing ram starts into the oven to push out coke that has completed the coking cycle and ends when the quench car is clear of the coke side shed.

**Run** means the observation of visible emissions from topside port lids, offtake systems, coke oven doors, or the charging of a coke oven that is made in accordance with and is valid under Methods 303 or 303A in appendix A to this part.

**Shed** means a structure for capturing coke oven emissions on the coke side or pusher side of the coke oven battery, which routes the emissions to a control device or system.

**Short coke oven battery** means a coke oven battery with ovens less than 6 meters (20 feet) in height.

**Shutdown** means the operation that commences when pushing has occurred on the first oven with the intent of pushing the coke out of all of the ovens in a coke oven battery without adding coal, and ends when all of the ovens of a coke oven battery are empty of coal or coke.

**Standpipe cap** means an apparatus used to cover the opening in the gooseneck of an offtake system.

**Startup** means that operation that commences when the coal begins to be added to the first oven of a coke oven battery that either is being started for the first time or that is being restarted and ends when the doors have been adjusted for maximum leak reduction and the collecting main pressure control has been stabilized. Except for the first startup of a coke oven battery, a startup cannot occur unless a shutdown has occurred.

**Tall coke oven battery** means a coke oven battery with ovens 6 meters (20 feet) or more in height.

**Temporary seal** means any measure, including but not limited to, application of luting or packing material, to stop a collecting main leak until the leak is repaired.

**Topside port lid** means a cover, removed during charging or decarbonizing, that is placed over the opening through which coal can be charged into the oven of a by-product coke oven battery.

### 18. 40 CFR 63.302 Standards for by-product coke oven batteries.

**40 CFR 63.302(a)**

(a) Except as provided in §63.304 or §63.305, on and after the dates specified in this paragraph, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere, coke oven emissions from each affected existing by-product coke oven battery that exceed any of the following emission limitations or requirements:

- **40 CFR 63.302(a)(1)**
- (1) On and after December 31, 1995;
40 CFR 63.302(a)(1)(i)
   (i) For coke oven doors;
40 CFR 63.302(a)(1)(i)(A)
   (A) 6.0 percent leaking coke oven doors for each tall by-product coke oven battery, as determined according to the procedures in §63.309(d)(1); and
40 CFR 63.302(a)(1)(i)(B)
   (B) 5.5 percent leaking coke oven doors for each short by-product coke oven battery, as determined according to the procedures in §63.309(d)(1);
40 CFR 63.302(a)(1)(ii)
   (ii) 0.6 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1);
40 CFR 63.302(a)(1)(iii)
   (iii) 3.0 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1); and
40 CFR 63.302(a)(1)(iv)
   (iv) 12 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).
40 CFR 63.302(a)(2)
   (2) On and after January 1, 2003, unless the Administrator promulgates more stringent limits pursuant to section 112(f) of the Act;
40 CFR 63.302(a)(2)(i)
   (i) 5.5 percent leaking coke oven doors for each tall by-product coke oven battery, as determined by the procedures in §63.309(d)(1); and
40 CFR 63.302(a)(2)(ii)
   (ii) 5.0 percent leaking coke oven doors for each short by-product coke oven battery, as determined by the procedures in §63.309(d)(1).
40 CFR 63.302(b)
   (b) Except as provided in paragraph (c) of this section, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere, coke oven emissions from a by-product coke oven battery subject to the applicability requirements in §63.300(b) that exceed any of the following emission limitations:
40 CFR 63.302(b)(1)
   (1) 0.0 percent leaking coke oven doors, as determined by the procedures in §63.309(d)(1);
40 CFR 63.302(b)(2)
   (2) 0.0 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1);
40 CFR 63.302(b)(3)
   (3) 0.0 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1); and
40 CFR 63.302(b)(4)
   (4) 34 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).
40 CFR 63.302(c)
   (c) The emission limitations in paragraph (b) of this section do not apply to the owner or operator of a by-product coke oven battery that utilizes a new recovery technology, including but not limited to larger size ovens, operation under negative pressure, and processes with emission points different from those regulated under this subpart. An owner or operator constructing a new by-product coke oven battery or reconstructing an existing by-product recovery battery that utilizes a new recovery technology shall:
40 CFR 63.302(c)(1)
   (1) Notify the Administrator of the intention to do so, as required in §63.311(c); and
40 CFR 63.302(c)(2)
(2) Submit, for the determination under section 112(g)(2)(B) of the Act, and as part of the application for permission to construct or reconstruct, all information and data requested by the Administrator for the determination of applicable emission limitations and requirements for that by-product coke oven battery. 

40 CFR 63.302(d)

(d) Emission limitations and requirements applied to each coke oven battery utilizing a new recovery technology shall be less than the following emission limitations or shall result in an overall annual emissions rate for coke oven emissions for the battery that is lower than that obtained by the following emission limitations:

40 CFR 63.302(d)(1)

(1) 4.0 percent leaking coke oven doors on tall by-product coke oven batteries, as determined by the procedures in §63.309(d)(1);

40 CFR 63.302(d)(2)

(2) 3.3 percent leaking coke oven doors on short by-product coke oven batteries, as determined by the procedures in §63.309(d)(1);

40 CFR 63.302(d)(3)

(3) 2.5 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1);

40 CFR 63.302(d)(4)

(4) 0.4 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1); and

40 CFR 63.302(d)(5)

(5) 12 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).


40 CFR 63.303(a)

(a) Except as provided in §63.304, on and after December 31, 1995, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from each affected existing nonrecovery coke oven battery that exceed any of the following emission limitations or requirements:

40 CFR 63.303(a)(1)

(1) For coke oven doors;

40 CFR 63.303(a)(1)(i)

(i) 0.0 percent leaking coke oven doors, as determined by the procedures in §63.309(d)(1); or

40 CFR 63.303(a)(1)(ii)

(ii) The owner or operator shall monitor and record, once per day for each day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under a negative pressure.

40 CFR 63.303(a)(2)

(2) For charging operations, the owner or operator shall implement, for each day of operation, the work practices specified in §63.306(b)(6) and record the performance of the work practices as required in §63.306(b)(7).

40 CFR 63.303(b)

(b) No owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from each affected new nonrecovery coke oven battery subject to the applicability requirements in §63.300(b) that exceed any of the following emission limitations or requirements:

40 CFR 63.303(b)(1)

(1) For coke oven doors;
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

40 CFR 63.303(b)(1)(i)  
(i) 0.0 percent leaking coke oven doors, as determined by the procedures in §63.309(d)(1); or

40 CFR 63.303(b)(1)(ii)  
(ii) The owner or operator shall monitor and record, once per day for each day of operation, the pressure in each oven or in a common battery tunnel to ensure that the ovens are operated under a negative pressure;

40 CFR 63.303(b)(2)  
(2) For charging operations, the owner or operator shall install, operate, and maintain an emission control system for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operation;

40 CFR 63.303(b)(3)  
(3) For charging operations, the owner or operator shall implement, for each day of operation, the work practices specified in §63.306(b)(6) and record the performance of the work practices as required in §63.306(b)(7).

40 CFR 63.303(b)(4)  
(4) 0.0 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1) (if applicable to the new nonrecovery coke oven battery); and

40 CFR 63.303(b)(5)  
(5) 0.0 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1) (if applicable to the new nonrecovery coke oven battery).

40 CFR 63.303(c)  
(c) Except as provided in §63.304, the owner or operator of any nonrecovery coke oven battery shall meet the work practice standards in paragraphs (c)(1) and (2) of this section.

40 CFR 63.303(c)(1)  
(1) The owner or operator shall observe each coke oven door after charging and record the oven number of any door from which visible emissions occur. Emissions from coal spilled during charging or from material trapped within the seal area of the door are not considered to be a door leak if the owner or operator demonstrates that the oven is under negative pressure, and that no emissions are visible from the top of the door or from dampers on the door.

40 CFR 63.303(c)(2)  
(2) Except as provided in paragraphs (c)(2)(i) and (ii) of this section, if a coke oven door leak is observed at any time during the coking cycle, the owner or operator shall take corrective action and stop the leak within 15 minutes from the time the leak is first observed. No additional leaks are allowed from doors on that oven for the remainder of that oven’s coking cycle.

40 CFR 63.303(c)(2)(i)  
(i) Except as provided in paragraph (c)(2)(ii) of this section, the owner or operator may take corrective action and stop the leak within 45 minutes (instead of 15 minutes) from the time the leak is first observed for a maximum of two times per battery in any semiannual reporting period.

40 CFR 63.303(c)(2)(ii)  
(ii) If a worker must enter a cokeside shed to stop a leaking door under the cokeside shed, the owner or
operator shall take corrective action and stop the door leak within 45 minutes (instead of 15 minutes) from the
time the leak is first observed. The evacuation system and control device
for the cokeside shed must be operated at all times there is a leaking door under the cokeside shed.

40 CFR 63.303(d)
(d) The owner or operator of a new nonrecovery coke oven battery shall meet the emission limitations and
work practice standards in paragraphs (d)(1) through (4) of this section.

40 CFR 63.303(d)(1)
(1) The owner or operator shall not discharge or cause to be discharged to the atmosphere from charging
operations any fugitive emissions that exhibit an opacity greater than 20 percent, as determined by the
procedures in §63.309(j).

40 CFR 63.303(d)(2)
(2) The owner or operator shall not discharge or cause to be discharged to the atmosphere any emissions of
particulate matter (PM) from a charging emissions control device that exceed 0.0081 pounds per ton (lbs/ton)
of dry coal charged, as determined by the procedures in §63.309(k).

40 CFR 63.303(d)(3)
(3) The owner or operator shall observe the exhaust stack of each charging emissions control device at least
once each day of operation during charging to determine if visible emissions are present and shall record the
results of each daily observation or the reason why conditions did
not permit a daily observation. If any visible emissions are observed, the owner or operator must:

40 CFR 63.303(d)(3)(i)
(i) Take corrective action to eliminate the presence of visible emissions;

40 CFR 63.303(d)(3)(ii)
(ii) Record the cause of the problem creating the visible emissions and the corrective action taken;

40 CFR 63.303(d)(3)(iii)
(iii) Conduct visible emission observations according to the procedures in §63.309(m) within 24 hours after
detecting the visible emissions; and

40 CFR 63.303(d)(3)(iv)
(iv) Report any 6-minute average, as determined according to the procedures in §63.309(m), that exceeds 10
percent opacity as a deviation in the semiannual compliance
report required by §63.311(d).

40 CFR 63.303(d)(4)
(4) The owner or operator shall develop and implement written procedures for adjusting the oven uptake
damper to maximize oven draft during charging and for monitoring the vent damper setting during each charge
to ensure that the damper is fully open.

20. 40 CFR 63.304 Standards for compliance date extension.

40 CFR 63.304(a)
(a) An owner or operator of an existing coke oven battery (including a cold-idle coke oven battery), a padup
rebuild, or a brownfield coke oven battery, may elect an extension of the compliance date for emission limits to
be promulgated pursuant to section 112(f) of the Act in accordance with section 112(i)(8). To receive an
extension of the compliance date from January 1, 2003, until January 1, 2020, the owner or operator shall
notify the Administrator as described in §63.311(c) that the battery will comply with the emission limitations
and requirements in this section in lieu of the applicable emission limitations in §§63.302 or 63.303.

40 CFR 63.304(b)
(b) Except as provided in paragraphs (b)(4), (b)(5), and (b)(7) of this section and in §63.305, on and after
the dates specified in this paragraph, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from a by-product coke oven battery that exceed any of the following emission limitations:

40 CFR 63.304(b)(1)  
(1) On and after November 15, 1993;
40 CFR 63.304(b)(1)(i)  
(i) 7.0 percent leaking coke oven doors, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(1)(ii)  
(ii) 0.83 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(1)(iii)  
(iii) 4.2 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(1)(iv)  
(iv) 12 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).

40 CFR 63.304(b)(2)  
(2) On and after January 1, 1998;
40 CFR 63.304(b)(2)(i)  
(i) For coke oven doors:
40 CFR 63.304(b)(2)(i)(A)  
(A) 4.3 percent leaking coke oven doors for each tall by-product coke oven battery and for each by-product coke oven battery owned or operated by a foundry coke producer, as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(2)(i)(B)  
(B) 3.8 percent leaking coke oven doors on each by-product coke oven battery not subject to the emission limitation in paragraph (b)(2)(i)(A) of this section, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(2)(ii)  
(ii) 0.4 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(2)(iii)  
(iii) 2.5 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(2)(iv)  
(iv) 12 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).

40 CFR 63.304(b)(3)  
(3) On and after January 1, 2010, unless the Administrator promulgates more stringent limits pursuant to section 112(i)(8)(C) of the Act;
40 CFR 63.304(b)(3)(i)  
(i) 4.0 percent leaking coke oven doors on each tall by-product coke oven battery and for each by-product coke oven battery owned or operated by a foundry coke producer, as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(3)(ii)  
(ii) 3.3 percent leaking coke oven doors for each by-product coke oven battery not subject to the emission limitation in paragraph (b)(3)(i) of this section, as determined by the procedures in §63.309(d)(1).

40 CFR 63.304(b)(4)  
(4) No owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from a brownfield or padup rebuild by-product coke oven battery, other than those specified in paragraph (b)(4)(v) of this section, that exceed any of the following emission limitations:
40 CFR 63.304(b)(4)(i)
   (i) For coke oven doors;
40 CFR 63.304(b)(4)(i)(A)
   (A) 4.0 percent leaking coke oven doors for each tall by-product coke oven battery, as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(4)(i)(B)
   (B) 3.3 percent leaking coke oven doors on each short by-product coke oven battery, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(4)(ii)
   (ii) 0.4 percent leaking topside port lids, as determined by the procedures in §63.309(d)(1);
40 CFR 63.304(b)(4)(iii)
   (iii) 2.5 percent leaking offtake system(s), as determined by the procedures in §63.309(d)(1); and
40 CFR 63.304(b)(4)(iv)
   (iv) 12 seconds of visible emissions per charge, as determined by the procedures in §63.309(d)(2).
40 CFR 63.304(b)(4)(v)
   (v) The requirements of paragraph (b)(4) of this section shall not apply and the requirements of paragraphs (b)(1), (b)(2), and (b)(3) of this section do apply to the following brownfield or padup rebuild coke oven batteries:
40 CFR 63.304(b)(4)(v)(A)
   (A) Bethlehem Steel-Burns Harbor, Battery No. 2;
40 CFR 63.304(b)(4)(v)(B)
   (B) National Steel-Great Lakes, Battery No. 4; and
40 CFR 63.304(b)(4)(v)(C)
   (C) Koppers-Woodward, Battery No. 3.
40 CFR 63.304(b)(4)(vi)
   (vi) To retain the exclusion provided in paragraph (b)(4)(v) of this section, a coke oven battery specified in paragraph (b)(4)(v) of this section shall commence construction not later than July 1, 1996, or 1 year after obtaining a construction permit, whichever is earlier.
40 CFR 63.304(b)(5)
   (5) The owner or operator of a cold-idle coke oven battery that shut down on or after November 15, 1990, shall comply with the following emission limitations:
40 CFR 63.304(b)(5)(i)
   (i) For a brownfield coke oven battery or a padup rebuild coke oven battery, coke oven emissions shall not exceed the emission limitations in paragraph (b)(4) of this section; and
40 CFR 63.304(b)(5)(ii)
   (ii) For a cold-idle battery other than a brownfield or padup rebuild coke oven battery, coke oven emissions shall not exceed the emission limitations in paragraphs (b)(1) through (b)(3) of this section.
40 CFR 63.304(b)(6)
   (6) The owner or operator of a cold-idle coke oven battery that shut down prior to November 15, 1990, shall submit a written request to the Administrator to include the battery in the design capacity of a coke plant as of November 15, 1990. A copy of the request shall also be sent to Director, Office of Air Quality Planning
and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. The Administrator will review and approve or disapprove a request according to the following procedures:

40 CFR 63.304(b)(6)(i)

(i) Requests will be reviewed for completeness in the order received. A complete request shall include:

40 CFR 63.304(b)(6)(i)(A)

(A) Battery identification;

40 CFR 63.304(b)(6)(i)(B)

(B) Design information, including the design capacity and number and size of ovens; and

40 CFR 63.304(b)(6)(i)(C)

(C) A brief description of the owner or operator's plans for the cold-idle battery, including a statement whether construction of a padup rebuild or a brownfield coke oven battery is contemplated.

40 CFR 63.304(b)(6)(ii)

(ii) A complete request shall be approved if the design capacity of the battery and the design capacity of all previous approvals does not exceed the capacity limit in paragraph (b)(6)(iii) of this section.

40 CFR 63.304(b)(6)(iii)

(iii) The total nationwide coke capacity of coke oven batteries that receive approval under paragraph (b)(6) of this section shall not exceed 2.7 million Mg/yr (3.0 million ton/yr).

40 CFR 63.304(b)(6)(iv)

(iv) If a construction permit is required, an approval shall lapse if a construction permit is not issued within 3 years of the approval date, or if the construction permit lapses.

40 CFR 63.304(b)(6)(v)

(v) If a construction permit is not required, an approval will lapse if the battery is not restarted within 2 years of the approval date.

The owner or operator of a by-product coke oven battery with fewer than 30 ovens may elect to comply with an emission limitation of 2 or fewer leaking coke oven doors, as determined by the procedures in §63.309(d)(4), as an alternative to the emission limitation for coke oven doors in paragraphs (b)(2)(i), (b)(3) (i) through (ii), (b)(4)(i), (b)(5), and (b)(6) of this section.

40 CFR 63.304(c)

(c) On and after November 15, 1993, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from an existing nonrecovery coke oven battery that exceed any of the emission limitations or requirements in §63.303(a).

40 CFR 63.304(d)

(d) Each owner or operator of an existing coke oven battery qualifying for a compliance date extension pursuant to this section shall make available, no later than January 1, 2000, to the surrounding communities the results of any risk assessment performed by the Administrator to determine the appropriate level of any emission standard established by the Administrator according to section 112(f) of the Act.

21. **40 CFR 63.305 Alternative standards for coke oven doors equipped with sheds.**

40 CFR 63.305(a)

(a) The owner or operator of a new or existing coke oven battery equipped with a shed for the capture of coke oven emissions from coke oven doors and an emission control device for the collection of the emissions may comply with an alternative to the applicable visible emission limitations for coke oven doors in §§63.302 and 63.304 according to the procedures and requirements in this section.

40 CFR 63.305(b)
(b) To qualify for approval of an alternative standard, the owner or operator shall submit to the Administrator a test plan for the measurement of emissions. A copy of the request shall also be sent to the Director, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. The plan shall describe the procedures to be used for the measurement of particulate matter; the parameters to be measured that affect the shed exhaust rate (e.g., damper settings, fan power) and the procedures for measuring such parameters; and if applicable under paragraph (c)(5)(ii) of this section, the procedures to be used for the measurement of benzene soluble organics, benzene, toluene, and xylene emitted from the control device for the shed. The owner or operator shall notify the Administrator at least 30 days before any performance test is conducted.

40 CFR 63.305(c)

(c) A complete test plan is deemed approved if no disapproval is received within 60 days of the submittal to the Administrator. After approval of the test plan, the owner or operator shall;

40 CFR 63.305(c)(1)

(1) Determine the efficiency of the control device for removal of particulate matter by conducting measurements at the inlet and the outlet of the emission control device using Method 5 in appendix A to part 60 of this chapter, with the filter box operated at ambient temperature and in a manner to avoid condensation, with a backup filter;

40 CFR 63.305(c)(2)

(2) Measure the visible emissions from coke oven doors that escape capture by the shed using Method 22 in appendix A to part 60 of this chapter. For the purpose of approval of an alternative standard, no visible emissions may escape capture from the shed.

40 CFR 63.305(c)(2)(i)

(i) Visible emission observations shall be taken during conditions representative of normal operations, except that pushing shall be suspended and pushing emissions shall have cleared the shed; and

40 CFR 63.305(c)(2)(ii)

(ii) Method 22 observations shall be performed by an observer certified according to the requirements of Method 9 in appendix A to part 60 of this chapter. The observer shall allow pushing emissions to be evacuated (typically 1 to 2 minutes) before making observations;

40 CFR 63.305(c)(3)

(3) Measure the opacity of emissions from the control device using Method 9 in appendix A to part 60 of this chapter during conditions representative of normal operations, including pushing; and

40 CFR 63.305(c)(3)(i)

(i) If the control device has multiple stacks, the owner or operator shall use an evaluation based on visible emissions and opacity to select the stack with the highest opacity for testing under this section;

40 CFR 63.305(c)(3)(ii)

(ii) The highest opacity, expressed as a 6-minute average, shall be used as the opacity standard for the control device.

40 CFR 63.305(c)(4)

(4) Thoroughly inspect all compartments of each air cleaning device prior to the performance test for proper operation and for changes that signal the potential for malfunction, including the presence of tears, holes, and abrasions in filter bags; damaged seals; and for dust deposits on the clean side of bags; and

40 CFR 63.305(c)(5)

(5) Determine the allowable percent leaking doors under the shed using either of the following procedures:

40 CFR 63.305(c)(5)(i)
(i) Calculate the allowable percent leaking doors using the following equation:

\[
PLD = \left[ \frac{(1.4 (PLD_{std})^{2.5})}{(1.4 - \text{eff}/100)} \right]^{0.4}
\]

where

- PLD = Allowable percent leaking doors for alternative standard.
- PLD\text{std} = Applicable visible emission limitation of percent leaking doors under this subpart that would otherwise apply to the coke oven battery, converted to the single-run limit according to Table 1.
- eff = Percent control efficiency for particulate matter for emission control device as determined according to paragraph (c)(1) of this section.

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or;

40 CFR 63.305(c)(5)(ii)

(ii) Calculate the allowable percent leaking doors using the following procedures:

40 CFR 63.305(c)(5)(ii)(A)

(A) Measure the total emission rate of benzene, toluene, and xylene exiting the control device using Method 18 in appendix A to part 60 of this chapter and the emission rate of benzene soluble organics entering the control device as described in the test plan submitted pursuant to paragraph (b) of this section; or

40 CFR 63.305(c)(5)(ii)(B)

(B) Measure benzene, toluene, xylene, and benzene soluble organics in the gas in the collector main as described in the test plan submitted pursuant to paragraph (b) of this section; and

40 CFR 63.305(c)(5)(ii)(C)
(C) Calculate the ratio (R) of benzene, toluene, and xylene to benzene soluble organics for the gas in the collector main, or as the sum of the outlet emission rates of benzene, toluene, and xylene, divided by the emission rate of benzene soluble organics as measured at the inlet to the control device; and

(D) Calculate the allowable percent leaking doors limit under the shed using the following equation:

\[ \text{PLD} = \left[ \frac{(R+1)(\text{PLD}_{\text{std}})^{2.5}}{(R+1 - \text{eff}/100)} \right]^{0.4} \]  

Eq. 2

where

\( R = \text{Ratio of measured emissions of benzene, toluene, and xylene to measured emissions of benzene soluble organics.} \)

(iii) If the allowable percent leaking coke oven doors is calculated to exceed 15 percent leaking coke oven doors under paragraphs (c)(5)(i) or (c)(5)(ii) of this section, the owner or operator shall use 15 percent leaking coke oven doors for the purposes of this section.

(6) Monitor the parameters that affect the shed exhaust flow rate.

(7) The owner or operator may request alternative sampling procedures to those specified in paragraph (c)(5)(ii) (A) and (B) of this section by submitting details on the procedures and the rationale for their use to the Administrator. Alternative procedures shall not be used without approval from the Administrator.

(8) The owner or operator shall inform the Administrator of the schedule for conducting testing under the approved test plan and give the Administrator the opportunity to observe the tests.

(d) After calculating the alternative standard for allowable percent leaking coke oven doors, the owner or operator shall submit the following information to the Administrator:

(1) Identity of the coke oven battery;

(2) Visible emission limitation(s) for percent leaking doors currently applicable to the coke oven battery under this subpart and known future limitations for percent leaking coke oven doors;

(3) A written report including:

(i) Appropriate measurements and calculations used to derive the allowable percent leaking coke oven doors requested as the alternative standard;

(ii) Appropriate visible emission observations for the shed and opacity observations for the control device for the shed, including an alternative opacity standard, if applicable, as described in paragraph (c)(3) of this section based on the highest 6-minute average; and

(iii) The parameter or parameters (e.g., fan power, damper position, or other) to be monitored and recorded to demonstrate that the exhaust flow rate measured during the test required by paragraph (c)(1) of this section is maintained, and the monitoring plan for such parameter(s).
(iv) If the application is for a new shed, one of the following demonstrations:

40 CFR 63.305(d)(3)(iv)(A)

(A) A demonstration, using modeling procedures acceptable to the Administrator, that the expected concentrations of particulate emissions (including benzene soluble organics) under the shed at the bench level, when the proposed alternative standard was being met, would not exceed the expected concentrations of particulate emissions (including benzene soluble organics) if the shed were not present, the regulations under this subpart were met, and the battery was in compliance with federally enforceable limitations on pushing emissions; or

40 CFR 63.305(d)(3)(iv)(B)

(B) A demonstration that the shed (including the evacuation system) has been designed in accordance with generally accepted engineering principles for the effective capture and control of particulate emissions (including benzene soluble organics) as measured at the shed's perimeter, its control device, and at the bench level.

40 CFR 63.305(e)

(e) The Administrator will review the information and data submitted according to paragraph (d) of this section and may request additional information and data within 60 days of receipt of a complete request.

40 CFR 63.305(e)(1)

(1) Except for applications subject to paragraph (e)(3) of this section, the Administrator shall approve or disapprove an alternative standard as expeditiously as practicable. The Administrator shall approve an alternative standard, unless the Administrator determines that the approved test plan has not been followed, or any required calculations are incorrect, or any demonstration required under paragraph (d)(3)(iv) of this section does not satisfy the applicable criteria under that paragraph. If the alternative standard is disapproved, the Administrator will issue a written notification to the owner or operator within the 60-day period.

40 CFR 63.305(e)(2)

(2) The owner or operator shall comply with the applicable visible emission limitation for coke oven doors and all other requirements in this subpart prior to approval of an alternative standard. The owner or operator may apply for an alternative standard at any time after December 4, 1992.

40 CFR 63.305(e)(3)

(3) An application for an alternative standard to the standard in §63.304(b)(1)(i) for any shed that is not a new shed that is filed on or before June 15, 1993, is deemed approved if a notice of disapproval has not been received 60 days after submission of a complete request. An approval under paragraph (e)(3) of this section shall be valid for a period of 1 year.

40 CFR 63.305(e)(4)

(4) Notwithstanding the provisions of paragraph (e) of this section, no alternative standard shall be approved that exceeds 15 percent leaking coke oven doors (yard equivalent).

40 CFR 63.305(f)

(f) After approval of an alternative standard, the owner or operator shall comply with the following requirements:

40 CFR 63.305(f)(1)

(1) The owner or operator shall not discharge or allow to be discharged to the atmosphere coke oven emissions from coke oven doors under sheds that exceed an approved alternative standard for percent leaking coke oven doors under sheds.

40 CFR 63.305(f)(1)(i)

(i) All visible emission observations for compliance determinations shall be performed by a certified
40 CFR 63.305(f)(1)(ii)
(ii) Compliance with the alternative standard for doors shall be determined by a weekly performance test conducted according to the procedures and requirements in §63.309(d)(5) and Method 303 in appendix A to this part.

40 CFR 63.305(f)(1)(iii)
(iii) If the visible emission limitation is achieved for 12 consecutive observations, compliance shall be determined by monthly rather than weekly performance tests. If any exceedance occurs during a performance test, weekly performance tests shall be resumed.

40 CFR 63.305(f)(1)(iv)
(iv) Observations taken at times other than those specified in paragraphs (f)(1)(ii) and (f)(1)(iii) of this section shall be subject to the provisions of §63.309(f).

40 CFR 63.305(f)(2)
(2) The certified observer shall monitor the visible coke oven emissions escaping capture by the shed on a weekly basis. The provision in paragraph (f)(6) of this section is applicable if visible coke oven emissions are observed during periods when pushing emissions have cleared the shed.

40 CFR 63.305(f)(3)
(3) The owner or operator shall not discharge or allow to be discharged to the atmosphere any visible emissions from the shed's control device exhibiting more than 0 percent opacity unless an alternative limit has been approved under paragraph (e) of this section.

40 CFR 63.305(f)(4)
(4) The opacity of emissions from the control device for the shed shall be monitored in accordance with the requirements of either paragraph (f)(4)(i) or (f)(4)(ii) of this section, at the election of the owner or operator.

40 CFR 63.305(f)(4)(i)
(i) The owner or operator shall install, operate, and maintain a continuous opacity monitor, and record the output of the system, for the measurement of the opacity of emissions discharged from the emission control system.

40 CFR 63.305(f)(4)(i)(A)
(A) Each continuous opacity monitoring system shall meet the requirements of Performance Specification 1 in appendix B to part 60 of this chapter; and

40 CFR 63.305(f)(4)(i)(B)
(B) Each continuous opacity monitoring system shall be operated, calibrated, and maintained according to the procedures and requirements specified in part 52 of this chapter; or

40 CFR 63.305(f)(4)(ii)
(ii) A certified observer shall monitor and record at least once each day during daylight hours, opacity observations for the control device for the shed using Method 9 in appendix A to part 60 of this chapter.

40 CFR 63.305(f)(5)
(5) The owner or operator shall visually inspect the structural integrity of the shed at least once a quarter for defects, such as deterioration of sheet metal (e.g., holes in the shed), that may allow the escape of visible emissions.
40 CFR 63.305(f)(5)(i)
   (i) The owner or operator shall record the time and date a defect is first observed, the time and date the
   defect is corrected or repaired, and a brief description of repairs or corrective actions taken;
40 CFR 63.305(f)(5)(ii)
   (ii) The owner or operator shall temporarily repair the defect as soon as possible, but no later than 5
   days after detection of the defect;
40 CFR 63.305(f)(5)(iii)
   (iii) Unless a major repair is required, the owner or operator shall perform a complete repair of the
   defect within 15 days of detection of the defect. If a major repair is required (e.g., replacement of large
   sections of the shed), the owner or operator shall submit a repair schedule to the enforcement agency.
40 CFR 63.305(f)(6)
   (6) If the no visible emission limit for the shed specified in paragraph (f)(2) of this section is exceeded, the
   Administrator may require another test for the shed according to the approved test plan as specified in
   paragraph (c) of this section. If the certified observer observes visible coke oven emissions from the shed,
   except during periods of pushing or when pushing emissions have not cleared the shed, the owner or operator
   shall check to ensure that the shed and control device are working properly.
40 CFR 63.305(f)(7)
   (7) The owner or operator shall monitor the parameter(s) affecting shed exhaust flow rate, and record
   data, in accordance with the approved monitoring plan for these parameters.
40 CFR 63.305(f)(8)
   (8) The owner or operator shall not operate the exhaust system of the shed at an exhaust flow rate lower
   than that measured during the test required under paragraph (c)(1) of this section, as indicated by the
   monitored parameters.
40 CFR 63.305(g)
   (g) Each side of a battery subject to an alternative standard for doors under this section shall be treated
   separately for purposes of §§63.306(c) (plan implementation) and 63.306(d) (plan revisions) of this subpart. In
   making determinations under these provisions for the side of the battery subject to an alternative standard, the
   requirement that exceedances be independent shall not apply. During any period when work practices for doors
   for both sides of the battery are required to be implemented, §63.306(a)(3) shall apply in the same manner as if
   the provisions of a plan for a single emissions point were required to be implemented. Exceedances of the
   alternative standard for percent leaking doors under a shed is the only provision in this section implicating
   implementation of work practice requirements.
40 CFR 63.305(h)
   (h) Multiple exceedances of the visible emission limitation for door leaks and/or the provisions of an
   alternative standard under this section for door leaks at a battery on a single day shall be considered a single
   violation.

40 CFR 63.306(a)
   (a) Work practice plan. On or before November 15, 1993, each owner or operator shall prepare and submit
   a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve
   compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and
   charging operations under this subpart, or, for a coke oven battery not subject to visible emission limitations
   under this subpart, other federally enforceable visible emission limitations for these emission points.
40 CFR 63.306(a)(1)

(1) The work practice plan must address each of the topics specified in paragraph (b) of this section in sufficient detail and with sufficient specificity to allow the reviewing authority to evaluate the plan for completeness and enforceability.

40 CFR 63.306(a)(2)

(2) The initial plan and any revisions shall be submitted to the Administrator or the delegated State, local, or Tribal authority. The Administrator (or delegated State, local, or Tribal authority) may require revisions to the initial plan only where the Administrator (or delegated State, local, or Tribal authority) finds either that the plan does not address each subject area listed in paragraph (b) of this section for each emission point subject to a visible emission standard under this subpart, or that the plan in unenforceable because it contains requirements that are unclear.

40 CFR 63.306(a)(3)

(3) During any period of time that an owner or operator is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any recordkeeping requirement(s) under §63.311(f)(4) for the emission point during a particular day is a single violation.

40 CFR 63.306(b)

(b) Plan components. The owner or operator shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under this subpart. Each of the following provisions, at a minimum, shall be addressed in the plan:

40 CFR 63.306(b)(1)

(1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of this subpart, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by the owner or operator or by qualified contractor personnel; however, the owner or operator shall ensure that the contractor training program complies with the requirements of this section. The training program in the plan must include:

40 CFR 63.306(b)(1)(i)

(i) A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;

40 CFR 63.306(b)(1)(ii)

(ii) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;

40 CFR 63.306(b)(1)(iii)

(iii) A description of the training method(s) that will be used (e.g., lecture, video tape);

40 CFR 63.306(b)(1)(iv)

(iv) A statement of the duration of initial training and the duration and frequency of refresher training;

40 CFR 63.306(b)(1)(v)

(v) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and

40 CFR 63.306(b)(1)(vi)

(vi) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing paragraph (b)(7) of this section.
(2) Procedures for controlling emissions from coke oven doors on by-product coke oven batteries, including:

40 CFR 63.306(b)(2)(i)

(i) A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

40 CFR 63.306(b)(2)(ii)

(ii) Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;

40 CFR 63.306(b)(2)(iii)

(iii) Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;

40 CFR 63.306(b)(2)(iv)

(iv) For batteries equipped with self-sealing doors, procedures for use of supplemental gasketing and luting materials, if the owner or operator elects to use such procedures as part of the program to prevent exceedances;

40 CFR 63.306(b)(2)(v)

(v) For batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary to prevent exceedances;

40 CFR 63.306(b)(2)(vi)

(vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and

40 CFR 63.306(b)(2)(vii)

(vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur.

40 CFR 63.306(b)(3)

(3) Procedures for controlling emissions from charging operations on by-product coke oven batteries, including:

40 CFR 63.306(b)(3)(i)

(i) Procedures for equipment inspection, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

40 CFR 63.306(b)(3)(ii)

(ii) Procedures for ensuring that the larry car hoppers are filled properly with coal;

40 CFR 63.306(b)(3)(iii)

(iii) Procedures for the alignment of the larry car over the oven to be charged;

40 CFR 63.306(b)(3)(iv)

(iv) Procedures for filling the oven (e.g., procedures for staged or sequential charging);
(v) Procedures for ensuring that the coal is leveled properly in the oven; and
40 CFR 63.306(b)(3)(vi)

(vi) Procedures and schedules for inspection and cleaning of offtake systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.
40 CFR 63.306(b)(4)

(4) Procedures for controlling emissions from topside port lids on by-product coke oven batteries, including:
40 CFR 63.306(b)(4)(i)

(i) Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and
40 CFR 63.306(b)(4)(ii)

(ii) Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.
40 CFR 63.306(b)(5)

(5) Procedures for controlling emissions from offtake system(s) on by-product coke oven batteries, including:
40 CFR 63.306(b)(5)(i)

(i) Procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
40 CFR 63.306(b)(5)(ii)

(ii) Procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and
40 CFR 63.306(b)(5)(iii)

(iii) Procedures for dampering off ovens prior to a push.
40 CFR 63.306(b)(6)

(6) Procedures for controlling emissions from nonrecovery coke oven batteries including:
40 CFR 63.306(b)(6)(i)

(i) Procedures for charging coal into the oven, including any special procedures for minimizing air infiltration during charging, maximizing the draft on the oven, and for replacing the door promptly after charging;
40 CFR 63.306(b)(6)(ii)

(ii) If applicable, procedures for the capture and control of charging emissions;
40 CFR 63.306(b)(6)(iii)

(iii) Procedures for cleaning coke from the door sill area for both sides of the battery after completing the pushing operation and before replacing the coke oven door;
40 CFR 63.306(b)(6)(iv)

(iv) Procedures for cleaning coal from the door sill area after charging and before replacing the push side door;
40 CFR 63.306(b)(6)(v)
(v) Procedures for filling gaps around the door perimeter with sealant material, if applicable; and
40 CFR 63.306(b)(6)(vi)

(vi) Procedures for detecting and controlling emissions from smoldering coal.
40 CFR 63.306(b)(7)

(7) Procedures for maintaining, for each emission point subject to visible emission limitations under this subpart, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
40 CFR 63.306(b)(7)(i)

(i) Procedures for recording the performance of such plan requirements; and
40 CFR 63.306(b)(7)(ii)

(ii) Procedures for certifying the accuracy of such records by the owner or operator.
40 CFR 63.306(b)(8)

(8) Any additional work practices or requirements specified by the Administrator according to paragraph (d) of this section.
40 CFR 63.306(c)

(c) Implementation of work practice plans. On and after November 15, 1993, the owner or operator of a coke oven battery shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:
40 CFR 63.306(c)(1)

(1) The owner or operator of a coke oven battery subject to visible emission limitations under this subpart on and after November 15, 1993, shall:
40 CFR 63.306(c)(1)(i)

(i) Implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purpose of this paragraph (c)(1)(i), the second exceedance is independent" if either of the following criteria is met:
40 CFR 63.306(c)(1)(i)(A)

(A) The second exceedance occurs 30 days or more after the first exceedance;
40 CFR 63.306(c)(1)(i)(B)

(B) In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or
40 CFR 63.306(c)(1)(i)(C)

(C) In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.
40 CFR 63.306(c)(1)(ii)

(ii) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to paragraph (c)(1)(i) of this section. After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination under paragraph (c)(1)(i) of this section.
40 CFR 63.306(c)(2)
The owner or operator of a coke oven battery not subject to visible emission limitations under this subpart until December 31, 1995, shall:

40 CFR 63.306(c)(2)(i)

(i) Implement the provisions of the work practice plan pertaining to a particular emission point following the second exceedance in any consecutive 6-month period of a federally enforceable emission limitation for that emission point for coke oven doors, topside port lids, offtake systems, or charging operations by no later than 3 days after receipt of written notification from the applicable enforcement agency; and

40 CFR 63.306(c)(2)(ii)

(ii) Continue to implement such plan provisions for 90 consecutive days after the most recent written notification from the enforcement agency of an exceedance of the visible emission limitation.

40 CFR 63.306(d)

(d) Revisions to plan. Revisions to the work practice emission control plan will be governed by the provisions in this paragraph (d) and in paragraph (a)(2) of this section. The reviewing authority is the Administrator or the delegated State, local, or Tribal authority.

40 CFR 63.306(d)(1)

(1) The reviewing authority may request the owner or operator to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6-month period that starts 30 days after the owner or operator is required to implement work practices under paragraph (c) of this section. In the case of a coke oven battery subject to visual emission limitations under this subpart, the second exceedance must be independent of the criteria in paragraph (c)(1)(i) of this section.

40 CFR 63.306(d)(2)

(2) The reviewing authority may not request the owner or operator to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the reviewing authority disapproves the plan according to the provisions in paragraph (d)(6) of this section.

40 CFR 63.306(d)(3)

(3) If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the owner or operator. No later than 10 days after receipt of such a notification, the owner or operator shall notify the reviewing authority of any finding of whether work practices are related to the cause or the solution of the problem. The notification is subject to review by the reviewing authority according to the provisions in paragraph (d)(6) of this section.

40 CFR 63.306(d)(4)

(4) The owner or operator shall submit a revised work practice plan within 60 days of notification from the reviewing authority under paragraph (d)(1) of this section, unless the reviewing authority grants an extension of time to submit the revised plan.

40 CFR 63.306(d)(5)

(5) If the reviewing authority requires a plan revision, the reviewing authority may require the plan to address a subject area or areas in addition to those in paragraph (b) of this section, if the reviewing authority determines that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.

40 CFR 63.306(d)(6)

(6) The reviewing authority may disapprove a plan revision required under paragraph (d) of this section if the reviewing authority determines that the revised plan is inadequate to prevent exceedances of the visible
emission limitation under this subpart for the emission point for which a plan revision is required or, in the case of a battery not subject to visual emission limitations under this subpart, other federally enforceable emission limitations for such emission point. The reviewing authority may also disapprove the finding that may be submitted pursuant to paragraph (d)(3) of this section if the reviewing authority determines that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

23. **40 CFR 63.307 Standards for bypass/bleeder stacks.**

   40 CFR 63.307(a)
   
   (a) (1) Except as otherwise provided in this section, on or before March 31, 1994, the owner or operator of an existing by-product recovery battery for which a notification was not submitted under paragraph (e)(1) of this section shall install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by the battery, which shall thereafter be operated and maintained.

   40 CFR 63.307(a)(2)
   
   (2) Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system or the alternative control device as described in paragraph (d) of this section.

   40 CFR 63.307(a)(3)
   
   (3) The owner or operator of a brownfield coke oven battery or a padup rebuild shall install such a flare system before startup, and shall properly operate and maintain the flare system.

   40 CFR 63.307(b)
   
   (b) Each flare installed pursuant to this section shall meet the following requirements:

   40 CFR 63.307(b)(1)
   
   (1) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air-assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.

   40 CFR 63.307(b)(2)
   
   (2) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of paragraphs (b)(3) and (b)(4) of this section.

   40 CFR 63.307(b)(3)
   
   (3) Each electronic igniter shall meet the following requirements:

   40 CFR 63.307(b)(3)(i)
   
   (i) Each flare shall be equipped with at least two igniter plugs with redundant igniter transformers;

   40 CFR 63.307(b)(3)(ii)
   
   (ii) The ignition units shall be designed failsafe with respect to flame detection thermocouples (i.e., any flame detection thermocouples are used only to indicate the presence of a flame, are not interlocked with the ignition unit, and cannot deactivate the ignition system); and

   40 CFR 63.307(b)(3)(iii)
   
   (iii) Integral battery backup shall be provided to maintain active ignition operation for a minimum of 15 minutes during a power failure.

   40 CFR 63.307(b)(3)(iv)
   
   (iv) Each electronic igniter shall be operated to initiate ignition when the bleeder valve is not fully closed as indicated by an "OPEN" limit switch.

   40 CFR 63.307(b)(4)
(4) Each flare installed to meet the requirements of this paragraph (b) that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by §63.309(h)(2).
40 CFR 63.307(c)

(c) Each flare installed to meet the requirements of this section shall be operated with no visible emissions, as determined by the methods specified in §63.309(h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
40 CFR 63.307(d)

(d) As an alternative to the installation, operation, and maintenance of a flare system as required in paragraph (a) of this section, the owner or operator may petition the Administrator for approval of an alternative control device or system that achieves at least 98 percent destruction or control of coke oven emissions vented to the alternative control device or system.
40 CFR 63.307(e)

(e) The owner or operator of a by-product coke oven battery is exempt from the requirements of this section if the owner or operator:
40 CFR 63.307(e)(1)

(1) Submits to the Administrator, no later than November 10, 1993, a formal commitment to close the battery permanently; and
40 CFR 63.307(e)(2)

(2) Closes the battery permanently no later than December 31, 1995. In no case may the owner or operator continue to operate a battery for which a closure commitment is submitted, past December 31, 1995.
40 CFR 63.307(f)

(f) Any emissions resulting from the installation of flares (or other pollution control devices or systems approved pursuant to paragraph (d) of this section) shall not be used in making new source review determinations under part C and part D of title I of the Act.

24. **40 CFR 63.308 Standards for collecting mains.**

40 CFR 63.308(a)

(a) On and after November 15, 1993, the owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303 in appendix A to this part.
40 CFR 63.308(b)

(b) The owner or operator shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.
40 CFR 63.308(c)

(c) The owner or operator shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.
40 CFR 63.308(d)

(d) The owner or operator shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the Administrator.

25. **40 CFR 63.309 Performance tests and procedures.**

40 CFR 63.309(a)
(a) Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart. If a facility pushes and charges only at night, then that facility must, at its option, change their schedule and charge during daylight hours or provide adequate lighting so that visible emission inspections can be made at night. "Adequate lighting" will be determined by the enforcement agency.

40 CFR 63.309(a)(1)

(1) Each performance test is to be conducted according to the procedures and requirements in this section and in Method 303 or 303A in appendix A to this part or Methods 9 and 22 in appendix A to part 60 of this chapter (where applicable).

40 CFR 63.309(a)(2)

(2) Each performance test is to be conducted by a certified observer.

40 CFR 63.309(a)(3)

(3) The certified observer shall complete any reasonable safety training program offered by the owner or operator prior to conducting any performance test at a coke oven battery.

40 CFR 63.309(a)(4)

(4) Except as otherwise provided in paragraph (a)(5) of this section, the owner or operator shall pay an inspection fee to the enforcement agency each calendar quarter to defray the costs of the daily performance tests required under paragraph (a) of this section.

40 CFR 63.309(a)(4)(i)

(i) The inspection fee shall be determined according to the following formula:

\[ F = H \times S \]  

where

F = Fees to be paid by owner or operator.
H = Total person hours for inspections: 4 hours for 1 coke oven battery, 6.25 hours for 2 coke oven batteries, 8.25 hours for 3 coke oven batteries. For more than 3 coke oven batteries, use these hours to calculate the appropriate estimate of person hours.
S = Current average hourly rate for private visible emission inspectors in the relevant market.

40 CFR 63.309(a)(4)(ii)

(ii) The enforcement agency may revise the value for H in equation 3 within 3 years after October 27, 1993 to reflect the amount of time actually required to conduct the inspections required under paragraph (a) of this section.

40 CFR 63.309(a)(4)(iii)

(iii) The owner or operator shall not be required to pay an inspection fee (or any part thereof) under paragraph (a)(4) of this section, for any monitoring or inspection services required by paragraph (a) of this section that the owner or operator can demonstrate are covered by other fees collected by the enforcement agency.

40 CFR 63.309(a)(4)(iv)

(iv) Upon request, the enforcement agency shall provide the owner or operator information concerning the inspection services covered by any other fees collected by the enforcement agency, and any information relied upon under paragraph (a)(4)(ii) of this section.
(5) (i) The EPA shall be the enforcement agency during any period of time that a delegation of enforcement authority is not in effect or a withdrawal of enforcement authority under §63.313 is in effect, and the Administrator is responsible for performing the inspections required by this section, pursuant to §63.313(c).
40 CFR 63.309(a)(5)(ii)

(ii) Within thirty (30) days of receiving notification from the Administrator that the EPA is the enforcement agency for a coke oven battery, the owner or operator shall enter into a contract providing for the inspections and performance tests required under this section to be performed by a Method 303 certified observer. The inspections and performance tests will be conducted at the expense of the owner or operator, during the period that the EPA is the implementing agency.
40 CFR 63.309(b)

(b) The enforcement agency shall commence daily performance tests on the applicable date specified in §§63.300(a) or (c).
40 CFR 63.309(c)

(c) The certified observer shall conduct each performance test according to the requirements in this paragraph:
40 CFR 63.309(c)(1)

(1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door (except for doors covered by an alternative standard under §63.305), topside port lid, and offtake system on each coke oven battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from each coke oven battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 or Method 303A in appendix A to this part. Observations from fewer than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in appendix A to this part.
40 CFR 63.309(c)(2)

(2) If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.
40 CFR 63.309(c)(3)

(3) After each performance test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of Method 303 in appendix A to this part.
40 CFR 63.309(c)(3)(i)

(i) The owner or operator shall demonstrate pursuant to Method 303 in appendix A to this part the accuracy of the pressure measurement device upon request of the certified observer;
40 CFR 63.309(c)(3)(ii)

(ii) The owner or operator shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection;
40 CFR 63.309(c)(4)

(4) The certified observer shall monitor visible emissions from coke oven doors subject to an alternative standard under §63.305 on the schedule specified in §63.305(f).
40 CFR 63.309(c)(5)
(5) If applicable, the certified observer shall monitor the opacity of any emissions escaping the control device for a shed covering doors subject to an alternative standard under §63.305 on the schedule specified in §63.305(f).
40 CFR 63.309(c)(6)

(6) In no case shall the owner or operator knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.
40 CFR 63.309(d)

(d) Using the observations obtained from each performance test, the enforcement agency shall compute and record, in accordance with the procedures and requirements of Method 303 or 303A in appendix A to this part, for each day of operations on which a valid emissions value (or set of values) is obtained:
40 CFR 63.309(d)(1)

(1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems on each coke oven battery, using the equations in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of Method 303 (or section 3.4.3.2 of Method 303A) in appendix A to this part;
40 CFR 63.309(d)(2)

(2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for each battery, using the equation in section 3.9 of Method 303 in appendix A to this part;
40 CFR 63.309(d)(3)

(3) For a battery subject to an alternative emission limitation for coke oven doors on by-product coke oven batteries pursuant to §63.305, the 30-run rolling average of the percent leaking coke oven doors for any side of the battery not subject to such alternative emission limitation;
40 CFR 63.309(d)(4)

(4) For a by-product coke oven battery subject to the small battery emission limitation for coke oven doors pursuant to §63.304(b)(7), the 30-run rolling average of the number of leaking coke oven doors;
40 CFR 63.309(d)(5)

(5) For an approved alternative emission limitation for coke oven doors according to §63.305, the weekly or monthly observation of the percent leaking coke oven doors using Method 303 in appendix A to this part, the percent opacity of visible emissions from the control device for the shed using Method 9 in appendix A to part 60 of this chapter, and visible emissions from the shed using Method 22 in appendix A to part 60 of this chapter;
40 CFR 63.309(e)

(e) The certified observer shall make available to the implementing agency as well as to the owner or operator, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to the owner or operator as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.
40 CFR 63.309(f)

(f) Compliance shall not be determined more often than the schedule provided for performance tests under this section. If additional valid emissions observations are obtained (or in the case of charging, valid sets of
emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under paragraph (d) of this section or determinations under §63.306.

40 CFR 63.309(g)

(g) Compliance with the alternative standards for nonrecovery coke oven batteries in §63.303; shed inspection, maintenance requirements, and monitoring requirements for parameters affecting the shed exhaust flow rate for batteries subject to alternative standards for coke oven doors under §63.305; work practice emission control plan requirements in §63.306; standards for bypass/bleeder stacks in §63.307; and standards for collecting mains in §63.308 is to be determined by the enforcement agency based on review of records and inspections.

40 CFR 63.309(h)

(h) For a flare installed to meet the requirements of §63.307(b):

40 CFR 63.309(h)(1)

(1) Compliance with the provisions in §63.307(c) (visible emissions from flares) shall be determined using Method 22 in appendix A to part 60 of this chapter, with an observation period of 2 hours; and

40 CFR 63.309(h)(2)

(2) Compliance with the provisions in §63.307(b)(4) (flare pilot light) shall be determined using a thermocouple or any other equivalent device.

40 CFR 63.309(i)

(i) No observations obtained during any program for training or for certifying observers under this subpart shall be used to determine compliance with the requirements of this subpart or any other federally enforceable standard.

40 CFR 63.309(j)

(j) The owner or operator of a new nonrecovery coke oven battery shall conduct a performance test once each week to demonstrate compliance with the opacity limit in §63.303(d)(1). The owner or operator shall conduct each performance test according to the procedures and requirements in paragraphs (j)(1) through (3) of this section.

40 CFR 63.309(j)(1)

(1) Using a certified observer, determine the average opacity of five consecutive charges per week for each charging emissions capture system if charges can be observed according to the requirements of Method 9 (40 CFR part 60, appendix A), except as specified in paragraphs (j)(1)(i) and (ii) of this section.

40 CFR 63.309(j)(1)(i)

(i) Instead of the procedures in section 2.4 of Method 9 (40 CFR part 60, appendix A), record observations to the nearest 5 percent at 15-second intervals for at least five consecutive charges.

40 CFR 63.309(j)(1)(ii)

(ii) Instead of the procedures in section 2.5 of Method 9 (40 CFR part 60, appendix A), determine and record the highest 3-minute average opacity for each charge from the consecutive observations recorded at 15-second intervals.

40 CFR 63.309(j)(2)

(2) Opacity observations are to start when the door is removed for charging and end when the door is replaced.

40 CFR 63.309(j)(3)

(3) Using the observations recorded from each performance test, the certified observer shall compute and record the average of the highest 3-minute averages for five consecutive charges.

40 CFR 63.309(k)
(k) The owner or operator of a new nonrecovery coke oven battery shall conduct a performance test to demonstrate initial compliance with the emission limitations for a charging emissions control device in §63.303(d)(2) within 180 days of the compliance date that is specified for the affected source in §63.300(a)(4) and report the results in the notification of compliance status. The owner or operator shall prepare a site-specific test plan according to the requirements in §63.7(c) and shall conduct each performance test according to the requirements in §63.7(c)(1) and paragraphs (k)(1) through (4) of this section.

40 CFR 63.309(k)(1)

(1) Determine the concentration of PM according to the following test methods in appendix A to 40 CFR part 60.

40 CFR 63.309(k)(1)(i)

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

40 CFR 63.309(k)(1)(ii)

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

40 CFR 63.309(k)(1)(iii)

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference).

40 CFR 63.309(k)(1)(iv)

(iv) Method 4 to determine the moisture content of the stack gas.

40 CFR 63.309(k)(1)(v)

(v) Method 5 or 5D, as applicable, to determine the concentration of front half PM in the stack gas.

40 CFR 63.309(k)(2)

(2) During each PM test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet (dscf) during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges).

40 CFR 63.309(k)(3)

(3) Determine and record the total combined weight of tons of dry coal charged during the duration of each test run.

40 CFR 63.309(k)(4)

(4) Compute the process-weighted mass emissions (Ep) for each test run using Equation 1 of this section as follows:

\[ E_p = \frac{C \times Q \times T}{P \times K} \]  

(Eq. 1)

Where:

Ep = Process weighted mass emissions of PM, lb/ton;

C = Concentration of PM, grains per dry standard cubic foot (gr/dscf);
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

Q = Volumetric flow rate of stack gas, dscf/hr;  
T = Total time during a run that a sample is withdrawn from the stack during charging, hr;  
P = Total amount of dry coal charged during the test run, tons; and  
K = Conversion factor, 7,000 grains per pound (gr/lb).

40 CFR 63.309(l)

(l) The owner or operator of a new nonrecovery coke oven battery shall conduct subsequent performance tests for each charging emissions control device subject to the PM emissions limit in §63.303(d)(2) at least once during each term of their title V operating permit.

40 CFR 63.309(m)

(m) Visible emission observations of a charging emissions control device required by §63.303(d)(3)(iii) must be performed by a certified observer according to Method 9 (40 CFR part 60, appendix A) for one 6-minute period.

26. **40 CFR 63.310 Requirements for startups, shutdowns, and malfunctions.**

40 CFR 63.310(a)

(a) At all times including periods of startup, shutdown, and malfunction, the owner or operator shall operate and maintain the coke oven battery and its pollution control equipment required under this subpart, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under this subpart. Failure to adhere to the requirement of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.

40 CFR 63.310(b)

(b) Each owner or operator of a coke oven battery shall develop and implement according to paragraph (c) of this section, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.

40 CFR 63.310(c)

(c) During a period of startup, shutdown, or malfunction:

40 CFR 63.310(c)(1)

(1) The owner or operator of a coke oven battery shall operate the battery (including associated air pollution control equipment) in accordance with the procedure specified in the startup, shutdown, and malfunction plan; and

40 CFR 63.310(c)(2)

(2) Malfunctions shall be corrected as soon as practicable after their occurrence, in accordance with the plan.

40 CFR 63.310(d)

(d) In order for the provisions of paragraph (i) of this section to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:

40 CFR 63.310(d)(1)
(1) If practicable, to the certified observer if the observer is at the facility during the occurrence; or
40 CFR 63.310(d)(2)

(2) To the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification under paragraph (d)(1) of this section was not made, an explanation of why no such notification was made.
40 CFR 63.310(e)

(e) Within 14 days of the notification made under paragraph (d) of this section, or after a startup or shutdown, the owner or operator shall submit a written report to the applicable permitting authority that:
40 CFR 63.310(e)(1)

(1) Describes the time and circumstances of the startup, shutdown, or malfunction; and
40 CFR 63.310(e)(2)

(2) Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.
40 CFR 63.310(f)

(f) The owner or operator shall maintain a record of internal reports which form the basis of each malfunction notification under paragraph (d) of this section.
40 CFR 63.310(g)

(g) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for this section and is made available for inspection at reasonable times when requested by the Administrator.
40 CFR 63.310(h)

(h) The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
40 CFR 63.310(h)(1)

(1) Does not address a startup, shutdown, or malfunction event that has occurred;
40 CFR 63.310(h)(2)

(2) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or
40 CFR 63.310(h)(3)

(3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
40 CFR 63.310(i)

(i) If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
40 CFR 63.310(i)(1)

(1) Constitute a violation of relevant requirements of this subpart;
40 CFR 63.310(i)(2)

(2) Be used in any compliance determination under §63.309; or
40 CFR 63.310(i)(3)

(3) Be considered for purposes of §63.306, until the Administrator has resolved the claim that a startup, shutdown, or malfunction has occurred. If the Administrator determines that a startup, shutdown, or
malfunction has not occurred, such observations may be used for purposes of §63.306, regardless of whether the owner or operator further contests such determination. The owner's or operator's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under §63.306, as written notification from the certified observer that an exceedance has occurred. 40 CFR 63.310(j)

(j) The owner or operator of a nonrecovery coke oven battery subject to the work practice standards for door leaks in §63.303(c) shall include the information specified in paragraphs (j)(1) and (2) of this section in the startup, shutdown, and malfunction plan.

40 CFR 63.310(j)(1)

(1) Identification of potential malfunctions that will cause a door to leak, preventative maintenance procedures to minimize their occurrence, and corrective action procedures to stop the door leak.

40 CFR 63.310(j)(2)

(2) Identification of potential malfunctions that affect charging emissions, preventative maintenance procedures to minimize their occurrence, and corrective action procedures.

27. **40 CFR 63.311 Reporting and recordkeeping requirements.**

40 CFR 63.311(a)

(a) After the effective date of an approved permit in a State under part 70 of this chapter, the owner or operator shall submit all notifications and reports required by this subpart to the State permitting authority. Use of information provided by the certified observer shall be a sufficient basis for notifications required under §70.5(c)(9) of this chapter and the reasonable inquiry requirement of §70.5(d) of this chapter.

40 CFR 63.311(b)

(b) **Initial compliance certification.** The owner or operator of an existing or new coke oven battery shall provide a written statement(s) to certify compliance to the Administrator within 45 days of the applicable compliance date for the emission limitations or requirements in this subpart. The owner or operator shall include the following information in the initial compliance certification:

40 CFR 63.311(b)(1)

(1) Statement, signed by the owner or operator, certifying that a bypass/bleeder stack flare system or an approved alternative control device or system has been installed as required in §63.307.

40 CFR 63.311(b)(2)

(2) Statement, signed by the owner or operator, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in §63.310.

40 CFR 63.311(b)(3)

(3) Statement, signed by the owner or operator, certifying that all work practice standards for charging operations have been met as required in §63.303(b)(3).

40 CFR 63.311(b)(4)

(4) Statement, signed by the owner or operator, certifying that all work practice standards for door leaks have been met as required in §63.303(c).

40 CFR 63.311(b)(5)

(5) Statement, signed by the owner or operator, certifying that the information on potential malfunctions has been added to the startup, shutdown and malfunction plan as required in §63.310(j).

40 CFR 63.311(b)(6)

(6) Statement, signed by the owner or operator, that all applicable emission limitations in §63.303(d)(1) and (2) for a new nonrecovery coke oven battery have been met. The
owner or operator shall also include the results of the PM performance test required in §63.309(k).

40 CFR 63.311(b)(7)

(7) Statement, signed by the owner or operator, certifying that all work practice standards in §63.303(d)(3) and (4) for a new nonrecovery coke oven battery have been met.

40 CFR 63.311(c)

(c) Notifications. The owner or operator shall provide written notification(s) to the Administrator of:

40 CFR 63.311(c)(1)

(1) Intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and construction of a greenfield coke oven battery), a brownfield coke oven battery, or a padup rebuild coke oven battery, including the anticipated date of startup.

40 CFR 63.311(c)(2)

(2) Election to meet emission limitation(s) in this subpart as follows:

40 CFR 63.311(c)(2)(i)

(i) Notification of election to meet the emission limitations in §§63.304(b)(1) or 63.304(c) either in lieu of or in addition to the applicable emission limitations in §63.302(a) or §63.303(a) must be received by the Administrator on or before November 15, 1993; or

40 CFR 63.311(c)(2)(ii)

(ii) Notification of election to meet the emission limitations in §63.302(a)(1) or §63.303(a), as applicable, must be received by the Administrator on or before December 31, 1995; and

40 CFR 63.311(c)(2)(iii)

(iii) Notification of election to meet the emission limitations in §63.304(b)(2) through (4) and §63.304(c) or election to meet residual risk standards to be developed according to section 112(f) of the Act in lieu of the emission standards in §63.304 must be received on or before January 1, 1998.

40 CFR 63.311(c)(3)

(3) Intention to conduct a PM performance test for a new nonrecovery coke oven battery subject to the requirements in §63.303(d)(2). The owner or operator shall provide written notification according to the requirements in §63.7(b).

40 CFR 63.311(d)

(d) Semianual compliance certification. The owner or operator of a coke oven battery shall include the following information in the semiannual compliance certification:

40 CFR 63.311(d)(1)

(1) Certification, signed by the owner or operator, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the reporting period or that a venting report has been submitted according to the requirements in paragraph (e) of this section.

40 CFR 63.311(d)(2)

(2) Certification, signed by the owner or operator, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in §63.310(e).

40 CFR 63.311(d)(3)

(3) Certification, signed by the owner or operator, that work practices were implemented if applicable under §63.306.
40 CFR 63.311(d)(4)
(4) Certification, signed by the owner or operator, that all work practices for nonrecovery coke oven batteries were implemented as required in §63.303(b)(3).

40 CFR 63.311(d)(5)
(5) Certification, signed by the owner or operator, that all coke oven door leaks on a nonrecovery battery were stopped according to the requirements in §63.303(c)(2) and (3). If a coke oven door leak was not stopped according to the requirements in §63.303(c)(2) and (3), or if the door leak occurred again during the coking cycle, the owner or operator must report the information in paragraphs (d)(5)(i) through (iii) of this section.

40 CFR 63.311(d)(5)(i)
(i) The oven number of each coke oven door for which a leak was not stopped according to the requirements in §63.303(c)(2) and (3) or for a door leak that occurred again during the coking cycle.

40 CFR 63.311(d)(5)(ii)
(ii) The total duration of the leak from the time the leak was first observed.

40 CFR 63.311(d)(5)(iii)
(iii) The cause of the leak (including unknown cause, if applicable) and the corrective action taken to stop the leak.

40 CFR 63.311(d)(6)
(6) Certification, signed by the owner or operator, that the opacity of emissions from charging operations for a new nonrecovery coke oven battery did not exceed 20 percent. If the opacity limit in §63.303(d)(1) was exceeded, the owner or operator must report the number, duration, and cause of the deviation (including unknown cause, if applicable), and the corrective action taken.

40 CFR 63.311(d)(7)
(7) Results of any PM performance test for a charging emissions control device for a new nonrecovery coke oven battery conducted during the reporting period as required in §63.309(l).

40 CFR 63.311(d)(8)
(8) Certification, signed by the owner or operator, that all work practices for a charging emissions control device for a new nonrecovery coke oven battery were implemented as required in §63.303(d)(3). If a Method 9 (40 CFR part 60, appendix A) visible emissions observation exceeds 10 percent, the owner or operator must report the duration and cause of the deviation (including unknown cause, if applicable), and the corrective action taken.

40 CFR 63.311(d)(9)
(9) Certification, signed by the owner or operator, that all work practices for oven dampers on a new nonrecovery coke oven battery were implemented as required in §63.303(d)(4).

40 CFR 63.311(e)
(e) Report for the venting of coke oven gas other than through a flare system. The owner or operator shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the Administrator as soon as practicable but no later than 24 hours after the beginning of the event. A written report shall be submitted within 30 days of the event and shall include a description of the event and, if applicable, a copy of the notification for a hazardous substance release required pursuant to §302.6 of this chapter.

40 CFR 63.311(f)
(f) Recordkeeping. The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator for the time period specified in §70.6(a)(3)(ii)(B) of this chapter. Copies of the work practice plan developed under §63.306 and the startup, shutdown, and malfunction plan developed under §63.310 shall be kept onsite at all times. The owner or operator shall maintain the following information:

40 CFR 63.311(f)(1)

(1) For nonrecovery coke oven batteries,

40 CFR 63.311(f)(1)(i)

(i) Records of daily pressure monitoring, if applicable according to §63.303(a)(1)(ii) or §63.303(b)(1)(ii).

40 CFR 63.311(f)(1)(ii)

(ii) Records demonstrating the performance of work practice requirements according to §63.306(b)(7).

40 CFR 63.311(f)(1)(iii)

(iii) Design characteristics of each emission control system for the capture and collection of charging emissions, as required by §63.303(b)(2).

40 CFR 63.311(f)(1)(iv)

(iv) Records to demonstrate compliance with the work practice requirement for door leaks in §63.303(c). These records must include the oven number of each leaking door, total duration of the leak from the time the leak was first observed, the cause of the leak (including unknown cause, if applicable), the corrective action taken, and the amount of time taken to stop the leak from the time the leak was first observed.

40 CFR 63.311(f)(1)(v)

(v) Records to demonstrate compliance with the work practice requirements for oven uptake damper monitoring and adjustments in §63.303(c)(1)(iv).

40 CFR 63.311(f)(1)(vi)

(vi) Records of weekly performance tests to demonstrate compliance with the opacity limit for charging operations in §63.303(d)(1). These records must include calculations of the highest 3-minute averages for each charge, the average opacity of five charges, and, if applicable, records demonstrating why five consecutive charges were not observed (e.g., the battery was charged only at night).

40 CFR 63.311(f)(1)(vii)

(vii) Records of all PM performance tests for a charging emissions control device to demonstrate compliance with the limit in §63.303(d)(2).

40 CFR 63.311(f)(1)(viii)

(viii) Records of all daily visible emission observations for a charging emission control device to demonstrate compliance with the requirements limit in §63.303(d)(3).

40 CFR 63.311(f)(1)(ix)

(ix) Records to demonstrate compliance with the work practice requirements for oven uptake damper monitoring and adjustments in §63.303(d)(4).

40 CFR 63.311(f)(2)

(2) For an approved alternative emission limitation according to §63.305;

40 CFR 63.311(f)(2)(i)

(i) Monitoring records for parameter(s) that indicate the exhaust flow rate is maintained;
(ii) If applicable under §63.305(f)(4)(i);
40 CFR 63.311(f)(2)(ii)(A)
   (A) Records of opacity readings from the continuous opacity monitor for the control device for the
   shed; and
40 CFR 63.311(f)(2)(ii)(B)
   (B) Records that demonstrate the continuous opacity monitoring system meets the requirements of
Performance Specification 1 in appendix B to part 60 of this chapter and the operation and maintenance
requirements in part 52 of this chapter; and
40 CFR 63.311(f)(2)(iii)
   (iii) Records of quarterly visual inspections as specified in §63.305(f)(5), including the time and date a
defect is detected and repaired.
40 CFR 63.311(f)(3)
   (3) A copy of the work practice plan required by §63.306 and any revision to the plan;
40 CFR 63.311(f)(4)
   (4) If the owner or operator is required under §63.306(c) to implement the provisions of a work practice
plan for a particular emission point, the following records regarding the implementation of plan requirements
for that emission point during the implementation period;
40 CFR 63.311(f)(4)(i)
   (i) Copies of all written and audiovisual materials used in the training, the dates of each class, the names
of the participants in each class, and documentation that all appropriate personnel have successfully completed
the training required under §63.306(b)(1);
40 CFR 63.311(f)(4)(ii)
   (ii) The records required to be maintained by the plan provisions implementing §63.306(b)(7);
40 CFR 63.311(f)(4)(iii)
   (iii) Records resulting from audits of the effectiveness of the work practice program for the particular
emission point, as required under §§63.306(b)(2)(i), 63.306(b)(3)(i), 63.306(b)(4)(i), or 63.306(b)(5)(i); and
40 CFR 63.311(f)(4)(iv)
   (iv) If the plan provisions for coke oven doors must be implemented, records of the inventory of doors
and jambs as required under §63.306(b)(2)(vi); and
40 CFR 63.311(f)(5)
   (5) The design drawings and engineering specifications for the bypass/bleeder stack flare system or
approved alternative control device or system as required under §63.307.
40 CFR 63.311(f)(6)
   (6) Records specified in §63.310(f) regarding the basis of each malfunction notification.
40 CFR 63.311(g)
   (g) Records required to be maintained and reports required to be filed with the Administrator under this
subpart shall be made available in accordance with the requirements of this paragraph by the owner or operator
to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection
and copying.
40 CFR 63.311(g)(1)
   (1) Requests under paragraph (g) of this section shall be submitted in writing, and shall identify the records
or reports that are subject to the request with reasonable specificity;
40 CFR 63.311(g)(2)
   (2) The owner or operator shall produce the reports for inspection and copying within a reasonable period
of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any
document), which shall not exceed the copying fee charged by the Administrator under part 2 of this chapter; 40 CFR 63.311(g)(3)
(3) Nothing in paragraph (g) of this section shall require the production for inspection or copying of any
portion of a document that contains trade secrets or confidential business information that the Administrator
would be prohibited from disclosing to the public under part 2 of this chapter; and
40 CFR 63.311(g)(4)
(4) The inspection or copying of a document under paragraph (g) of this section shall not in any way affect
any property right of the owner or operator in such document under laws for the protection of intellectual
property, including the copyright laws.

28. **40 CFR 63.312 Existing regulations and requirements.**

40 CFR 63.312(a)
(a) The owner or operator shall comply with all applicable State implementation plan emission limits and
(subject to any expiration date) all federally enforceable emission limitations which are contained in an order,
decree, permit, or settlement agreement for the control of emissions from offtake systems, topside port lids,
coke oven doors, and charging operations in effect on September 15, 1992, or which have been modified
according to the provisions of paragraph (c) of this section.
40 CFR 63.312(b)
(b) Nothing in this subpart shall affect the enforcement of such State implementation plan emission
limitations (or, subject to any expiration date, such federally enforceable emission limitations contained in an
order, decree, permit, or settlement agreement) in effect on September 15, 1992, or which have been modified
according to the provisions in paragraph (c) of this section.
40 CFR 63.312(c)
(c) No such State implementation plan emission limitation (or, subject to any expiration date, such federally
enforceable emission limitation contained in an order, decree, permit, or settlement agreement) in effect on
September 15, 1992, may be modified under the Act unless:
40 CFR 63.312(c)(1)
(1) Such modification is consistent with all requirements of section 110 of the Act; and either
40 CFR 63.312(c)(1)(i)
(i) Such modification ensures that the applicable emission limitations and format (e.g., single pass v.
multiday average) in effect on September 15, 1992, will continue in effect; or
40 CFR 63.312(c)(1)(ii)
(ii) Such modification includes a change in the method of monitoring (except frequency unless frequency
was indicated in the State implementation plan, or subject to any expiration date, other federally enforceable
requirements contained in an order, decree, permit, or settlement agreement) that is more stringent than the
method of monitoring in effect on September 15, 1992, and that ensures coke oven emission reductions greater
than the emission reductions required on September 15, 1992. The burden of proof in demonstrating the
stringency of the methods of monitoring is borne by the party requesting the modification and must be made to
the satisfaction of the Administrator; or
40 CFR 63.312(c)(1)(iii)
29. **40 CFR 63.313 Implementation and enforcement.**

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (d) of this section are retained by the Administrator and cannot be transferred to the State, local, or Tribal agency.

(c) Withdrawal of authority:

(1) Whenever the Administrator learns that a delegated agency has not fully carried out the inspections and performance tests required under §63.309 for each applicable emission point of each battery each day, the Administrator shall immediately notify the agency. Unless the delegated agency demonstrates to the Administrator's satisfaction within 15 days of notification that the agency is consistently carrying out the inspections and performance tests required under §63.309 in the manner specified in the preceding sentence, the Administrator shall notify the coke oven battery owner or operator that inspections and performance tests shall be carried out according to §63.309(a)(5). When the Administrator determines that the delegated agency is prepared to consistently perform all the required inspections and performance tests each day, the Administrator shall give the coke oven battery owner or operator at least 15 days notice that implementation will revert to the previously delegated agency.

(2) In addition to the provisions in paragraph (c)(1) of this section, the Administrator may also withdraw delegation of authority pursuant to the provisions of §63.96 of subpart E of this part.
(d)(1) through (5) of this section.
40 CFR 63.313(d)(1)
(1) Approval of alternatives to the requirements in §§63.300 and 63.302 through 63.308 (except the authorities in 63.306(a)(2) and (d)).
40 CFR 63.313(d)(2)
(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.
40 CFR 63.313(d)(3)
(3) Approval of any changes to section 2 of Method 303 in appendix A of this part.
40 CFR 63.313(d)(4)
(4) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.
40 CFR 63.313(d)(5)
(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks

30. 40 CFR 63.7280  What is the purpose of this subpart?
This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

31. 40 CFR 63.7281  Am I subject to this subpart?
You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

32. 40 CFR 63.7282  What parts of my plant does this subpart cover?
40 CFR 63.7282(a)
(a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.
40 CFR 63.7282(b)
(b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.
40 CFR 63.7282(c)
(c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.
40 CFR 63.7282(d)
(d) An affected source at your coke plant is new if you commenced construction or reconstruction of the
affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

33. **40 CFR 63.7283 When do I have to comply with this subpart?**

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than April 14, 2006.

(b) If you have a new affected source and its initial startup date is on or before April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by April 14, 2003.

(c) If you have a new affected source and its initial startup date is after April 14, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) You must meet the notification and schedule requirements in §63.7340. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations and Work Practice Standards

34. **40 CFR 63.7290 What emission limitations must I meet for capture systems and control devices applied to pushing emissions?**

(a) You must not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a new or existing coke oven battery that exceed the applicable limit in paragraphs (a)(1) through (4) of this section:

(1) 0.01 grain per dry standard cubic foot (gr/dscf) if a cokeside shed is used to capture emissions;

(2) 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions;

(3) If a mobile scrubber car that does not capture emissions during travel is used:

   (i) 0.03 lb/ton of coke for a control device applied to pushing emissions from a short battery, or
40 CFR 63.7290(a)(3)(ii)  
(ii) 0.01 lb/ton of coke for a control device applied to pushing emissions from a tall battery; and

40 CFR 63.7290(a)(4)  
(4) 0.04 lb/ton of coke if a mobile control device that captures emissions during travel is used.

40 CFR 63.7290(b)  
(b) You must meet each operating limit in paragraphs (b)(1) through (4) of this section that applies to you for a new or existing coke oven battery.

40 CFR 63.7290(b)(1)  
(1) For each venturi scrubber applied to pushing emissions, you must maintain the daily average pressure drop and scrubber water flow rate at or above the minimum levels established during the initial performance test.

40 CFR 63.7290(b)(2)  
(2) For each hot water scrubber applied to pushing emissions, you must maintain the daily average water pressure and water temperature at or above the minimum levels established during the initial performance test.

40 CFR 63.7290(b)(3)  
(3) For each capture system applied to pushing emissions, you must maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test; or

40 CFR 63.7290(b)(3)(i)  
(i) For each capture system that uses an electric motor to drive the fan, you must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test; and

40 CFR 63.7290(b)(3)(ii)  
(ii) For each capture system that does not use a fan driven by an electric motor, you must maintain the daily average static pressure at the inlet to the control device at an equal or greater vacuum than the level established during the initial performance test or maintain the daily average fan revolutions per minute (RPM) at or above the minimum level established during the initial performance test.

40 CFR 63.7290(b)(4)  
(4) For each multicyclone, you must maintain the daily average pressure drop at or below the minimum level established during the initial performance test.

35. 40 CFR 63.7291 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with vertical flues?

40 CFR 63.7291(a)  
(a) You must meet each requirement in paragraphs (a)(1) through (7) of this section for each new or existing by-product coke oven battery with vertical flues.

40 CFR 63.7291(a)(1)  
(1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, you must observe the opacity of the first push of that oven following the close of the 90-day period.
that is capable of being observed in accordance with the procedures in §63.7334(a), and you must document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in §63.7334(a).

40 CFR 63.7291(a)(2)

(2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.

40 CFR 63.7291(a)(3)

(3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, you must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

40 CFR 63.7291(a)(4)

(4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

40 CFR 63.7291(a)(5)

(5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, you must take corrective action and/or increase coking time for that oven. You must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 of this section, whichever is greater:

\[ X = 0.55 \times Y \]  

(Eq. 1)

Where:

- \( X \) = Number of calendar days allowed to complete corrective action or increase coking time; and
- \( Y \) = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.

40 CFR 63.7291(a)(6)

(6) (i) You must demonstrate that the corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was
unsuccessful, and you must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph (a)(5) of this section.

40 CFR 63.7291(a)(6)(ii)

(ii) After implementing any additional corrective action and/or increased coking time required under paragraph (a)(6)(i) or (a)(7)(ii) of this section, you must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph (a)(5) of this section, you must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and you must follow the procedures in paragraph (a)(6)(iii) of this section.

40 CFR 63.7291(a)(6)(iii)

(iii) If the corrective action and/or increased coking time was unsuccessful as described in paragraph (a)(6)(ii) of this section, you must repeat the procedures in paragraph (a)(6)(ii) of this section until the corrective action and/or increased coking time is successful. You must report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under paragraph (a)(6)(ii) of this section.

40 CFR 63.7291(a)(7)

(7) (i) If at any time you place an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, you must keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph (a)(7)(ii) or (a)(7)(iii) of this section.

40 CFR 63.7291(a)(7)(ii)

(ii) To qualify for a decreased coking time for an oven placed on increased coking time in accordance with paragraph (a)(5) or (6) of this section, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

40 CFR 63.7291(a)(7)(iii)

(iii) If the attempt to qualify for decreased coking time was unsuccessful as described in paragraph
(a)(7)(ii) of this section, you may again attempt to qualify for decreased coking time for the oven. To do this, you must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, you must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in paragraph (a)(1) of this section. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. You must then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, you must follow the procedures in paragraph (a)(6)(ii) of this section to confirm that the corrective action(s) and/or increased coking time was successful.

40 CFR 63.7291(a)(7)(iv)

(iv) You must report to the permitting authority as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph (a)(7)(iii) of this section.

40 CFR 63.7291(b)

(b) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

36. **40 CFR 63.7292 What work practice standards must I meet for fugitive pushing emissions if I have a by-product coke oven battery with horizontal flues?**

40 CFR 63.7292(a)

(a) You must comply with each of the requirements in paragraphs (a)(1) through (4) of this section.

40 CFR 63.7292(a)(1)

(1) Prepare and operate by a written plan that will eliminate or minimize incomplete coking for each by-product coke oven battery with horizontal flues. You must submit the plan and supporting documentation to the Administrator (or delegated authority) for approval no later than 90 days after completing all observations and measurements required for the study in paragraph (a)(3) of this section or April 14, 2004, whichever is earlier. You must begin operating by the plan requirements by the compliance date that is specified in §63.7283. The written plan must identify minimum flue temperatures for different coking times and a battery-wide minimum acceptable flue temperature for any oven at any coking time.

40 CFR 63.7292(a)(2)

(2) Submit the written plan and supporting documentation to the Administrator (or delegated authority) for review and approval. Include all data collected during the study described in paragraph (a)(3) of this section. If the Administrator (or delegated authority) disapproves the plan, you must revise the plan as directed by the Administrator (or delegated authority) and submit the amended plan for approval. The Administrator (or delegated authority) may require you to collect and submit additional data. You must operate according to your submitted plan (or submitted amended plan, if any) until the Administrator (or delegated authority) approves your plan.

40 CFR 63.7292(a)(3)

(3) You must base your written plan on a study that you conduct that meets each of the requirements listed in paragraphs (a)(3)(i) through (x) of this section.
40 CFR 63.7292(a)(3)(i)
   (i) Initiate the study by July 14, 2003. Notify the Administrator (or delegated authority) at least 7 days prior to initiating the study according to the requirements in §63.7340(f).

40 CFR 63.7292(a)(3)(ii)
   (ii) Conduct the study under representative operating conditions, including but not limited to the range of moisture content and volatile matter in the coal that is charged.

40 CFR 63.7292(a)(3)(iii)
   (iii) Include every oven in the study and observe at least two pushes from each oven.

40 CFR 63.7292(a)(3)(iv)
   (iv) For each push observed, measure and record the temperature of every flue within 2 hours before the scheduled pushing time. Document the oven number, date, and time the oven was charged and pushed, and calculate the net coking time.

40 CFR 63.7292(a)(3)(v)
   (v) For each push observed, document the factors to be used to identify pushes that are incompletely coked. These factors must include (but are not limited to): average opacity during the push, average opacity during travel to the quench tower, average of six highest consecutive observations during both push and travel, highest single opacity reading, color of the emissions (especially noting any yellow or brown emissions), presence of excessive smoke during travel to the quench tower, percent volatile matter in the coke, percent volatile matter and percent moisture in the coal that is charged, and the date the oven was last rebuilt or completely relined. Additional documentation may be provided in the form of pictures or videotape of emissions during the push and travel. All opacity observations must be conducted in accordance with the procedures in §63.7334(a)(3) through (7).

40 CFR 63.7292(a)(3)(vi)
   (vi) Inspect the inside walls of the oven after each observed push for cool spots as indicated by a flue that is darker than others (the oven walls should be red hot) and record the results.

40 CFR 63.7292(a)(3)(vii)
   (vii) For each push observed, note where incomplete coking occurs if possible (e.g., coke side end, pusher side end, top, or center of the coke mass). For any push with incomplete coking, investigate and document the probable cause.

40 CFR 63.7292(a)(3)(viii)
   (viii) Use the documented factors in paragraph (a)(3)(v) of this section to identify pushes that were completely coked and those that were not completely coked. Provide a rationale for the determination based on the documentation of factors observed during the study.

40 CFR 63.7292(a)(3)(ix)
   (ix) Use only the flue temperature and coking time data for pushes that were completely coked to identify minimum flue temperatures for various coking times. Submit the criteria used to determine complete coking, as well as a table of coking times and corresponding temperatures for complete coking as part of your plan.

40 CFR 63.7292(a)(3)(x)
   (x) Determine the battery-wide minimum acceptable flue temperature for any oven. This temperature will be equal to the lowest temperature that provided complete coking as determined in paragraph (a)(3)(ix) of this section.

40 CFR 63.7292(a)(4)
   (4) You must operate according to the coking times and temperatures in your approved plan and the
requirements in paragraphs (a)(4)(i) through (viii) of this section.

40 CFR 63.7292(a)(4)(i)

(i) Measure and record the percent volatile matter in the coal that is charged.

40 CFR 63.7292(a)(4)(ii)

(ii) Measure and record the temperature of all flues on two ovens per day within 2 hours before the scheduled pushing time for each oven. Measure and record the temperature of all flues on each oven at least once each month.

40 CFR 63.7292(a)(4)(iii)

(iii) For each oven observed in accordance with paragraph (a)(4)(ii) of this section, record the time each oven is charged and pushed and calculate and record the net coking time. If any measured flue temperature for an oven is below the minimum flue temperature for an oven's scheduled coking time as established in the written plan, increase the coking time for the oven to the coking time in the written plan for the observed flue temperature before pushing the oven.

40 CFR 63.7292(a)(4)(iv)

(iv) If you increased the coking time for any oven in accordance with paragraph (a)(4)(iii) of this section, you must investigate the cause of the low flue temperature and take corrective action to fix the problem. You must continue to measure and record the temperature of all flues for the oven within 2 hours before each scheduled pushing time until the measurements meet the minimum temperature requirements for the increased coking time for two consecutive pushes. If any measured flue temperature for an oven on increased coking time falls below the minimum flue temperature for the increased coking time, as established in the written plan, you must increase the coking time for the oven to the coking time specified in the written plan for the observed flue temperature before pushing the oven. The oven must continue to operate at this coking time (or at a longer coking time if the temperature falls below the minimum allowed for the increased coking time) until the problem has been corrected, and you have confirmed that the corrective action was successful as required by paragraph (a)(4)(v) of this section.

40 CFR 63.7292(a)(4)(v)

(v) Once the heating problem has been corrected, the oven may be returned to the battery's normal coking schedule. You must then measure and record the flue temperatures for the oven within 2 hours before the scheduled pushing time for the next two consecutive pushes. If any flue temperature measurement is below the minimum flue temperature for that coking time established in the written plan, repeat the procedures in paragraphs (a)(4)(iii) and (iv) of this section.

40 CFR 63.7292(a)(4)(vi)

(vi) If any flue temperature measurement is below the battery-wide minimum acceptable temperature for complete coking established in the written plan for any oven at any coking time, you must remove the oven from service for repairs.

40 CFR 63.7292(a)(4)(vii)

(vii) For an oven that has been repaired and returned to service after being removed from service in accordance with paragraph (a)(4)(vi) of this section, you must measure and record the temperatures of all flues for the oven within 2 hours before the first scheduled pushing time. If any flue temperature measurement is below the minimum flue temperature for the scheduled coking time, as established in the written plan, you must repeat the procedures described in paragraphs (a)(4)(iii) and (iv) of this section.

40 CFR 63.7292(a)(4)(viii)

(viii) For an oven that has been repaired and returned to service after removal from service in accordance with paragraph (a)(4)(vi) of this section, you must report as a deviation to the permitting authority...
any flue temperature measurement made during the initial coking cycle after return to service that is below the lowest acceptable minimum flue temperature.

40 CFR 63.7292(b)
(b) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (a) of this section.

37. **40 CFR 63.7293 What work practice standards must I meet for fugitive pushing emissions if I have a non-recovery coke oven battery?**

40 CFR 63.7293(a)
(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each new and existing non-recovery coke oven battery.

40 CFR 63.7293(a)(1)
(1) You must visually inspect each oven prior to pushing by opening the door damper and observing the bed of coke.

40 CFR 63.7293(a)(2)
(2) Do not push the oven unless the visual inspection indicates that there is no smoke in the open space above the coke bed and that there is an unobstructed view of the door on the opposite side of the oven.

40 CFR 63.7293(b)
(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

38. **40 CFR 63.7294 What work practice standard must I meet for soaking?**

40 CFR 63.7294(a)
(a) For each new and existing by-product coke oven battery, you must prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to:

40 CFR 63.7294(a)(1)
(1) Train topside workers to identify soaking emissions that require corrective actions.

40 CFR 63.7294(a)(2)
(2) Damper the oven off the collecting main prior to opening the standpipe cap.

40 CFR 63.7294(a)(3)
(3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

40 CFR 63.7294(a)(4)
(4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

40 CFR 63.7294(a)(5)
(5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, you must put the oven back on the collecting main until it is completely coked or you must ignite the emissions.
40 CFR 63.7294(b)
(b) As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.

39. **40 CFR 63.7295 What requirements must I meet for quenching?**

40 CFR 63.7295(a)
(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section for each quench tower and backup quench station at a new or existing coke oven battery.

40 CFR 63.7295(a)(1)
(1) For the quenching of hot coke, you must meet the requirements in paragraph (a)(1)(i) or (ii) of this section.

40 CFR 63.7295(a)(1)(i)
(i) The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or

40 CFR 63.7295(a)(1)(ii)
(ii) The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority.

40 CFR 63.7295(a)(2)
(2) You must use acceptable makeup water, as defined in §63.7352, as makeup water for quenching.

40 CFR 63.7295(b)
(b) For each quench tower at a new or existing coke oven battery and each backup quench station at a new coke oven battery, you must meet each of the requirements in paragraphs (b)(1) through (4) of this section.

40 CFR 63.7295(b)(1)
(1) You must equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

40 CFR 63.7295(b)(2)
(2) You must wash the baffles in each quench tower once each day that the tower is used to quench coke, except as specified in paragraphs (b)(2)(i) and (ii) of this section.

40 CFR 63.7295(b)(2)(i)
(i) You are not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, you must resume daily washing according to the schedule in your operation and maintenance plan.

40 CFR 63.7295(b)(2)(ii)
(ii) You must continuously record the ambient temperature on days that the baffles were not washed.

40 CFR 63.7295(b)(3)
(3) You must inspect each quench tower monthly for damaged or missing baffles and blockage.

40 CFR 63.7295(b)(4)
(4) You must initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable.

40 CFR 63.7295(c)
(c) As provided in §63.6(g), you may request to use an alternative to the work practice standards in paragraph (b) of this section.

40 CFR 63.7296  What emission limitations must I meet for battery stacks?
You must not discharge to the atmosphere any emissions from any battery stack at a new or existing by-product coke oven battery that exhibit an opacity greater than the applicable limit in paragraphs (a) and (b) of this section.
40 CFR 63.7296(a)
(a) Daily average of 15 percent opacity for a battery on a normal coking cycle.
40 CFR 63.7296(b)
(b) Daily average of 20 percent opacity for a battery on batterywide extended coking.

Operation and Maintenance Requirements
41. 40 CFR 63.7300  What are my operation and maintenance requirements?
40 CFR 63.7300(a)
(a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
40 CFR 63.7300(b)
(b) You must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section.
40 CFR 63.7300(b)(1)
(1) Frequency and method of recording underfiring gas parameters.
40 CFR 63.7300(b)(2)
(2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.
40 CFR 63.7300(b)(3)
(3) Procedures to prevent pushing an oven before it is fully coked.
40 CFR 63.7300(b)(4)
(4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.
40 CFR 63.7300(b)(5)
(5) Frequency and procedures for inspecting flues, burners, and nozzles.
40 CFR 63.7300(b)(6)
(6) Schedule and procedures for the daily washing of baffles.
40 CFR 63.7300(c)
(c) You must prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from a new or existing coke oven battery. Each plan must address at a minimum the elements in paragraphs (c)(1) through (3) of this section.
40 CFR 63.7300(c)(1)
(1) Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of
the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection.

40 CFR 63.7300(c)(2)
(2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

40 CFR 63.7300(c)(3)
(3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:

40 CFR 63.7300(c)(3)(i)
(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

40 CFR 63.7300(c)(3)(ii)
(ii) Sealing off defective bags or filter media.

40 CFR 63.7300(c)(3)(iii)
(iii) Replacing defective bags or filter media or otherwise repairing the control device.

40 CFR 63.7300(c)(3)(iv)
(iv) Sealing off a defective baghouse compartment.

40 CFR 63.7300(c)(3)(v)
(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

40 CFR 63.7300(c)(3)(vi)
(vi) Shutting down the process producing the particulate emissions.

General Compliance Requirements

42. 40 CFR 63.7310 What are my general requirements for complying with this subpart?

40 CFR 63.7310(a)
(a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.

40 CFR 63.7310(b)
(b) During the period between the compliance date specified for your affected source in §63.7283 and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

40 CFR 63.7310(c)
(c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3).

Initial Compliance Requirements

43. 40 CFR 63.7320 By what date must I conduct performance tests or other initial
compliance demonstrations?

40 CFR 63.7320(a)
(a) As required in §63.7(a)(2), you must conduct a performance test to demonstrate compliance with each limit in §63.7290(a) for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in §63.7283.

40 CFR 63.7320(b)
(b) You must conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in §63.7295(a)(1) and each opacity limit in §63.7297(a) for a by-product coke oven battery stack by the compliance date that is specified in §63.7283.

40 CFR 63.7320(c)
(c) For each work practice standard and operation and maintenance requirement that applies to you, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7283.

40 CFR 63.7320(d)
(d) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, you must demonstrate initial compliance with either the proposed emission limit or the promulgated emission limit no later than October 14, 2003, or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

40 CFR 63.7320(e)
(e) If you commenced construction or reconstruction between July 3, 2001 and April 14, 2003, and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by October 11, 2006, or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

44. 40 CFR 63.7321 When must I conduct subsequent performance tests?
For each control device subject to an emission limit for particulate matter in §63.7290(a), you must conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

45. 40 CFR 63.7322 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter?

40 CFR 63.7322(a)
(a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

40 CFR 63.7322(b)
(b) To determine compliance with the emission limit for particulate matter from a control device applied to pushing emissions where a cokeside shed is the capture system, follow the test methods and procedures in paragraphs (b)(1) and (2) of this section. To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions where a cokeside shed is not used, follow the test methods and procedures in paragraph (b)(1) through (4) of this section.
40 CFR 63.7322(b)(1)
   (1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60.
40 CFR 63.7322(b)(1)(i)
   (i) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
40 CFR 63.7322(b)(1)(ii)
   (ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
40 CFR 63.7322(b)(1)(iii)
   (iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
40 CFR 63.7322(b)(1)(iv)
   (iv) Method 4 to determine the moisture content of the stack gas.
40 CFR 63.7322(b)(1)(v)
   (v) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.
40 CFR 63.7322(b)(2)
   (2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).
40 CFR 63.7322(b)(3)
   (3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.
40 CFR 63.7322(b)(4)
   (4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows:

   \[ E_p = \frac{C \times Q \times T}{P \times K} \]

   "Equation 1"

   Where:
   \( E_p \) = Process weighted mass emissions of particulate matter, lb/ton;
   \( C \) = Concentration of particulate matter, gr/dscf;
   \( Q \) = Volumetric flow rate of stack gas, dscf/hr;
   \( T \) = Total time during a run that a sample is withdrawn from the stack during pushing, hr;
   \( P \) = Total amount of coke pushed during the test run, tons; and
   \( K \) = Conversion factor, 7,000 gr/lb.

46. **40 CFR 63.7323 What procedures must I use to establish operating limits?**

40 CFR 63.7323(a)
   (a) For a venturi scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for pressure drop and scrubber water flow rate according to the procedures in paragraphs (a)(1) and (2) of this section.
(1) Using the continuous parameter monitoring systems (CPMS) required in §63.7330(b), measure and record the pressure drop and scrubber water flow rate for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement and one scrubber water flow rate measurement must be obtained for each push.
40 CFR 63.7323(a)(2)

(2) Compute and record the average pressure drop and scrubber water flow rate for each test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate values recorded during any of the three runs that meet the applicable emission limit.
40 CFR 63.7323(b)

(b) For a hot water scrubber applied to pushing emissions from a coke oven battery, you must establish site-specific operating limits for water pressure and water temperature according to the procedures in paragraphs (b)(1) and (2) of this section.
40 CFR 63.7323(b)(1)

(1) Using the CPMS required in §63.7330(c), measure and record the hot water pressure and temperature for each particulate matter test run during periods of pushing. A minimum of one pressure measurement and one temperature measurement must be made just prior to each push by monitoring the hot water holding tank on the mobile scrubber car.
40 CFR 63.7323(b)(2)

(2) Compute and record the average water pressure and temperature for each test run. Your operating limits are the lowest pressure and temperature values recorded during any of the three runs that meet the applicable emission limit.
40 CFR 63.7323(c)

(c) For a capture system applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit for the fan motor amperes or volumetric flow rate according to the procedures in paragraph (c)(1) or (2), or (3) of this section.
40 CFR 63.7323(c)(1)

(1) If you elect the operating limit in Sec. 63.7290(b)(3) for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. Your operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.
40 CFR 63.7323(c)(2)

(2) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.
40 CFR 63.7323(c)(3)

(3) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for static pressure or fan RPM, measure and record the static pressure at the inlet of the control device or fan RPM during each push sampled for each particulate matter test run. Your operating limit for static pressure is the minimum vacuum recorded during any of the three runs that meets the emission limit. Your operating limit for fan RPM is the lowest fan RPM recorded during any of the three runs that meets the emission limit.
40 CFR 63.7323(d)

(d) For a multicyclone applied to pushing emissions from a coke oven battery, you must establish a site-specific operating limit for pressure drop according to the procedures in paragraphs (d)(1) and (2) of this section.
40 CFR 63.7323(d)(1)
   (1) Using the CPMS required in Sec. 63.7330(f), measure and record the pressure drop for each particulate matter test run during periods of pushing. A minimum of one pressure drop measurement must be obtained for each push.

40 CFR 63.7323(d)(2)
   (2) Compute and record the average pressure drop for each test run. Your operating limit is the highest average pressure drop value recorded during any of the three runs that meet the emission limit.

40 CFR 63.7323(e)
   (e) You may change the operating limit for a venturi scrubber, capture system, or mobile control device that captures emissions during pushing if you meet the requirements in paragraphs (e)(1) through (3) of this section.

40 CFR 63.7323(e)(1)
   (1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

40 CFR 63.7323(e)(2)
   (2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).

40 CFR 63.7323(e)(3)
   (3) Establish revised operating limits according to the applicable procedures in paragraph (a) through (d) of this section.

40 CFR 63.7324 What procedures must I use to demonstrate initial compliance with the opacity limits?

40 CFR 63.7324(a)
   (a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.

40 CFR 63.7324(b)
   (b) To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs (b)(1) through (3) of this section.

40 CFR 63.7324(b)(1)
   (1) Using the continuous opacity monitoring system (COMS) required in §63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.

40 CFR 63.7324(b)(2)
   (2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

40 CFR 63.7324(b)(3)
   (3) Compute and record the 24-hour (daily) average of the COMS data.

40 CFR 63.7325 What test methods and other procedures must I use to demonstrate initial compliance with the TDS or constituent limits for quench water?
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

40 CFR 63.7325(a)
   (a) If you elect the TDS limit for quench water in §63.7295(a)(1)(i), you must conduct each performance
test that applies to your affected source according to the conditions in paragraphs (a)(1) and (2) of this section.
   40 CFR 63.7325(a)(1)
      (1) Take the quench water sample from a location that provides a representative sample of the quench
water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct
sampling under normal and representative operating conditions.
   40 CFR 63.7325(a)(2)
      (2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see
residue—filterable"), except that you must dry the total filterable residue at 103 to 105°C (degrees Centigrade)
instead of 180°C.

40 CFR 63.7325(b)
   (b) If at any time you elect to meet the alternative requirements for quench water in §63.7295(a)(1)(ii), you
must establish a site-specific constituent limit according to the procedures in paragraphs (b)(1) through (4) of
this section.
   40 CFR 63.7325(b)(1)
      (1) Take a minimum of nine quench water samples from a location that provides a representative sample
of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower
reservoirs). Conduct sampling under normal and representative operating conditions.
   40 CFR 63.7325(b)(2)
      (2) For each sample, determine the TDS concentration according to the requirements in paragraph (a)(2)
of this section and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods
in 40 CFR part 136 or an approved alternative method.
   40 CFR 63.7325(b)(3)
      (3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and
naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L.
This concentration is the site-specific constituent limit.
   40 CFR 63.7325(b)(4)
      (4) Submit the site-specific limit, sampling results, and all supporting data and calculations to your
permitting authority for review and approval.

40 CFR 63.7325(c)
   (c) If you elect the constituent limit for quench water in §63.7295(a)(1)(ii), you must conduct each
performance test that applies to your affected source according to the conditions in paragraphs (c)(1) and (2)
of this section.
   40 CFR 63.7325(c)(1)
      (1) Take a quench water sample from a location that provides a representative sample of the quench
water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct
sampling under normal and representative operating conditions.
   40 CFR 63.7325(c)(2)
      (2) Determine the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in the sample
using the applicable methods in 40 CFR part 136 or an approved alternative method.
40 CFR 63.7326  How do I demonstrate initial compliance with the emission limitations that apply to me?

40 CFR 63.7326(a)

(a) For each coke oven battery subject to the emission limit for particulate matter from a control device applied to pushing emissions, you have demonstrated initial compliance if you meet the requirements in paragraphs (a)(1) through (4) of this section that apply to you.

40 CFR 63.7326(a)(1)

(1) The concentration of particulate matter, measured in accordance with the performance test procedures in §63.7322(b)(1) and (2), did not exceed 0.01 gr/dscf for a control device where a cokeside shed is used to capture pushing emissions or the process-weighted mass rate of particulate matter (lb/ton of coke), measured in accordance with the performance test procedures in §63.7322(b)(1) through (4), did not exceed:

40 CFR 63.7326(a)(1)(i)

(i) 0.02 lb/ton of coke if a moveable hood vented to a stationary control device is used to capture emissions;

40 CFR 63.7326(a)(1)(ii)

(ii) 0.03 lb/ton of coke from a control device applied to pushing emissions from a short coke oven battery or 0.01 lb/ton of coke from a control device applied to pushing emissions from a tall coke oven battery; and

40 CFR 63.7326(a)(1)(iii)

(iii) 0.04 lb/ton of coke if a mobile control device that captures emissions during travel is used.

40 CFR 63.7326(a)(2)

(2) For each venturi scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7323(a).

40 CFR 63.7326(a)(3)

(3) For each hot water scrubber applied to pushing emissions, you have established appropriate site-specific operating limits and have a record of the water pressure and temperature measured during the performance test in accordance with §63.7323(b).

40 CFR 63.7326(a)(4)

(4) For each capture system applied to pushing emissions, you have established an appropriate site-specific operating limit, and:

40 CFR 63.7326(a)(4)(i)

(i) If you elect the operating limit in Sec. 63.7290(b)(3) for volumetric flow rate, you have a record of the total volumetric flow rate at the inlet of the control device measured during the performance test in accordance with Sec. 63.7323(c)(1); or

40 CFR 63.7326(a)(4)(ii)

(ii) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with Sec. 63.7323(c)(2); or

40 CFR 63.7326(a)(4)(iii)

(iii) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for static pressure or fan RPM, you have a record of the static pressure at the inlet of the control device or fan RPM measured during the performance test in accordance with Sec. 63.7323(c)(3).

40 CFR 63.7326(a)(5)
(5) For each multicyclone applied to pushing emissions, you have established an appropriate site-specific operating limit and have a record of the pressure drop measured during the performance test in accordance with Sec. 63.7323(d).

40 CFR 63.7326(b)

(b) For each new or existing by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a), you have demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in §63.7324(b), is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking.

40 CFR 63.7326(c)

(c) For each new or existing by-product coke oven battery subject to the TDS limit or constituent limits for quench water in §63.7295(a)(1),

40 CFR 63.7326(c)(1)

(1) You have demonstrated initial compliance with the TDS limit in §63.7295(a)(1)(i) if the TDS concentration, as measured according to the performance test procedures in §63.7325(a), does not exceed 1,100 mg/L.

40 CFR 63.7326(c)(2)

(2) You have demonstrated initial compliance with the constituent limit in §63.7295(a)(1)(ii) if:

40 CFR 63.7326(c)(2)(i)

(i) You have established a site-specific constituent limit according to the procedures in §63.7325(b); and

40 CFR 63.7326(c)(2)(ii)

(ii) The sum of the constituent concentrations, as measured according to the performance test procedures in §63.7325(c), is less than or equal to the site-specific limit.

40 CFR 63.7326(d)

(d) For each by-product coke oven battery stack subject to an opacity limit in §63.7296(a) and each by-product coke oven battery subject to the requirements for quench water in §63.7295(a)(1), you must submit a notification of compliance status containing the results of the COMS performance test for battery stacks and the quench water performance test (TDS or constituent limit) according to §63.7340(e)(1). For each particulate matter emission limitation that applies to you, you must submit a notification of compliance status containing the results of the performance test according to §63.7340(e)(2).

50. 40 CFR 63.7327  How do I demonstrate initial compliance with the work practice standards that apply to me?

40 CFR 63.7327(a)

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you have demonstrated initial compliance if you certify in your notification of compliance status that you will meet each of the work practice requirements beginning no later than the compliance date that is specified in §63.7283.

40 CFR 63.7327(b)

(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for
fugitive pushing emissions in §63.7292(a), you have demonstrated initial compliance if you have met the
requirements of paragraphs (b)(1) and (2) of this section:

40 CFR 63.7327(b)(1)
(1) You have prepared and submitted a written plan and supporting documentation establishing
appropriate minimum flue temperatures for different coking times and the lowest acceptable temperature to the
Administrator (or delegated authority) for review and approval; and

40 CFR 63.7327(b)(2)
(2) You certify in your notification of compliance status that you will meet each of the work practice
requirements beginning no later than the compliance date that is specified in §63.7283.

40 CFR 63.7327(c)
(c) For each non-recovery coke oven battery subject to the work practice standards for fugitive pushing
emissions in §63.7293(a), you have demonstrated initial compliance if you certify in your notification of
compliance status that you will meet each of the work practice requirements beginning no later than the
compliance date that is specified in §63.7283.

40 CFR 63.7327(d)
(d) For each by-product coke oven battery subject to the work practice standards for soaking in §63.7294,
you have demonstrated initial compliance if you have met the requirements of paragraphs (d)(1) and (2) of this
section:

40 CFR 63.7327(d)(1)
(1) You have prepared and submitted a written work practice plan in accordance with §63.7294(a); and

40 CFR 63.7327(d)(2)
(2) You certify in your notification of compliance status that you will meet each of the work practice
requirements beginning no later than the compliance date that is specified in §63.7283.

40 CFR 63.7327(e)
(e) For each coke oven battery, you have demonstrated initial compliance with the work practice standards
for quenching in §63.7295(b) if you certify in your notification of compliance status that you have met the
requirements of paragraphs (e)(1) and (2) of this section:

40 CFR 63.7327(e)(1)
(1) You have installed the required equipment in each quench tower; and

40 CFR 63.7327(e)(2)
(2) You will meet each of the work practice requirements beginning no later than the compliance date that
is specified in §63.7283.

40 CFR 63.7327(f)
(f) For each work practice standard that applies to you, you must submit a notification of compliance status
according to the requirements in §63.7340(e)(1).

51. **40 CFR 63.7328** How do I demonstrate initial compliance with the operation and
maintenance requirements that apply to me?

You have demonstrated initial compliance if you certify in your notification of compliance status that you
have met the requirements of paragraphs (a) through (d) of this section:

40 CFR 63.7328(a)
(a) You have prepared the operation and maintenance plans according to the requirements in §63.7300(b)
and (c);
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance  
40 CFR 63.7328(b)
You will operate each by-product coke oven battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in §63.7283;
40 CFR 63.7328(c)
(c) You have prepared a site-specific monitoring plan according to the requirements in §63.7331(b); and
40 CFR 63.7328(d)
(d) You submit a notification of compliance status according to the requirements in §63.7340(e).

Continuous Compliance Requirements
52. 40 CFR 63.7330  What are my monitoring requirements?
40 CFR 63.7330(a)
(a) For each baghouse applied to pushing emissions from a coke oven battery, you must at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in §63.7331(a) and conduct inspections at their specified frequency according to the requirements in paragraphs (a)(1) through (8) of this section.
40 CFR 63.7330(a)(1)
(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
40 CFR 63.7330(a)(2)
(2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
40 CFR 63.7330(a)(3)
(3) Check the compressed air supply for pulse-jet baghouses each day;
40 CFR 63.7330(a)(4)
(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
40 CFR 63.7330(a)(5)
(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
40 CFR 63.7330(a)(6)
(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;
40 CFR 63.7330(a)(7)
(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
40 CFR 63.7330(a)(8)
(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
40 CFR 63.7330(b)
(b) For each venturi scrubber applied to pushing emissions, you must at all times monitor the pressure drop and water flow rate using a CPMS according to the requirements in §63.7331(e).
40 CFR 63.7330(c)
   (c) For each hot water scrubber applied to pushing emissions, you must at all times monitor the water 
   pressure and temperature using a CPMS according to the requirements in §63.7331(f).

40 CFR 63.7330(d)
   (d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow 
   rate according to the requirements in Sec. 63.7331(g), the fan motor amperes according to the requirements in 
   Sec. 63.7331(h), or the static pressure or the fan RPM according to the requirements in Sec. 63.7331(i).

40 CFR 63.7330(e)
   (e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting 
   each stack using a COMS according to the requirements in Sec. 63.7331(j).

40 CFR 63.7330(f)
   (f) For each multicyclone applied to pushing emissions, you must monitor at all times the pressure drop 
   using a CPMS according to the requirements in Sec. 63.7331(k).

53. 40 CFR 63.7331 What are the installation, operation, and maintenance requirements 
      for my monitors?

40 CFR 63.7331(a)
   (a) For each baghouse applied to pushing emissions, you must install, operate, and maintain each bag leak 
      detection system according to the requirements in paragraphs (a)(1) through (7) of this section.

40 CFR 63.7331(a)(1)
   (1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate 
       matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;

40 CFR 63.7331(a)(2)
   (2) The system must provide output of relative changes in particulate matter loadings;

40 CFR 63.7331(a)(3)
   (3) The system must be equipped with an alarm that will sound when an increase in relative particulate 
       loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate 
       plant personnel;

40 CFR 63.7331(a)(4)
   (4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in 
       a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R- 
       98-015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in 
       a manner consistent with the manufacturer's written specifications and recommendations;

40 CFR 63.7331(a)(5)
   (5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity 
       (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;

40 CFR 63.7331(a)(6)
   (6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set 
       points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the 
       sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period.
unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good
operating condition; and
40 CFR 63.7331(a)(7)
(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among
detectors.
40 CFR 63.7331(b)
(b) For each CPMS required in §63.7330, you must develop and make available for inspection upon request
by the permitting authority a site-specific monitoring plan that addresses the requirements in paragraphs (b)(1)
through (6) of this section.
40 CFR 63.7331(b)(1)
(1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each
affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on
or downstream of the last control device);
40 CFR 63.7331(b)(2)
(2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and
the data collection and reduction system;
40 CFR 63.7331(b)(3)
(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
40 CFR 63.7331(b)(4)
(4) Ongoing operation and maintenance procedures in accordance with the general requirements of
§§63.8(c)(1), (3), (4)(ii), (7), and (8);
40 CFR 63.7331(b)(5)
(5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d);
and
40 CFR 63.7331(b)(6)
(6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of
§§63.10(c), (e)(1), and (e)(2)(i).
40 CFR 63.7331(c)
(c) You must conduct a performance evaluation of each CPMS in accordance with your site-specific
monitoring plan.
40 CFR 63.7331(d)
(d) You must operate and maintain the CPMS in continuous operation according to the site-specific
monitoring plan.
40 CFR 63.7331(e)
(e) For each venturi scrubber applied to pushing emissions, you must install, operate, and maintain CPMS
to measure and record the pressure drop across the scrubber and scrubber water flow rate during each push
according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs
(e)(1) through (3) of this section.
40 CFR 63.7331(e)(1)
(1) Each CPMS must complete a measurement at least once per push;
40 CFR 63.7331(e)(2)
(2) Each CPMS must produce valid data for all pushes; and
40 CFR 63.7331(e)(3)
(3) Each CPMS must determine and record the daily (24-hour) average of all recorded readings.
40 CFR 63.7331(f)

(f) For each hot water scrubber applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the water pressure and temperature during each push according to the requirements in paragraphs (b) through (d) of this section, except as specified in paragraphs (e)(1) through (3) of this section.

40 CFR 63.7331(g)

(g) If you elect the operating limit in Sec. 63.7290(b)(3) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device.

40 CFR 63.7331(h)

(h) If you elect the operating limit in Sec. 63.7290(b)(3)(i) for a capture system applied to pushing emissions, you must install, operate, and maintain a device to measure the fan motor amperes.

40 CFR 63.7331(i)

(i) If you elect the operating limit in Sec. 63.7290(b)(3)(ii) for a capture system applied to pushing emissions, you must install, operate and maintain a device to measure static pressure at the inlet of the control device or the fan RPM.

40 CFR 63.7331(j)

(j) For each by-product coke oven battery, you must install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the requirements in paragraphs (j)(1) through (5) of this section.

40 CFR 63.7331(j)(1)

(1) You must install, operate, and maintain each COMS according to the requirements in §63.8(e) and Performance Specification 1 in 40 CFR part 60, appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

40 CFR 63.7331(j)(2)

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and Performance Specification 1 in appendix B to 40 CFR part 60.

40 CFR 63.7331(j)(3)

(3) You must develop and implement a quality control program for operating and maintaining each COMS according to the requirements in §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS.

40 CFR 63.7331(j)(4)

(4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. You must reduce the COMS data as specified in §63.8(g)(2).

40 CFR 63.7331(j)(5)

(5) You must determine and record the hourly and daily (24-hour) average opacity according to the procedures in §63.7324(b) using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

40 CFR 63.7331(k)(5)

(k) For each multicyclone applied to pushing emissions, you must install, operate, and maintain CPMS to measure and record the pressure drop across each multicyclone during each push according to the requirements in paragraphs (b) through (d) of this section except as specified in paragraphs (e)(1)
54. **40 CFR 63.7332 How do I monitor and collect data to demonstrate continuous compliance?**

40 CFR 63.7332(a)

(a) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times the affected source is operating.

40 CFR 63.7332(b)

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

55. **40 CFR 63.7333 How do I demonstrate continuous compliance with the emission limitations that apply to me?**

40 CFR 63.7333(a)

(a) For each control device applied to pushing emissions and subject to the emission limit in §63.7290(a), you must demonstrate continuous compliance by meeting the requirements in paragraphs (a)(1) and (2) of this section:

40 CFR 63.7333(a)(1)

1. Maintaining emissions of particulate matter at or below the applicable limits in paragraphs §63.7290(a)(1) through (4); and

40 CFR 63.7333(a)(2)

2. Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

40 CFR 63.7333(b)

(b) For each venturi scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (b)(1) through (3) of this section.

40 CFR 63.7333(b)(1)

1. Maintaining the daily average pressure drop and scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test.

40 CFR 63.7333(b)(2)

2. Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.
(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to §63.7331(e)(1) through (3).

40 CFR 63.7333(c)

(c) For each hot water scrubber applied to pushing emissions and subject to the operating limits in §63.7290(b)(2), you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(1) through (3) of this section.

40 CFR 63.7333(c)(1)

(1) Maintaining the daily average water pressure and temperature at levels no lower than those established during the initial or subsequent performance test.

40 CFR 63.7333(c)(2)

(2) Operating and maintaining each CPMS according to §63.7331(b) and recording all information needed to document conformance with these requirements.

40 CFR 63.7333(c)(3)

(3) Collecting and reducing monitoring data for water pressure and temperature according to §63.7331(f).

40 CFR 63.7333(d)

(d) For each capture system applied to pushing emissions and subject to the operating limit in Sec. 63.7290(b)(3), you must demonstrate continuous compliance by meeting the requirements in paragraph (d)(1), (2), or (3) of this section:

40 CFR 63.7333(d)(1)

(1) If you elect the operating limit for volumetric flow rate in Sec. 63.7290(b)(3):

   (i) Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and

40 CFR 63.7333(d)(1)(ii)

   (ii) Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

40 CFR 63.7333(d)(2)

(2) If you elect the operating limit for fan motor amperes in Sec. 63.7290(b)(3)(i):

40 CFR 63.7333(d)(2)(i)

   (i) Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and

40 CFR 63.7333(d)(2)(ii)

   (ii) Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

40 CFR 63.7333(d)(3)

(3) If you elect the operating limit for static pressure or fan RPM in Sec. 63.7290(b)(3)(ii):

40 CFR 63.7333(d)(3)(i)

Maintaining the daily average static pressure at the inlet to the control device at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM at or above the minimum level established during the initial or subsequent performance test; and

40 CFR 63.7333(d)(3)(ii)

   (ii) Checking the static pressure or fan RPM at least every 8 hours to verify the daily average static pressure or fan RPM is at or above the minimum level established during the initial or subsequent performance test; and
pressure at the inlet to the control device is at an equal or greater vacuum than established during the initial or subsequent performance test or the daily average fan RPM is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

40 CFR 63.7333(e)

(e) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in §63.7296(a) by meeting the requirements in paragraphs (e)(1) and (2) of this section:

40 CFR 63.7333(e)(1)

(1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on batterywide extended coking; and

40 CFR 63.7333(e)(2)

(2) Operating and maintaining a COMS and collecting and reducing the COMS data according to Sec. 63.7331(j).

40 CFR 63.7333(f)

(f) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the TDS limit for quenching in §63.7295(a)(1)(i) by meeting the requirements in paragraphs (f)(1) and (2) of this section:

40 CFR 63.7333(f)(1)

(1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and

40 CFR 63.7333(f)(2)

(2) Determining the TDS content of the quench water at least weekly according to the requirements in §63.7325(a) and recording the sample results.

40 CFR 63.7333(g)

(g) Beginning on the first day compliance is required under §63.7283, you must demonstrate continuous compliance with the constituent limit for quenching in §63.7295(a)(1)(ii) by meeting the requirements in paragraphs (g)(1) and (2) of this section:

40 CFR 63.7333(g)(1)

(1) Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and

40 CFR 63.7333(g)(2)

(2) Determining the sum of the constituent concentrations at least monthly according to the requirements in §63.7325(c) and recording the sample results.

40 CFR 63.7333(h)

(h) For each multicyclone applied to pushing emissions and subject to the operating limit in Sec. 63.7290(b)(4), you must demonstrate compliance by meeting the requirements in paragraphs (h)(1) through (3) of this section.

40 CFR 63.7333(h)(1)

(1) Maintaining the daily average pressure drop at a level at or below the level established during the initial or subsequent performance test.

40 CFR 63.7333(h)(2)

(2) Operating and maintaining each CPMS according to Sec. 63.7331(k) and recording all information needed to document conformance with these requirements.
(3) Collecting and reducing monitoring data for pressure drop according to Sec. 63.7331(e)(1) through (3).

56. **40 CFR 63.7334 How do I demonstrate continuous compliance with the work practice standards that apply to me?**

40 CFR 63.7334(a)

(a) For each by-product coke oven battery with vertical flues subject to the work practice standards for fugitive pushing emissions in §63.7291(a), you must demonstrate continuous compliance according to the requirements of paragraphs (a)(1) through (8) of this section:

40 CFR 63.7334(a)(1)

(1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by §63.7291(a)(3). Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to §63.7291(a)(4).

40 CFR 63.7334(a)(2)

(2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs (a)(1) through (8) of this section.

40 CFR 63.7334(a)(3)

(3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in appendix A to 40 CFR part 60 using a Method 9 certified observer unless you have an approved alternative procedure under paragraph (a)(7) of this section.

40 CFR 63.7334(a)(4)

(4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of (Method 9 appendix A to 40 CFR part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

40 CFR 63.7334(a)(5)

(5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

40 CFR 63.7334(a)(6)

(6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

40 CFR 63.7334(a)(6)(i)

(i) For a battery without a cokeside shed, observe fugitive pushing emissions from a position at least 10
meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

40 CFR 63.7334(a)(6)(ii)  
(ii) For a battery with a cokeside shed, the observer must be in a position that provides an unobstructed view and avoids interferences from the topside of the battery. Typical interferences to avoid include emissions from open standpipes and charging. Observations must include any fugitive emissions that escape from the top of the shed, from the ends of the shed, or from the area where the shed is joined to the battery. If the observer does not have a clear view to identify when a push starts or ends, a second person can be positioned to signal the start or end of the push and notify the observer when to start or end the observations. Radio communications with other plant personnel (e.g., pushing ram operator or quench car operator) may also serve to notify the observer of the start or end of a push. Record the oven number of any push not observed because of obstructions or interferences.

40 CFR 63.7334(a)(6)(iii)  
(iii) You may reposition after the push to observe emissions during travel if necessary.

40 CFR 63.7334(a)(7)  
(7) If it is infeasible to implement the procedures in paragraphs (a)(1) through (6) of this section for an oven due to physical obstructions, nighttime pushes, or other reasons, you may apply to your permitting authority for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in paragraphs (a)(1) through (6) of this section, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

40 CFR 63.7334(a)(8)  
(8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, you must take corrective action and/or increase the coking time in accordance with §63.7291(a). Maintain records documenting conformance with the requirements in §63.7291(a).

40 CFR 63.7334(b)  
(b) For each by-product coke oven battery with horizontal flues subject to the work practice standards for fugitive pushing emissions in §63.7292(a), you must demonstrate continuous compliance by having met the requirements of paragraphs (b)(1) through (3) of this section:

40 CFR 63.7334(b)(1)  
(1) Measuring and recording the temperature of all flues on two ovens per day within 2 hours before the oven's scheduled pushing time and ensuring that the temperature of each oven is measured and recorded at least once every month;

40 CFR 63.7334(b)(2)  
(2) Recording the time each oven is charged and pushed and calculating and recording the net coking time for each oven; and

40 CFR 63.7334(b)(3)  
(3) Increasing the coking time for each oven that falls below the minimum flue temperature trigger established for that oven's coking time in the written plan required in §63.7292(a)(1), assigning the oven to the oven-directed program, and recording all relevant information according to the requirements in §63.7292(a)(4) including, but not limited to, daily pushing schedules, diagnostic procedures, corrective actions, and oven
reparis.
40 CFR 63.7334(c)
(c) For each non-recovery coke oven battery subject to the work practice standards in §63.7293(a), you must demonstrate continuous compliance by maintaining records that document each visual inspection of an oven prior to pushing and that the oven was not pushed unless there was no smoke in the open space above the coke bed and there was an unobstructed view of the door on the opposite side of the oven.
40 CFR 63.7334(d)
(d) For each by-product coke oven battery subject to the work practice standard for soaking in §63.7294(a), you must demonstrate continuous compliance by maintaining records that document conformance with requirements in §63.7294(a)(1) through (5).
40 CFR 63.7334(e)
(e) For each coke oven battery subject to the work practice standard for quenching in §63.7295(b), you must demonstrate continuous compliance according to the requirements of paragraphs (e)(1) through (3) of this section:
40 CFR 63.7334(e)(1)
(1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in §63.7295(b)(1);
40 CFR 63.7334(e)(2)
(2) Maintaining records that document conformance with the washing, inspection, and repair requirements in §63.7295(b)(2), including records of the ambient temperature on any day that the baffles were not washed; and
40 CFR 63.7334(e)(3)
(3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in §63.7295(a)(2).

57. **40 CFR 63.7335** How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

40 CFR 63.7335(a)
(a) For each by-product coke oven battery, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.

40 CFR 63.7335(b)
(b) For each coke oven battery with a capture system or control device applied to pushing emissions, you must demonstrate continuous compliance with the operation and maintenance requirements in §63.7300(c) by meeting the requirements of paragraphs (b)(1) through (3) of this section:

40 CFR 63.7335(b)(1)
(1) Making monthly inspections of capture systems according to §63.7300(c)(1) and recording all information needed to document conformance with these requirements;

40 CFR 63.7335(b)(2)
(2) Performing preventative maintenance for each control device according to §63.7300(c)(2) and recording all information needed to document conformance with these requirements; and

40 CFR 63.7335(b)(3)
(3) Initiating and completing corrective action for a bag leak detection system alarm according to
§63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

40 CFR 63.7335(c)

(c) To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in §63.7331(a), you must inspect and maintain each baghouse according to the requirements in §63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If you increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in §63.7331(a)(6), you must include a copy of the required written certification by a responsible official in the next semiannual compliance report.

40 CFR 63.7335(d)

(d) You must maintain a current copy of the operation and maintenance plans required in §63.7300(b) and (c) onsite and available for inspection upon request. You must keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

58. 40 CFR 63.7336 What other requirements must I meet to demonstrate continuous compliance?

40 CFR 63.7336(a)

(a) Deviations. You must report each instance in which you did not meet each emission limitation in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each work practice standard or operation and maintenance requirement in this subpart that applies to you. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.7341.

40 CFR 63.7336(b)

(b) Startup, shutdowns, and malfunctions. During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

40 CFR 63.7336(b)(1)

(1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan.

40 CFR 63.7336(b)(2)

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

59. 40 CFR 63.7340 What notifications must I submit and when?

40 CFR 63.7340(a)

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply to you by the specified dates.

40 CFR 63.7340(b)

(b) As specified in §63.9(b)(2), if you startup your affected source before April 14, 2003, you must submit
your initial notification no later than August 12, 2003.

40 CFR 63.7340(c)

(c) As specified in §63.9(b)(3), if you startup your new affected source on or after April 14, 2003, you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

40 CFR 63.7340(d)

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

40 CFR 63.7340(e)

(e) If you are required to conduct a performance test, opacity observation, or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii).

40 CFR 63.7340(e)(1)

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

40 CFR 63.7340(e)(2)

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to §63.10(d)(2).

40 CFR 63.7340(f)

(f) For each by-product coke oven battery with horizontal flues, you must notify the Administrator (or delegated authority) of the date on which the study of flue temperatures required by §63.7292(a)(3) will be initiated. You must submit this notification no later than 7 days prior to the date you initiate the study.

60. 40 CFR 63.7341  What reports must I submit and when?

40 CFR 63.7341(a)

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to your permitting authority according to the requirements in paragraphs (a)(1) through (4) of this section.

40 CFR 63.7341(a)(1)

(1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

40 CFR 63.7341(a)(2)

(2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7283 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

40 CFR 63.7341(a)(3)
(3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

40 CFR 63.7341(a)(4)

(4) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (3) of this section.

40 CFR 63.7341(b)

(b) Quarterly compliance report contents. Each quarterly report must provide information on compliance with the emission limitations for battery stacks in §63.7296. The reports must include the information in paragraphs (c)(1) through (3), and as applicable, paragraphs (c)(4) through (8) of this section.

40 CFR 63.7341(c)

(c) Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in paragraphs (c)(1) through (3) of this section, and as applicable, paragraphs (c)(4) through (8) of this section.

40 CFR 63.7341(c)(1)

(1) Company name and address.

40 CFR 63.7341(c)(2)

(2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

40 CFR 63.7341(c)(3)

(3) Date of report and beginning and ending dates of the reporting period.

40 CFR 63.7341(c)(4)

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

40 CFR 63.7341(c)(5)

(5) If there were no deviations from the continuous compliance requirements in §63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in §§63.7333 through 63.7335 that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

40 CFR 63.7341(c)(6)

(6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.

40 CFR 63.7341(c)(7)

(7) For each deviation from an emission limitation in this subpart (including quench water limits) and for
each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(4) and (7)(i) and (ii) of this section. This includes periods of startup, shutdown, and malfunction.

40 CFR 63.7341(c)(7)(i)
(i) The total operating time of each affected source during the reporting period.

40 CFR 63.7341(c)(7)(ii)
(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

40 CFR 63.7341(c)(8)
(8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in this subpart, you must include the information in paragraphs (c)(4) and (8)(i) through (xii) of this section. This includes periods of startup, shutdown, and malfunction.

40 CFR 63.7341(c)(8)(i)
(i) The date and time that each malfunction started and stopped.

40 CFR 63.7341(c)(8)(ii)
(ii) The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.

40 CFR 63.7341(c)(8)(iii)
(iii) The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).

40 CFR 63.7341(c)(8)(iv)
(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

40 CFR 63.7341(c)(8)(v)
(v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

40 CFR 63.7341(c)(8)(vi)
(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

40 CFR 63.7341(c)(8)(vii)
(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

40 CFR 63.7341(c)(8)(viii)
(viii) An identification of each HAP that was monitored at the affected source.

40 CFR 63.7341(c)(8)(ix)
(ix) A brief description of the process units.

40 CFR 63.7341(c)(8)(x)
(x) A brief description of the continuous monitoring system.
The date of the latest continuous monitoring system certification or audit.
40 CFR 63.7341(c)(8)(xii)

A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.
40 CFR 63.7341(d)

Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).
40 CFR 63.7341(e)

Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

61. 40 CFR 63.7342 What records must I keep?
40 CFR 63.7342(a)

You must keep the records specified in paragraphs (a)(1) through (3) of this section.
40 CFR 63.7342(a)(1)

A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).
40 CFR 63.7342(a)(2)

The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
40 CFR 63.7342(a)(3)

Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).
40 CFR 63.7342(b)

For each COMS or CEMS, you must keep the records specified in paragraphs (b)(1) through (4) of this section.
40 CFR 63.7342(b)(1)

Records described in §63.10(b)(2)(vi) through (xi).
40 CFR 63.7342(b)(2)

Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).
40 CFR 63.7342(b)(3)

Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).
40 CFR 63.7342(b)(4)
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.  
40 CFR 63.7342(c)  
(c) You must keep the records in §63.6(h)(6) for visual observations.  
40 CFR 63.7342(d)  
(d) You must keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.

62. **40 CFR 63.7343**  In what form and how long must I keep my records?  
40 CFR 63.7343(a)  
(a) You must keep your records in a form suitable and readily available for expeditious review, according to §63.10(b)(1).  
40 CFR 63.7343(b)  
(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.  
40 CFR 63.7343(c)  
(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

**Other Requirements and Information**

63. **40 CFR 63.7350**  What parts of the General Provisions apply to me?  
Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

64. **40 CFR 63.7351**  Who implements and enforces this subpart?  
40 CFR 63.7351(a)  
(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.  
40 CFR 63.7351(b)  
(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.  
40 CFR 63.7351(c)  
(c) The authorities in paragraphs (c)(1) through (6) of this section will not be delegated to State, local, or tribal agencies.  
40 CFR 63.7351(c)(1)
(1) Approval of alternatives to work practice standards for fugitive pushing emissions in §63.7291(a) for a by-product Coke oven battery with vertical flues, fugitive pushing emissions in §63.7292(a) for a by-product coke oven battery with horizontal flues, fugitive pushing emissions in §63.7293 for a non-recovery coke oven battery, soaking for a by-product coke oven battery in §63.7294(a), and quenching for a coke oven battery in §63.7295(b) under §63.6(g).

40 CFR 63.7351(c)(2)

(2) Approval of alternative opacity emission limitations for a by-product coke oven battery under §63.6(h)(9).

40 CFR 63.7351(c)(3)

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90, except for alternative procedures in §63.7334(a)(7).

40 CFR 63.7351(c)(4)

(4) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

40 CFR 63.7351(c)(5)

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

40 CFR 63.7351(c)(6)

(6) Approval of the work practice plan for by-product Coke oven batteries with horizontal flues submitted under §63.7292(a)(1).

65. 40 CFR 63.7352 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section as follows:

Acceptable makeup water means surface water from a river, lake, or stream; water meeting drinking water standards; storm water runoff and production area clean up water except for water from the by-product recovery plant area; process wastewater treated to meet effluent limitations guidelines in 40 CFR part 420; water from any of these sources that has been used only for non-contact cooling or in water seals; or water from scrubbers used to control pushing emissions.

Backup quench station means a quenching device that is used for less than 5 percent of the quenches from any single coke oven battery in the 12-month period from July 1 to June 30.

Baffles means an apparatus comprised of obstructions for checking or deflecting the flow of gases. Baffles are installed in a quench tower to remove droplets of water and particles from the rising vapors by providing a point of impact. Baffles may be installed either inside or on top of quench towers and are typically constructed of treated wood, steel, or plastic.

Battery stack means the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system.

Batterywide extended coking means increasing the average coking time for all ovens in the coke oven battery by 25 percent or more over the manufacturer's specified design rate.

By-product coke oven battery means a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas from which by-products are recovered.
**By-product recovery plant area** means that area of the coke plant where process units subject to subpart L in part 61 are located.

**Coke oven battery** means a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.

**Coke plant** means a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.

**Cokeside shed** means a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.

**Coking time** means the time interval that starts when an oven is charged with coal and ends when the oven is pushed.

**Deviation** means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

1. Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including operating limits) or work practice standard;
2. Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
3. Fails to meet any emission limitation or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

**Emission limitation** means any emission limit, opacity limit, or operating limit.

**Four consecutive pushes** means four pushes observed successively.

**Fugitive pushing emissions** means emissions from pushing that are not collected by a capture system.

**Horizontal flue** means a type of coke oven heating system used on Semet-Solvay batteries where the heating flues run horizontally from one end of the oven to the other end, and the flues are not shared with adjacent ovens.

**Hot water scrubber** means a mobile scrubber used to control pushing emissions through the creation of an induced draft formed by the expansion of pressurized hot water through a nozzle.

**Increased coking time** means increasing the charge-to-push time for an individual oven.

**Non-recovery coke oven battery** means a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

**Oven** means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

**Pushing** means the process of removing the coke from the oven. Pushing begins with the first detectable movement of the coke mass and ends when the quench car enters the quench tower.

**Quenching** means the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

**Quench tower** means the structure in which hot incandescent coke in the quench car is deluged or quenched with water.

**Remove from service** means that an oven is not charged with coal and is not used for coking. When removed from service, the oven may remain at the operating temperature or it may be cooled down for repairs.
Responsible official means responsible official as defined in §63.2.

Short battery means a by-product coke oven battery with ovens less than five meters in height.

Soaking means that period in the coking cycle that starts when an oven is dampered off the collecting main and vented to the atmosphere through an open standpipe prior to pushing and ends when the coke begins to be pushed from the oven.

Soaking emissions means the discharge from an open standpipe during soaking of visible emissions due to either incomplete coking or leakage into the standpipe from the collecting main.

Standpipe means an apparatus on the oven that provides a passage for gases from an oven to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened. This includes mini-standpipes that are not connected to the collecting main.

Tall battery means a by-product coke oven battery with ovens five meters or more in height.

Vertical flue means a type of coke oven heating system in which the heating flues run vertically from the bottom to the top of the oven, and flues are shared between adjacent ovens.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

As required in §63.7350, you must comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table:

<table>
<thead>
<tr>
<th>Applicability</th>
<th>Subject</th>
<th>Applies to Subpart CC</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§40 CFR 63.1</td>
<td>Applicability</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.2</td>
<td>Definitions</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.3</td>
<td>Units and Abbreviations</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.4</td>
<td>Prohibited Activities</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.5</td>
<td>Construction/Reconstruction</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.6(a), (b), (c), (d), (e), (f), (g), (h)(2) - (8)</td>
<td>Compliance with Standards and Maintenance Requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.6(h)(9)</td>
<td>Adjustment to an Opacity Emission Standard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.7(a)(3), (b), (c) - (h)</td>
<td>Performance Testing Requirements</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§40 CFR 63.7(a)(1) - 2</td>
<td>Applicability and Performance Test Dates</td>
<td>No</td>
<td>Subpart CCCCC specifies applicability and dates</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------</td>
<td>----</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>§40 CFR 63.8(a)(1) - (3), (b), (c)(1) - (3), (c)(4)(i) - (ii), (c)(5) - (8), (d), (e), (f)(1) - (5), (g)(1) - (4)</td>
<td>Monitoring Requirements</td>
<td>Yes</td>
<td>CMS requirements in 63.8(c)(4)(i)-(ii), (c)(5), and (c)(6) apply only to COMS and battery stacks.</td>
</tr>
<tr>
<td>§40 CFR 63.8(a)(4)</td>
<td>Additional Monitoring Requirements for Control Devices in 63.11</td>
<td>No</td>
<td>Flares are not control devices for Subpart CCCCC affected sources.</td>
</tr>
<tr>
<td>§40 CFR 63.8(c)(4)</td>
<td>Continuous Monitoring System (CMS) Requirements</td>
<td>No</td>
<td>Subpart CCCCC specifies requirements for operation of CMS.</td>
</tr>
<tr>
<td>§40 CFR 63.8(e)(4) - (5)</td>
<td>Performance Evaluations</td>
<td>Yes</td>
<td>Except COMS performance evaluation must be conducted before the compliance date.</td>
</tr>
<tr>
<td>§40 CFR 63.8(f)(6)</td>
<td>RATA Alternative</td>
<td>No</td>
<td>Subpart CCCCC does not require CEMS.</td>
</tr>
<tr>
<td>§40 CFR 63.8(g)(5)</td>
<td>Data Reduction</td>
<td>No</td>
<td>Subpart CCCCC specifies data that can't be used in computing averages for COMS.</td>
</tr>
<tr>
<td>§40 CFR 63.9</td>
<td>Notification Requirements</td>
<td>Yes</td>
<td>Additional notifications for CMS in 63.9(g) apply only to COMS for battery stacks.</td>
</tr>
<tr>
<td>§40 CFR 63.10(a), (b)(1) - (b)(2)(xii), (b)(2)(xiv), (b)(3), (c)(1)-(6), (c)(9) - (15), (d), (e)(1) - (2), (e)(4), (f)</td>
<td>Recordkeeping and Reporting Requirements</td>
<td>Yes</td>
<td>Additional records for CMS in 63.10(c)(1)-(6), (9)-(15), and reports in 63.10(d)(1)-(2) apply to only COMS for battery stacks.</td>
</tr>
<tr>
<td>§40 CFR 63.10(b)(2)(xi) - (xii)</td>
<td>CMS Records for RATA Alternatives</td>
<td>No</td>
<td>Subpart CCCCC does not require CEMS.</td>
</tr>
<tr>
<td>§40 CFR 63.10(c)(7) - (8)</td>
<td>Records of Excess Emissions and Parameter Monitoring Exceedances for CMS</td>
<td>No</td>
<td>Subpart CCCCC specifies record requirements.</td>
</tr>
<tr>
<td>§40 CFR 63.10(e)(3)</td>
<td>Excess Emission Reports</td>
<td>No</td>
<td>Subpart CCCCC specifies reporting requirements.</td>
</tr>
<tr>
<td>§40 CFR 63.11</td>
<td>Control Device Requirements</td>
<td>No</td>
<td>Subpart CCCCC does not require flares.</td>
</tr>
<tr>
<td>§40 CFR 63.12</td>
<td>State Authority and Delegations</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
FDS Coke Plant, L.L.C.  
PTI Application: 04-01360  
Issued: To be entered upon final issuance

| §40 CFR 63.13 - 63.15 | Addresses, Incorporation by Reference, Availability of Information | Yes |

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None
State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>B901- (2) Nonrecovery Coke Oven Batteries consisting of 84 ovens per battery (Batteries A and B) with heat recovery steam generators</td>
</tr>
<tr>
<td>Waste gas from coking process with staged combustion, lime spray dryer, baghouse and activated carbon injection</td>
</tr>
</tbody>
</table>
FDS Coke Plant, L.L.C.
PTI #
Issue

Charging operations: (4) stamped coal carriers, (4) moveable hoods and (4) stationary baghouses

Pushing Operations: (4) pushing machines, (4) fully enclosed flat push hot cars, each equipped with a baghouse to control emissions during travel to the quench tower

Emissions Unit ID: B901
Issued: To be entered upon final issuance

<table>
<thead>
<tr>
<th>Applicable Rules/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 CFR Part 63, Subpart A</td>
</tr>
<tr>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
</tbody>
</table>

Leaks from coke oven doors

OAC rules 3745-31-10 through 20
<table>
<thead>
<tr>
<th>Emissions Unit ID: B901</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issued: To be entered upon final issuance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>40 CFR Part 63, Subpart CCCC</th>
<th>OAC rule 3745-31-05(A)(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC rule 3745-17-07(A)(1)</td>
<td>OAC rule 3745-17-07(B)(2)(a)</td>
</tr>
<tr>
<td>OAC rule 3745-17-07(B)(2)(b)</td>
<td>OAC rule 3745-17-07(B)(2)(c)</td>
</tr>
<tr>
<td>OAC rules 3745-31-10 through 20</td>
<td>OAC rule 3745-17-08(B)</td>
</tr>
<tr>
<td>OAC rule 3745-17-11(B)</td>
<td>OAC rule 3745-18-06(E)(2)</td>
</tr>
<tr>
<td>OAC rule 3745-21-08(B)</td>
<td>OAC rule 3745-23-06(B)</td>
</tr>
<tr>
<td>40 CFR Part 63, Subpart L</td>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
<tr>
<td>OAC rule 3745-17-07(A)(1)</td>
<td>OAC rules 3745-31-10 through 20</td>
</tr>
<tr>
<td>OAC rule 3745-17-11(B)</td>
<td>OAC rule 3745-18-06(E)(2)</td>
</tr>
<tr>
<td>OAC rule 3745-21-08(B)</td>
<td>OAC rule 3745-23-06(B)</td>
</tr>
<tr>
<td>Emission Category</td>
<td>Applicable Emissions Limitations/Control Measures</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>OAC rule 3745-17-08(B)</td>
<td>See Part II., Sections A.1 through A.15 and Part III., Section A.I.2.g.</td>
</tr>
<tr>
<td>OAC rule 3745-17-11(B)</td>
<td></td>
</tr>
<tr>
<td>40 CFR Part 63, Subpart CCCCC</td>
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<tr>
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<tr>
<td>OAC rule 3745-17-07(B)(2)(b)-(d)</td>
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<td>OAC rule 3745-17-08(B)</td>
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<td>40 CFR Part 63, Subpart L</td>
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<tr>
<td>OAC rule 3745-17-07(A)(1)</td>
<td></td>
</tr>
<tr>
<td>OAC rule 3745-17-07(B)(2)(e)</td>
<td></td>
</tr>
</tbody>
</table>
rolling 12-month period carbon monoxide (CO) emissions from all HRSG bypass vent stacks combined;

246 pounds per hour and 1030 tons per rolling 12-month period nitrogen oxides (NOx) emissions from the main stack;

39.2 pounds per hour and 22.6 tons per rolling 12-month period nitrogen oxides (NOx) emissions from all HRSG bypass vent stacks combined;

39.0 pounds per hour and 171 tons per rolling 12-month period particulate emissions (PE) from the main stack;

24.4 pounds per hour and 14.1 tons per rolling 12-month period particulate emissions (PE) from all HRSG bypass vent stacks combined;

39.0 pounds per hour and 171 tons per rolling 12-month period PM10 emissions from the main stack;

24.4 pounds per hour and 14.1 tons per rolling 12-month period PM10 emissions from each charging baghouse stack.

emissions from all HRSG bypass vent stacks combined;

243.3 pounds per hour and 1019 tons per rolling 12-month period sulfur dioxide (SO2) emissions from the main stack;

431 pounds per hour and 248.2 tons per rolling 12-month period sulfur dioxide (SO2) emissions from all HRSG bypass vent stacks combined;

10.6 pounds per hour and 46.5 tons per rolling 12-month period volatile organic compound (VOC) emissions from the main stack;

1.8 pounds per hour and 1.0 tons per rolling 12-month period volatile organic compound (VOC) emissions from all HRSG bypass vent stacks combined;

0.99 pound SO2 emissions per ton of wet coal charged from the main stack when the coal charged contains less than 0.9 weight percent sulfur and 1.06 pounds SO2 per ton of wet coal charged from the main stack when the coal charged contains greater than or equal to 0.9 weight percent sulfur;

1.00 pound of NOx emissions per ton of wet coal charged from the main stack;

20 parts per million by volume, dry basis (ppmvd) CO from the main stack;

10 ppmvd VOC from the main stack;

See sections A.I.2.b., A.I.2.c., A.I.2.h, A.I.2.i., and A.I.2.w.

See section A.I.2.a.

See section A.I.2.a.

See section A.I.2.e.

See section A.I.2.f.

See Part II. sections A.30 through A.65.

0.001 pound per hour and 0.001 ton per year lead emissions from each charging baghouse stack;

0.04 pound per hour and 0.11 ton per year HAPs from each charging baghouse stack;


0.94 pound per hour and 2.88 tons per rolling 12-month period carbon monoxide (CO) emissions from each charging baghouse stack;

0.05 pound per hour and 0.17 ton per rolling 12-month period PE from each charging baghouse stack;
<table>
<thead>
<tr>
<th>Issue</th>
<th>See section</th>
<th>Emissions Unit ID: B901</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.91 pound per hour and 2.78 tons per rolling 12-month period fugitive PE from charging operations;</td>
<td>See section A.I.2.a.</td>
<td>1.9 pounds per hour and 5.8 tons per rolling 12-month period fugitive PM$_{10}$ emissions from each pushing baghouse stack;</td>
</tr>
<tr>
<td>0.05 pound per hour and 0.17 ton per rolling 12-month period PM$_{10}$ emissions from each charging baghouse stack;</td>
<td>See section A.I.2.e.</td>
<td>16.8 pounds per hour and 51.5 ton per rolling 12-month period SO$_2$ emissions from each pushing baghouse stack;</td>
</tr>
<tr>
<td>0.27 pound per hour and 0.83 ton per rolling 12-month period fugitive PM$_{10}$ emissions from charging operations;</td>
<td>See section A.I.2.f.</td>
<td>13.5 pounds per hour and 41 tons per rolling 12-month period VOC emissions from each pushing baghouse stack;</td>
</tr>
<tr>
<td>0.10 pound per hour and 0.31 ton per rolling 12-month period SO$_2$ emissions from each charging baghouse stack;</td>
<td>See Part II. sections A.16 through A.29</td>
<td></td>
</tr>
<tr>
<td>0.67 pound per hour and 2.06 tons per rolling 12-month period VOC emissions from each charging baghouse stack;</td>
<td>See section A.I.2.m.</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>See Part II. sections A.16 through A.29</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.d.</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.e.</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.f.</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>See Part II. sections A.30 through A.65.</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.k</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>0.5 pound per hour, 0.03 Pound Per Ton of Coke Pushed and 1.7 tons per rolling 12-month period PE from each pushing baghouse stack;</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td></td>
<td>See section A.I.2.a.</td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>4.2 pounds per hour and 13 tons per rolling 12-month period fugitive PE from pushing operations;</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td></td>
</tr>
<tr>
<td>See section A.I.2.a.</td>
<td>See section A.I.2.a.</td>
<td>0.2 pound per hour and 0.5 ton per rolling 12-month period PM$_{10}$</td>
</tr>
</tbody>
</table>
2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b Visible particulate emissions shall not exceed 10% opacity as a 6-minute average from the main stack.

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CCCCC.

2.d The emission limitations established by this rule are not applicable to this emissions unit, since the rule is based on topside charging [see compliance method under OAC rule 3745-17-03(B)(2)(a)]. This emissions unit will utilize a side-charging through the oven door.

2.e The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.f The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology requirements established pursuant to this Permit to Install.

2.g 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to emissions units affected by 40 CFR Part 63.

2.h PE and PM_{10} emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 grain per dry standard cubic foot of exhaust gases.

2.i No visible emissions shall be permitted from the common battery tunnel or its associated
piping.

2.j Visible particulate emissions from the charging baghouse stacks shall not exceed 10% opacity as a 6-minute average.

2.k The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart L.

2.l Visible particulate emissions of fugitive dust from charging operations shall not exceed 20% opacity.

2.m PM and PM$_{10}$ emissions from the charging dust collector exhaust stacks shall not exceed 0.008 grain per dry standard cubic foot of exhaust gases.

2.n The permittee shall not discharge to the atmosphere particulate emissions from the dust collectors controlling pushing emissions that exceed 0.03 lb/ton of coke pushed.

2.o Visible particulate emissions of fugitive dust during any pushing operations shall not exceed an average of 20% opacity. For purposes of this paragraph, the duration of a pushing operation shall commence with the moving (or pushing) of the coke mass from an oven, and shall conclude when the quench car enters the quench tower or when visible emission readings can no longer be made, whichever comes first.

2.p i. The permittee shall employ best available control measures for all charging and pushing operations for the purpose of ensuring compliance with the emission limitations above. These control measures shall include, but not be limited to, the enclosure of the emissions sources and the addition of dust control systems to maintain compliance with the visible emission limitations for fugitive dust emissions.

ii. For each charging and pushing operations that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.q The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20.

2.r The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system installed on the main stack and complete corrective actions in a timely manner. Example corrective actions that may be included in the plan include:

i. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any
other conditions that may cause an increase in emission,

ii. sealing off defective bags or filter media,

iii. replacing defective bags or filter media, or otherwise repairing the control device,

iv. sealing off a defective baghouse compartment,

v. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system, and

vi. shutting down the process producing the particulate emissions.

2.s Visible emissions from the pushing baghouse stacks shall not exceed 10% opacity.

2.t The permittee shall install, operate, and maintain an activated carbon injection system for the control of mercury emissions. The activated carbon injection system shall be designed for a maximum activated carbon injection rate of 2 pounds of activated carbon per million actual cubic feet of exhaust gases at the point of injection. The activated carbon shall consist of readily available untreated commercial products that originate from bituminous or lignite coal. The untreated activated carbon shall meet a minimum iodine content of 500 mg/g and a physical specification of at least 90% by weight passing through a 325 mesh U.S. Sieve Size. The permittee may petition to the Director to increase the allowable mercury emission limitation. The Director may increase the allowable mercury emission limitation, if the permittee demonstrates to the satisfaction of the Director that the activated carbon injection control system has been optimized within the limits of this paragraph.

2.u Since there is not much information available on lead and mercury emissions from non-recovery coke ovens, Ohio EPA may increase the lead and/or mercury emission limitations based on the results of the lead and mercury emission testing required to be conducted under Section A.V.

2.v This emissions unit is not an affected facility under 40 CFR Part 60, Subpart Da, or 40 CFR Part 75. However, as part of complying with BAT, the permittee shall comply with the mercury sorbent trap monitoring system requirements under 40 CFR Part 60, Subpart Da and 40 CFR Part 75 that are determined by the Director to be applicable to the permittee.

2.w When charging coal with a sulfur content greater than or equal to 0.9 weight percent sulfur, the permittee shall either:
i. adjust operating parameters of the lime spray dryer as needed to increase the control efficiency for SO$_2$ emissions to comply with the pound per hour and rolling 12-month SO$_2$ emission limitations; or

ii. reduce production as needed to comply with the pound per hour and rolling 12-month SO$_2$ emission limitations.

II. Operational Restrictions

1. The maximum annual wet coal charge rate for this emissions unit shall not exceed 2,058,600 tons per year, based upon a rolling, 12-month summation of the wet coal charge rates.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the wet coal charge levels specified in the following table:

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum Allowable Cumulative Wet Coal Charge Rate, tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>182,807</td>
</tr>
<tr>
<td>1-2</td>
<td>365,614</td>
</tr>
<tr>
<td>1-3</td>
<td>542,524</td>
</tr>
<tr>
<td>1-4</td>
<td>725,331</td>
</tr>
<tr>
<td>1-5</td>
<td>902,241</td>
</tr>
<tr>
<td>1-6</td>
<td>1,085,048</td>
</tr>
<tr>
<td>1-7</td>
<td>1,267,855</td>
</tr>
<tr>
<td>1-8</td>
<td>1,432,971</td>
</tr>
<tr>
<td>1-9</td>
<td>1,615,778</td>
</tr>
<tr>
<td>1-10</td>
<td>1,792,688</td>
</tr>
<tr>
<td>1-11</td>
<td>1,975,526</td>
</tr>
<tr>
<td>1-12</td>
<td>2,058,600</td>
</tr>
</tbody>
</table>

   After the first 12 calendar months of operation, compliance with the annual wet coal charge rate limitation shall be based upon a rolling, 12-month summation of the wet coal charge rates.

2. The wet coal charge rate shall not exceed 5,897 tons per day.

3. The coke push rate shall be limited to 1,440,000 tons per year, based upon a rolling, 12-month summation of the coke push rates.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the coal charge levels specified in the following table:

   Maximum Allowable


After the first 12 calendar months of operation, compliance with the annual coke push rate limitation shall be based upon a rolling, 12-month summation of the coke push rates.

4. The pressure drop across each charging baghouse and pushing baghouse shall be maintained within the range of 3-12 inches of water and 5-6 inches of water respectively while the emissions unit is in operation. The minimum pressure drop for these units may be adjusted by Ohio EPA based on the values recorded during PE and PM stack testing.

5. The permittee shall not exceed 88 charges/pushes per day.

6. The permittee shall not operate more than one pushing and charging machine (PCM) or one flat push hot car (FPHC) at any one time while at an open oven door.

7. Each common battery tunnel shall be maintained at a negative pressure.

8. The permittee shall ensure that the common battery tunnel(s), oven exhaust ductwork, waste heat ductwork, heat recovery steam generators, ductwork from the heat recovery steam generators to the lime spray dryer, lime spray dryer, baghouse and fan capacity are designed and installed to handle peak gassing periods.

9. It is recognized that soot formation can occur on the heat transfer surfaces of the heat recovery steam generators and reduce the heat transfer efficiency. The permittee shall implement maintenance procedures that allow for removal of soot from the heat transfer surfaces of the heat recovery steam generators without shutdown of the heat recovery steam generator(s). These maintenance procedures can include, but are not limited to, installation of sootblowers on the heat recovery steam generators to allow for periodic cleaning of the heat transfer surfaces.
10. Waste gas emissions shall not be vented to the HRSG bypass vent stacks for more than 192 hours per rolling 12-month period per vent stack. There shall be no more than one HRSG bypass vent stack in use at any time.

To ensure enforceability during the first 12-calendar months of operation, the permittee shall not exceed the by-pass levels specified in the following table:

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum cumulative hours of operation of each HRSG bypass vent stack</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>192</td>
</tr>
<tr>
<td>2</td>
<td>192</td>
</tr>
<tr>
<td>3</td>
<td>192</td>
</tr>
<tr>
<td>4</td>
<td>192</td>
</tr>
<tr>
<td>5</td>
<td>192</td>
</tr>
<tr>
<td>6</td>
<td>192</td>
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<td>192</td>
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<td>192</td>
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<tr>
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<td>192</td>
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<td>10</td>
<td>192</td>
</tr>
<tr>
<td>11</td>
<td>192</td>
</tr>
<tr>
<td>12</td>
<td>192</td>
</tr>
</tbody>
</table>

After the first 12 calendar months of operation, compliance with the annual HRSG bypass vent stack usage limitation shall be based upon a rolling, 12-month summation of the HRSG bypass vent stack usage rates.

11. The permittee shall maintain an activated carbon injection rate of 2 lbs/mmacf. A reduced activated carbon injection rate operational restriction may later be established by Ohio EPA, if the permittee demonstrates to the Director's satisfaction that a lower activated carbon injection rate can achieve the mercury emission limitation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall install, operate, and maintain equipment to monitor the pressure drop across each charging dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each charging dust collector on a once per shift basis.

2. The permittee shall install, operate, and maintain equipment to monitor the pressure drop across each pushing dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's
recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each pushing dust collector on a once per shift basis.

The permittee shall also comply with the pushing dust collector monitoring requirements under 40 CFR 63.7330 through 63.7332 [See Part II. section A.52. through A.54.].

The enclosed mobile flat push hot car enclosure shall be visually examined weekly for areas potentially needing repair to minimize visible emissions of fugitive dust. When an inspection identifies an area needing repair, the permittee shall document and maintain records of the repair methods of each attempt to repair, and the date of successful repair.

3. The permittee shall install, operate, and maintain equipment to continuously monitor and record \( \text{SO}_2 \) emissions from the main stack in units of pounds \( \text{SO}_2 \) per hour and tons \( \text{SO}_2 \) per rolling 12-month period. The permittee shall calculate the pounds of \( \text{SO}_2 \) per ton of wet coal charged based on the daily charge rate and \( \text{SO}_2 \) CEM data. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

4. Prior to the installation of the continuous \( \text{SO}_2 \) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site(s) in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

Within 60 days of initial startup the permittee shall conduct certification tests of the continuous \( \text{SO}_2 \) monitoring system pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous \( \text{SO}_2 \) monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

5. Monitoring and Record Keeping Requirements for \( \text{SO}_2 \) continuous emissions monitoring systems

a. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the \( \text{SO}_2 \) monitor at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in
Appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

b. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) shall be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

c. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

d. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

e. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O\textsubscript{2} or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

f. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO\textsubscript{2} monitoring system designed to ensure continuous valid and representative readings of SO\textsubscript{2}. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO\textsubscript{2} monitoring system must be kept on site and available for inspection during regular office hours.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the permittee shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
g. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

6. The permittee shall maintain monthly records of the following information:

a. The wet coal charge rate for each day, in tons, and for each month, in tons;

b. The coke push rate for each day, in tons, and for each month, in tons;

c. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the wet coal charge rates, in tons; and,

d. Beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the coke push rates, in tons.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative wet coal charge rate, in tons for each calendar month, and the cumulative coke push rate, in tons for each calendar month.

7. Ohio EPA reserves the right to require the permittee to install a continuous opacity monitoring system on the main stack if, in the Director's judgment, there is significant ongoing opacity at a level near the allowable visible emission limitation. If the Director determines that a continuous opacity monitoring system is needed to assure compliance with the visible emission limitation, the permittee shall install an opacity monitoring system on the main stack within 180 days of notification by the Director that an opacity monitoring system is required to be installed. Prior to installation of an opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

8. The permittee shall monitor and record the temperature of each common battery tunnel on a once per day basis.
9. The permittee shall maintain monthly records of all the following information for all periods when battery waste gas emissions are vented to by-pass vent stacks (by-passing the lime spray dryer and baghouse):
   a. the date and time each by-pass event occurred;
   b. the identification of the each by-pass vent stack in use;
   c. the duration of each by-pass event in hours; and,
   d. the reason for the by-pass event.

10. The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system on the main stack.
   i. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed, operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.
   ii. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
   iii. The bag leak detection system sensor shall produce an output of relative particulate emissions.
   iv. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.
   v. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.
   vi. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.
FDS Coke Plant, L.L.C.

PTI 

Issue

Emissions Unit ID: B901
vii. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time except as detailed in the operations, maintenance, and monitoring plan. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

11. The permittee shall keep a record of number of charges and pushes per day.

12. The permittee shall collect monthly composite samples of the coal charged in this emissions unit. The permittee shall also collect a composite sample of the coal charged in this emissions unit each time the coal blend is changed. The individual samples for each composite sample shall be collected at the coal bin feeding the coal stamping machine or from other locations mutually agreeable by the permittee and Ohio EPA. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal charged in this emissions unit during each calendar month. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each composite sample of coal shall be analyzed for sulfur content (percent), mercury content (percent), and chlorine content (percent). The analytical methods for sulfur content, mercury content and chlorine content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; D3684-01 Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method; and, D2361-95(2001) Standard Test Method for Chlorine in Coal. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

13. The permittee shall maintain monthly records of the results of the analyses for sulfur content, mercury content and chlorine content of the coal charged.

14. All bypass vent stacks shall be equipped with sensors that detect when the bypass stacks are open, or partially opened, either due to relieving system pressure or manual opening of the bypass vent stacks by the operator. These sensors shall be instrumented to the operator and an alarm sounded when there is stack gas flow to any of the by-pass vent stacks. The permittee shall record and maintain daily records for each bypass vent stack the time periods that there was flow through the
The permittee shall install, operate, and maintain a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to measure and record the concentration of mercury in the exhaust gas from the main stack according to the procedures of 40CFR Part 75.15 that are determined by the Director to be applicable to the permittee, and the following requirements.

a. The sorbent traps used in the sorbent trap monitoring system (as defined in 40 CFR Part 72.2) shall be of sufficient size to collect samples for a minimum sampling duration of 7 days. The permittee shall replace the sorbent traps in the sorbent trap sampling system every 7 days.

b. The permittee shall calculate and record the mercury emission rate in pounds for each calendar month and pounds per rolling 12-month period using equations 1 and 2 below, except that for a particular pair of sorbent traps, $C_h$ in equation 1 shall be the flow-proportional average Hg concentration measured over the data collection period.

\[
E_h = K C_h Q_h t_h (1-B_{ws})
\]
(Equation 1)

Where:
- $E_h$ = Hg mass emissions for the hour, (lb)
- $K$ = Units conversion constant, $6.24 \times 10^{-11}$ lb-scm/μg-scf
- $C_h$ = Hourly mercury concentration, dry basis, μg/dscm
- $Q_h$ = Hourly stack gas volumetric flow rate, (scfh)
- $t_h$ = Unit operating time, i.e., the fraction of the hour for which the unit operated
- $B_{ws}$ = Stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H₂O, $B_{ws} = 0.08$)

\[
M = \sum_{h=1}^{n} E_h
\]
(Equation 2)

Where:
- $M$ = total Hg mass emissions for the month
- $E_h$ = Hg mass emissions for hour "h", from Equation 1, lb
- $n$ = The number of unit operating hours in the month with valid sorbent trap monitoring system data

c. The emissions data must be corrected for the stack gas moisture content. A certified continuous moisture monitoring system that meets the requirements of 40 CFR Part 75.11(b) is acceptable for this purpose. The permittee may use a default moisture value determined during the initial stack test with prior approval from Ohio EPA.
FDS Coke Plant, L.L.C.
PTI #
Issue

Emissions Unit ID: B901
d. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with appendices A and B of 40 CFR Part 75 that are determined by the Director to be applicable to the permittee, and all other quality assurance requirements specified in appendix K to 40CFR Part 75 shall be met for sorbent trap monitoring systems.

e. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

f. The permittee may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

g. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

16. Prior to startup, the permittee shall prepare and submit to the Toledo Division of Environmental Services and Ohio EPA Central Office for approval a monitoring plan for the mercury sorbent trap monitoring system. The plan must address the requirements below.

a. Installation of the sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., at or downstream of the last control device);

b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

c. Performance evaluation procedures and acceptance criteria (e.g., calibrations);

d. Ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(d) or 40 CFR Part 75 that are determined by the Director to be applicable to the permittee;

e. Ongoing data quality assurance procedures in accordance with 40 CFR 60.13 or 40 CFR
Part 75 hat are determined by the Director to be applicable to the permittee; and

f. Ongoing recordkeeping and reporting procedures in accordance with 40 CFR Part 60, Subpart Da that are determined by the Director to be applicable to the permittee.

17. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously the mercury emissions from the main stack (or collect data at all required intervals) at all times that the emissions unit is operating.

18. The permittee may not use mercury sorbent trap monitoring system data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities, in data averages and calculations used to report emissions or operating levels. The permittee shall use all data collected during all other periods in assessing the operation of the control device and associated control system.

19. A mercury monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

20. If continuous mercury emissions monitoring systems prove to reliably and accurately measure the mercury emissions from non-recovery coke ovens in the future, the permittee may switch from a sorbent trap monitoring system to a continuous mercury emissions monitoring system, or Ohio EPA may require the permittee to install a continuous mercury emissions monitoring system.

21. The permittee shall maintain monthly records of all the following information for all periods when waste gas emissions are vented to the HRSG bypass vent stacks:

a. the date, time, and duration of each bypass event;

b. the identification of each bypass vent stack in use;

c. the reason for the bypass event; and

d. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the HRSG bypass vent stack usage rates per stack.

22. The permittee shall install equipment to continuously monitor and record the activated carbon injection rate, in units of pounds per hour and pounds per million actual cubic feet of exhaust
23. The permittee shall observe each coke oven door after charging and record the oven number of any door from which visible emissions occur. Emissions from coal spilled during charging or from material trapped within the seal area of the door are not considered to be a door leak if the permittee demonstrates that the oven is under negative pressure, and that no emissions are visible from the top of the door or from the dampers on the door.

IV. Reporting Requirements

1. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the rolling, monthly wet coal charge rate limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative wet coal charge levels. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. Reporting Requirements for SO$_2$ Continuous Emissions Monitoring System

Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO$_2$ values in excess of 0.99 lb/ton when charging coal containing less than 0.9% sulfur, 1.06 lb/ton when charging coal containing greater than 0.9% sulfur, 279.2 lbs/hr as a rolling 3-hour average, and 1019 tons per rolling 12-month period. These reports shall also contain the total SO$_2$ emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the appropriate Ohio EPA District Office or local air agency documenting any continuous SO$_2$ monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be
The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the hourly wet coal charge rate limitation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

The permittee shall submit to the Toledo Division of Environmental Services quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each charging dust collector and each pushing dust collector did not comply with the allowable ranges specified above. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

The permittee shall submit semi-annual deviation (excursion) reports that identify all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

The permittee shall submit to the Toledo Division of Environmental Services quarterly common battery tunnel pressure deviation (excursion) reports that identify all periods of time during which each common battery tunnel was not maintained at a negative pressure. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all periods during which visual inspections of the enclosed flat push hot car identified areas potentially needing repair to minimize visible emissions of fugitive dust. The report shall include the repair methods of each attempt to repair, and the date of successful repair. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

The permittee shall submit to the Toledo Division of Environmental Services quarterly reports concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.
include the following information for the emissions unit for each day during the calendar quarter:

a. the total quantity of wet coal charged (tons);

b. the average mercury content (weight percent) of the coal charged;

c. the average chlorine content (weight percent) of the coal charged; and

d. the average sulfur content (weight percent) of the coal charged.

These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

9. Reporting Requirements for Hg Sorbent Trap Monitoring System

The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Hg values in excess of the applicable mercury emission limitations for the main stack under section A.I.1 for this emissions unit in units of pounds per rolling 12-month period. These reports shall also contain the total Hg emissions for each month and the rolling, 12-month summation of the monthly emissions.

The permittee shall submit reports to the Toledo Division of Environmental Services documenting any Hg sorbent trap monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the sorbent trap monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.
10. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the HRSG bypass vent stack usage limitations. If no deviations occurred during a calendar quarter, the permittee shall submit a
quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      10% opacity as a 6-minute average from the main stack

   Applicable Compliance Method:

   The continuous opacity monitor records required by this permit to install shall serve as demonstration of compliance.

   If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      39.0 pounds per hour PE from the main stack

   Applicable Compliance Method

   If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

   c. Emission Limitation:

      39.0 pounds per hour PM_{10} from the main stack

   Applicable Compliance Method:
d. Emission Limitation:

PE from the lime spray dryer baghouse exhaust shall not exceed 0.008 grains per dry standard cubic foot of exhaust gases

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

PM$_{10}$ emissions from the lime spray dryer baghouse exhaust shall not exceed 0.008 grains per dry standard cubic foot of exhaust gases

Applicable Compliance Method

If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

171 tons PE per rolling 12-month period and 178 tons PM$_{10}$ per rolling 12-month period from the main stack

Applicable Compliance Method:

These emission limitations were developed by multiplying the hourly allowable emission limitations for PM and PM$_{10}$ (39.0 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.
g. Emission Limitation:

49.6 pounds per hour CO from the main stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

h. Emission Limitation:

217.2 tons CO per rolling 12-month period from the main stack

Applicable Compliance Method:

This emission limitation was developed by multiplying the hourly allowable emission limitation for CO (49.6 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

246 pounds per hour NOx from the main stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

j. Emission Limitation:

1030 tons per rolling 12-month period NOx from the main stack

Applicable Compliance Method:

This emission limitation was developed by multiplying the annual coal charge rate of 2,058,600 tons/yr by allowable NOx emission rate of 1 pound NOx per ton of coal charged and divided by 2000 lbs/ton. Therefore, compliance with the annual coal charge rate restriction and the 1 pound per ton NOx emission rate demonstrates compliance with
FDS
PTI

Issued: To be entered upon final issuance

the annual NOx emission limitation.
k. Emission Limitation:

243.3 pounds per hour SO\textsubscript{2} from the main stack

Applicable Compliance Method:

The continuous emissions monitoring system records required by this permit shall serve as demonstration of compliance with this emission limitation.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

l. Emission Limitation:

1019 tons SO\textsubscript{2} per rolling 12-month period from the main stack

Applicable Compliance Method:

Data from the continuous SO\textsubscript{2} emissions monitoring system shall serve as demonstration of compliance with the annual emission limitation.

m. Emission Limitation:

10.6 pounds per hour VOC from the main stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

n. Emission Limitation:

46.5 tons VOC per rolling 12-month period from the main stack
This emission limitation was developed by multiplying the hourly allowable emission limitation for VOC (10.6 lbs/hr) by 8760 hrs/yr, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

**Emission Limitation:**

0.99 pound SO\textsubscript{2} per ton of wet coal charged from the main stack when charging coal containing less than 0.9% sulfur; 1.06 lb/ton when charging coal containing greater than or equal to 0.9% sulfur

**Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

**Emission Limitation:**

1.00 pound NO\textsubscript{x} per ton of wet coal charged from the main stack

**Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

**Emission Limitation:**

20 ppmvd CO from the main stack

**Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
FDS
PTI
Issued: To be entered upon final issuance

Emissions Unit ID: B901
r. Emission Limitation:

10 ppmvd VOC from the main stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

s. Emission Limitation:

0.04 pound per hour lead from the main stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

t. Emission Limitation:

0.13 ton lead per rolling 12-month period from the main stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

u. Emission Limitation:

1.93 pounds per hour total HAP emissions from the main stack
Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum hourly coal charge rate (336.4 tons/hr).

v. Emission Limitation:

5.42 tons total HAP emissions per rolling 12-month period from the main stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum annual coal charge rate (2,058,600 tons/yr).

w. Emission Limitation:

No visible emissions from the common battery tunnel or its associated piping

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 22 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

x. Emission Limitation:

0.001 pound per hour lead from the charging dust collector

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
0.001 ton lead per rolling 12-month period from the charging dust collector

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

0.04 pound per hour total HAP emissions from the charging dust collector

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-21 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum hourly coal charge rate (336.4 tons/hr).

0.11 tons total HAP emissions per rolling 12-month period from the charging dust collector

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-21 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum annual coal charge rate (2,058,600 tons/yr).

Visible particulate emissions from the charging dust collector stack shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

Visible particulate emissions of fugitive dust from charging operations shall not exceed
Applicable Compliance Method:

The permittee shall conduct a performance test each week to demonstrate compliance this opacity limit. The permittee shall conduct each performance test according to the procedures and requirements in paragraphs (i)(a) through (iii) of this section.

(i) Using a certified observer, determine the average opacity of five consecutive charges per week for each charging emissions capture system if charges can be observed according to Method 9 (40 CFR Part 60, Appendix A), except as specified in paragraphs (a) and (b) of this section.

(a) Instead of the procedures in section 2.4 of Method 9 (40 CFR Part 60, Appendix A), record observations to the nearest 5 percent at 15-second intervals for at least five consecutive charges.

(b) Instead of the procedures in section 2.5 of Method 9 (40 CFR Part 60, Appendix A), determine and record the highest 3-minute block average opacity for each charge from the consecutive observations recorded at 15-second intervals.

(ii) Opacity observations are to start when the door is removed for charging and end when the door is replaced.

(iii) Using the observations recorded from each performance test, the certified observer shall compute and record the average of the five 3-minute block averages.

dd. Emission Limitation:

0.05 pound per hour PE from each charging stack

Applicable Compliance Method

Multiply the permittee-supplied emission factor (0.008 grain PE/dscf) by the maximum stack flow rate (3,000 dscfm) multiplied by the time per charge (3 minutes/charge) multiplied by the number of charges per hour (5 charges/hr) divided by the number of grains per pound (1 lb/7000 gr). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). During each test run, sample only during periods of actual
charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ee. Emission Limitation:

0.05 pound per hour PM$_{10}$ from each charging baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. During each test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ff. Emission Limitation:

0.17 ton PE per rolling 12-month period and 0.17 ton PM$_{10}$ per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee-supplied emission factor (0.008 grain PE/dscf) by the maximum stack flow rate (3,000 dscfm) multiplied by the time per charge (3 minutes/charge) multiplied by the number of charges per day (88 charges/day) divided by the number of grains per pound (1 lb/7000 gr) multiplied by 365 days/yr divided by 2,000 lbs/ton.

gg. Emission Limitation:

2.78 tons per rolling 12-month period fugitive PE from charging operations

Applicable Compliance Method:
Compliance shall be demonstrated by multiplying the wet coal charge rate in tons per rolling 12-month period by the AP-42 PE emission factor of 0.027 lb/ton of coal charged [Table 12.2-21 of draft Section 12 dated August, 2001] multiplied by (1 - the estimated capture efficiency of 90%) and dividing by 2,000 pounds per ton.

hh. Emission Limitation:

0.91 pound per hour fugitive PE emissions from charging operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum wet coal charge rate of 336.4 lbs/hr by the AP-42 PE emission factor of 0.027 lb/ton of coal charged [Table 12.2-21 of draft Section 12 dated August, 2001] multiplied by (1 - the estimated capture efficiency of 90%).

ii. Emission Limitation:

0.27 pound per hour fugitive PM\(_{10}\) emissions from charging operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the fugitive PM per hour (0.91 lb/hr) multiplied by a factor of 0.3 because fugitive PM\(_{10}\) = 30 % of fugitive PM as stated in the permit application).

jj. Emission Limitation:

0.83 tons per rolling 12-month period fugitive PM\(_{10}\) emissions from charging operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the fugitive PE in tons per year (2.78 tons/yr) multiplied by a factor of 0.3 because fugitive PM\(_{10}\) = 30 % of fugitive PM as stated in the permit application).

kk. Emission Limitation:

0.94 pound per hour CO from each charging baghouse stack

Applicable Compliance Method:

Multiply the permittee-supplied emission factor (0.0028 lb CO/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of
charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

II. Emission Limitation:

2.88 tons CO per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds CO per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for CO, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

mm. Emission Limitation:

0.10 pound per hour SO\textsubscript{2} from each charging baghouse stack

Applicable Compliance Method:

Multiply the permittee-supplied emission factor (0.0003 lb SO\textsubscript{2}/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

nn. Emission Limitation:

0.31 ton SO\textsubscript{2} per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds SO\textsubscript{2} per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for SO\textsubscript{2}, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.
oo. Emission Limitation:

0.67 pound per hour VOC from each charging baghouse stack
Applicable Compliance Method:

Multiply the permittee-supplied emission factor (0.002 lb VOC/ton of coal charged) by the maximum daily coal charge rate (67.28 tons/oven) multiplied by the maximum number of charges per hour (5). If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

2.06 tons VOC per rolling 12-month period from each charging baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds VOC per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for VOC, by the rolling, 12-month summation of coal processed and dividing by 2,000 pounds per ton.

Emission Limitation:

0.001 pound per hour lead from each pushing baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

0.001 ton lead per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds lead per
ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for lead, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

ss. Emission Limitation:

0.1 pound per hour total HAP emissions from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Tables 12.2-9 and 12.2-10 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum hourly coal charge rate (336.4 tons/hr).

tt. Emission Limitation:

0.3 ton total HAP emissions per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP pollutant pound per ton emission factors [Tables 12.2-9 and 12.2-10 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum annual coal charge rate (2,058,600 tons/yr).

uu. Emission Limitation:

0.5 pound per hour PE from each pushing baghouse stack

Applicable Compliance Method

Multiply the permittee-supplied controlled emission factor (0.008 grain PE/dscf) by the maximum flow rate (9,500 dscfm) multiplied by the number of minutes per charge (10 minutes) multiplied by the maximum number of charges per hour (5 charges/hr) divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 5 of 40
CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10). During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions \( E_p \) for each test run using Equation 1 of this section as follows:

\[
E_p = C \times Q \times T / K
\]

Where:
- \( E_p \) = Process weighted mass emissions of PE, lb/hr;
- \( C \) = Concentration of particulate matter of PE, gr/dscf;
- \( Q \) = Volumetric flow rate of stack gas, dscf/hr;
- \( T \) = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
- \( K \) = Conversion factor, 7,000 gr/lb.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

0.2 pound per hour PM\(_{10}\) from each pushing baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions \( E_p \) for each test run using Equation 1 of this section as follows:

\[
E_p = C \times Q \times T / K
\]
Where:

$E_p =$ Process weighted mass emissions of PM$_{10}$, lb/hr;

$C =$ Concentration of particulate matter of PM$_{10}$, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
K = Conversion factor, 7,000 gr/lb.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ww. Emission Limitation:

13 tons PE per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds PE per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for PE, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

xx. Emission Limitation:

0.5 ton PM<sub>10</sub> per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pound PE per ton of coke pushed) by the maximum rolling, 12-month summation of coke pushed (1,440,000 tons) and dividing by 2,000 pounds per ton.

yy. Emission Limitation:

4.2 pounds per hour fugitive PE from pushing operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pounds PE per ton of coke pushed) by the maximum hourly push rate (231.15 tons) multiplied by the percentage of emissions not captured by the control device (0.1).

zz. Emission Limitation:
13 tons per rolling 12-month period fugitive PE from pushing operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.18 pounds PE per ton of coke pushed) by the maximum annual push rate (1,440,000 tons of coke pushed per rolling 12-month period) multiplied by the percentage of emissions not captured by the control device (0.1) and divided by 2,000 pounds per ton.

aaa. Emission Limitation:

1.9 pounds per hour fugitive PM$_{10}$ from pushing operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.08 pounds PM$_{10}$ per ton of coke pushed) by the maximum hourly push rate (231.15 tons) multiplied by the percentage of emissions not captured by the control device (0.1).

bbb. Emission Limitation:

5.8 tons per rolling 12-month period fugitive PM$_{10}$ from pushing operations

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the permittee supplied emission factor (0.1 pounds PM$_{10}$ per ton of coke pushed) by the maximum annual push rate (1,440,000 tons of coke pushed per rolling 12-month period) multiplied by the percentage of emissions not captured by the control device (0.1).

ccc. Emission Limitation:

21.2 pounds per hour CO from each pushing baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
dd. Emission Limitation:

65 tons CO per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds CO per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for CO, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

ee. Emission Limitation:

6.4 pounds per hour NOx from each pushing baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

ff. Emission Limitation:

20 tons per rolling 12-month period NOx from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds NOx per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for NOx, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

gg. Emission Limitation:

16.8 pound per hour SO$_2$ from each pushing baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A.
Emissions Unit ID: B901

Issued: To be entered upon final issuance

CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
Emissions Unit ID: B901

Emission Limitation:

51.5 ton SO₂ per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds SO₂ per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for SO₂, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

Emission Limitation:

13.5 pounds per hour VOC from each pushing stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

41 tons VOC per rolling 12-month period from each pushing baghouse stack

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds VOC per ton of coal processed, established during the most recent emissions test which demonstrated compliance with the emissions limitation for VOC, by the rolling, 12-month summation of coal processed (or 2,058,600 tons, each based on potential to emit) and dividing by 2,000 pounds per ton.

Emission Limitation:

Visible particulate emissions of fugitive dust during any pushing operations shall not
exceed an average of 20% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60.

III. Emission Limitation:

Visible emissions from the pushing baghouse stacks shall not exceed 10% opacity

Applicable Compliance Method:

OAC rule 3745-17-03(B)(2)(d)

mmm. Emission Limitation:

0.006 lb/hr mercury emissions from the main stack

Applicable Compliance Method:

If required, ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method), shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

Data obtained from the initial stack test shall be used to demonstrate compliance with this emission limitation.

nnn. Emission Limitation:

36 pounds per rolling 12-month period mercury emissions from the main stack

Applicable Compliance Method:

Data obtained from the mercury sorbent trap monitoring system, shall be used to demonstrate compliance with this emission limitation.

oooo. Emission Limitation:
Particulate emissions from the baghouses controlling pushing emissions shall not exceed 0.03 lb/ton coke pushed.
Applicable Compliance Method:

If required, compliance shall be demonstrated using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

**PPP. Emission Limitation:**

0.12 pound per hour lead emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled lead emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

**QQQ. Emission Limitation:**

0.1 ton lead per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour lead emission rate established during the most recent lead emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the lead emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total lead emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total lead emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

**RRR. Emission Limitation:**

1.42 pounds per hour total HAP emissions from all bypass vent stacks combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the summation of the individual HAP
pollutant pound per ton emission factors [Table 12.2-20 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum daily average hourly coal charge rate (336.4 tons/hr) multiplied by the total number of HRSG bypass vent stacks in use (as recorded in Section A.III.) divided by the total number of HRSG vent stacks (6). Sum the total HAP emissions emitted from each HRSG bypass vent stack to obtain the total HAP emissions from all HRSG bypass vent stacks combined.

sss. Emission Limitation:

0.96 tons total HAP emissions per rolling 12-month period from all bypass vent stacks combined

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the summation of the individual HAP pollutant pound per ton emission factors [Table 12.2-20 of Draft AP-42 Section 12.2 dated August, 2001] by the maximum hourly charge rate (336.4 tons) divided by the total number of HRSG bypass vent stacks (6) and multiply by the total number of hours per rolling 12-month period that emissions were vented to the HRSG bypass vent stack as recorded under Section A.III. Sum the total HAP emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total HAP emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

ttt. Emission Limitation:

8.3 pounds per hour CO emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled CO emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

uuu. Emission Limitation:

4.8 tons CO per rolling 12-month period from all HRSG bypass vent stacks combined
Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour CO emission rate established during the most recent CO emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the CO emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total CO emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total CO emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

Emission Limitation:

39.2 pounds per hour NOx emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled NOx emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

22.6 ton NOx per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour NOx emission rate established during the most recent NOx emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the NOx emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total NOx emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total NOx emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

Emission Limitation:

24.4 pounds per hour PE emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled PE emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

yyy. Emission Limitation:

14.1 ton PE per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour PE emission rate established during the most recent PE emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the PE emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total PE emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total PE emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

zzz. Emission Limitation:

24.4 pounds per hour PM$_{10}$ emissions from all heat recovery steam generator bypass vent stacks combined

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled PM$_{10}$ emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

aaaa. Emission Limitation:

14.1 ton PM$_{10}$ per rolling 12-month period from all HRSG bypass vent stacks combined
Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour PM$_{10}$ emission rate established during the most recent PM$_{10}$ emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the PM$_{10}$ emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total PM$_{10}$ emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total PM$_{10}$ emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled SO$_2$ emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour SO$_2$ emission rate established during the most recent SO$_2$ emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the SO$_2$ emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total SO$_2$ emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total SO$_2$ emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour VOC emissions rate established during the most recent VOC emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the VOC emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total VOC emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total VOC emissions from all HRSG bypass vent stacks per rolling 12-month period combined.
If required, the permittee shall demonstrate compliance with this emission limitation by measuring the maximum vent stack flow rate as determined using Methods 1 through 4 of 40 CFR Part 60, Appendix A. The vent stack emission rate may be determined using the maximum vent stack flow rate and the uncontrolled VOC emission concentration vented to the main stack. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Emission Limitation:

1.0 ton VOC per rolling 12-month period from all HRSG bypass vent stacks combined

Applicable Compliance Method:

For each HRSG bypass vent stack, multiply the pound per hour VOC emission rate established during the most recent VOC emissions test that demonstrated compliance by the number of hours per rolling 12-month period that the HRSG bypass vent stack was in use as recorded in Section A.III to obtain the VOC emissions per rolling 12-month period from each HRSG bypass vent stack. Sum the total VOC emissions emitted from each HRSG bypass vent stack per rolling 12-month period to obtain the total VOC emissions from all HRSG bypass vent stacks per rolling 12-month period combined.

Emission Limitation:

20% opacity from the HRSG bypass vent stacks when in use.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Method 9 of 40 CFR Part 60, Appendix A.

2. Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup of the emissions unit for: the main stack, charging baghouse stacks, pushing baghouse stacks, fugitive charging emissions, and fugitive pushing emissions. The flow rate testing for the HRSG bypass vent stacks shall be conducted during the first scheduled by-pass of a heat recovery steam
b. The emission testing shall be conducted to demonstrate compliance with the following allowable limitations.
i. Main Stack: PE, PM$_{10}$, SO$_2$, NO$_x$, CO, VOC, Lead, mercury, and opacity. Opacity observations shall be taken concurrent with PE and PM$_{10}$ emission testing.

ii. Charging baghouse stacks: PM$_{10}$ and opacity.

During each test run, sample only during periods of actual charging when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a charge and finish at the end of a charge (i.e., sample for an integral number of charges).

Compute the process-weighted mass emissions ($E_p$) for each test run using Equation 1 of this section as follows:

$$E_p = \frac{\sum C \times Q \times T}{K}$$

Where:
- $E_p =$ Process weighted mass emissions of PM$_{10}$, lb/hr;
- $C =$ Concentration of particulate matter of PM$_{10}$, gr/dscf;
- $Q =$ Volumetric flow rate of stack gas, dscf/hr;
- $T =$ Total time during a run that a sample is withdrawn from the stack during pushing, hr; and
- $K =$ Conversion factor, 7,000 gr/lb.

Opacity observations shall be taken concurrent with PM$_{10}$ emission testing.

iii. Pushing baghouse stacks: PM$_{10}$, SO$_2$, NO$_x$, CO, VOC, opacity. During each test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes).

Compute the process-weighted mass emissions ($E_p$) for each test run using Equation 1 of this section as follows:

$$E_p = \frac{\sum C \times Q \times T}{K}$$

Where:
Opacity observations shall be taken concurrent with \( \text{PM}_{10} \) emission testing.

d. The emission testing shall be conducted to determine the emissions of dioxins, furans, and acid gases from the main stack.

e. The permittee shall determine the maximum vent gas flow rate in dry standard cubic feet per minute through the bypass vent stacks using Method 1 through 4 of 40 CFR Part 60, Appendix A. Using the maximum flow rate through the bypass vent stacks and the uncontrolled emissions concentrations measured at the main stack, the permittee shall determine the maximum emissions of PE, \( \text{PM}_{10} \), \( \text{SO}_2 \), \( \text{NO}_x \), CO, VOC, lead, and mercury from the bypass vent stacks in pounds per hour.

f. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A</td>
</tr>
<tr>
<td>( \text{PM}_{10} )</td>
<td>Method 201 and 202 of 40 CFR Part 51, Appendix M</td>
</tr>
<tr>
<td>( \text{SO}_2 )</td>
<td>Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A</td>
</tr>
<tr>
<td>( \text{NO}_x )</td>
<td>Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A</td>
</tr>
<tr>
<td>CO</td>
<td>Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A</td>
</tr>
</tbody>
</table>
VOC Methods 1 through 4 and 18, Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A

Lead Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A

Opacity Methods 9 and 22 of 40 CFR Part 60, Appendix A

Mercury ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Method 23 of 40 CFR Part 60, Appendix A is added to test dioxins and furans emissions.

Method 26 of 40 CFR Part 60, Appendix A is added to test acid gas emissions (include HCl, HF, Cl₂, etc.)

Method 29 of 40 CFR Part 60, Appendix A is added to test for metals emissions.

The following additional information shall be documented during all emission testing for PE, PM₁₀, SO₂, NOₓ, CO, VOC, Lead, mercury, opacity, dioxins and furans, acid gases, metals and flow rate.

i. Hourly wet coal charge rates, in tons/hr and the number of charges per hour to allow a determination of an emission factor in pounds of pollutant per ton of coal processed;

ii. Hourly coke push rates, in tons/hr and the number of pushes per hour to allow a determination of an emission factor in pounds of pollutant per ton of coke produced;

iii. Pressure drop readings approximately every 15 minutes during the test(s) for:

(a) each charging baghouse when charging emissions are being tested;

(b) the lime spray dryer baghouse when the main stack emissions are being tested;

(c) each pushing baghouse when pushing emissions are being tested.

iv. Lime spray dryer operating parameters when the main stack emissions are being tested;
v. main stack baghouse cleaning cycle; and

vi. activated carbon injection rate in pounds per hour and pounds per million actual cubic feet of exhaust gases.

h. The permittee shall perform an activated carbon injection study to determine the optimum operating parameters of the activated carbon injections system to maximize the control of mercury emissions. The permittee shall submit to the Toledo Division of Environmental Services and Ohio EPA a carbon injection study plan for approval within 60 days prior to the proposed date of the commencement of the optimization study.

i. The permittee shall provide, or cause to be provided, performance testing facilities as follows for the outlet ducts for charging baghouses, inlet duct for the lime spray dryer, the outlet duct for the main stack, and the outlet ducts for the pushing baghouses:

i. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

ii. Safe sampling platform(s).

iii. Safe access to sampling platform(s).

iv. Utilities for sampling and testing equipment.

j. The outlet ducts for charging baghouses, inlet duct for the lime spray dryer, the outlet duct for the main stack, and the outlet ducts for the pushing baghouses shall be designed in a manner that allows for emissions sampling ports to be installed according to criteria specified in Method 1 of 40 CFR Part 60, Appendix A.

k. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s),
and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services’ refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

3. The SO$_2$ CEMS shall be audited at least once each calendar quarter as outlined under 40 CFR Part 60 Appendix F. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA shall be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B of 40 CFR Part 60 (e.g., PS 2 for SO$_2$ and NO$_x$). In addition, analyze the appropriate performance audit samples received from U.S. EPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

      i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office’s or local air agency’s refusal to accept the results of the emission test(s).

      ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B of 40 CFR Part 60 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of U.S. EPA performance audit samples are also required.

4. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the permittee shall audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA shall always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

5. The permittee shall demonstrate initial compliance with the 12-month rolling mercury emission limitation using sorbent trap monitoring system data according to the following procedures.

a. Calculate the monthly and 12-month rolling mercury emissions as specified in Section A.III.

b. Report the 12-month rolling average mercury emissions rate in the first semi-annual compliance report.

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>B901 - Coke battery - 240 coke ovens, charging cars, and flat coke quench railcars</td>
<td>Air Toxics Policy</td>
<td>See section B.III.1.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (B901) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Phosphorus

TLV (mg/m3): 0.10

Maximum Hourly Emission Rate (lbs/hr): 1.09

Predicted 1-Hour Maximum Ground-Level
Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F001 - Roadways and parking areas (all roadways and parking areas are paved)</td>
<td>OAC rule 3745-31-05(A)(2)</td>
<td>24.88 tons per year particulate emissions (PE)</td>
</tr>
<tr>
<td></td>
<td>OAC rules 3745-31-10 through 20</td>
<td>no visible particulate emissions except for one minute during any 60-minute period</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(B)(4)</td>
<td>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.2.b through A.I.2.g.)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-08(B), (B)(8), (B)(9)</td>
<td>4.85 tons per year particulate matter less than 10 micron (PM$_{10}$) emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See section A.I.2.h.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See section A.I.2.i.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See section A.I.2.i.</td>
</tr>
</tbody>
</table>

2. **Additional Terms and Conditions**

2.a The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
paved roadways:

Baghouse and FGD system maintenance and lime supply road
Nut Coke/Breeze Truck Road

paved parking areas:

Main Parking area

2.b The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and flushing at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c The needed frequencies of implementation of the control measures shall be determined by the permittee’s inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.d The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.e Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.f Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

2.g A maximum speed limit of 10 miles per hour shall be posted and enforced on the property.
2.h All roadways and parking areas shall be paved.

2.i The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

<table>
<thead>
<tr>
<th>Paved Roadways and Parking Areas</th>
<th>Minimum Inspection Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td></td>
</tr>
<tr>
<td>Baghouse and FGD System Maintenance and Lime Supply Road</td>
<td></td>
</tr>
<tr>
<td>Nut Coke/Breeze Truck Road</td>
<td></td>
</tr>
<tr>
<td>Main Parking Area</td>
<td></td>
</tr>
</tbody>
</table>

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and
FDS
PTI
Issued: To be entered upon final issuance

Emissions Unit ID: F001
IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

   b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The permittee shall submit these deviation reports to the Toledo Division of Environmental Services quarterly. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   no visible particulate emissions from paved roadways and parking areas except for one minute during any 60-minute period

   Applicable Compliance Method:
Compliance with the emission limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

b. Emission Limitation:

24.88 tons/yr PE and 4.85 tons/yr PM$_{10}$ from paved roadways and parking areas

Applicable Compliance Method:

If required, compliance shall be determined using Equation 2 of AP-42 Section 13.2.1 dated 12/2003.

$$E = [k(sL/2)^{0.65} (W/3)^{1.5} - C(1-P/4N)(VMT)/2000$$

Where:

- $E$ = emissions, tons/yr
- $k$ = 0.082 pound per vehicle mile traveled for (lb/VMT) PE
- $k$ = 0.016 lb/VMT for PM$_{10}$
- $sL$ = 9.7 g/m$^2$
- $W$ = average vehicle weight, tons
- $C$ = 0.00047 lb/VMT for PE
- $C$ = 0.00036 lb/VMT for PM$_{10}$
- $P$ = 130
- $N$ = 365 days
- $VMT$ = vehicle miles traveled per year

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F001 - Roadways and Parking Areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F002 - Coke storage piles, including load-in and load-out operations with partial enclosure</td>
<td>OAC rule 3745-31-05(A)(3)</td>
<td>0.3 ton per year of particulate emissions (PE), and see Sections A.2.a. and b.</td>
</tr>
<tr>
<td></td>
<td>OAC rules 3745-31-10 thru 20</td>
<td>See Section A.2.c.</td>
</tr>
<tr>
<td></td>
<td>40 CFR Part 60, Subpart Y</td>
<td>See Section A.2.d.</td>
</tr>
<tr>
<td>load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)</td>
<td>OAC rule 3745-31-05(A)(3)</td>
<td>No visible emissions except for one minute in any hour, and see Sections A.1.2.e., A.1.2.f., and A.1.2.i.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(B)(6)</td>
<td>Less stringent than the above-mentioned control measure requirements.</td>
</tr>
<tr>
<td>wind erosion from storage piles (see Section A.2.a for identification of storage piles)</td>
<td>OAC rule 3745-31-05(A)(3)</td>
<td>No visible emissions except for three minutes in any hour, and see Sections A.1.2.g. through A.1.2.i.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-08(B), (B)(6)</td>
<td>Less stringent than the above-mentioned control measure requirements.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a All coke storage piles at this facility are covered by this permit and subject to the above-mentioned requirements.
2.b The annual emission limitation was established for PTI purposes to reflect the potential to emit for the storage piles. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

2.c The combined emissions from all sources comprising this emissions unit shall not exceed 0.19 ton of PM$_{10}$ as a rolling, 12-month summation.

2.d The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.e The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to installing a partial enclosure and watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.f The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.g The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to watering and applying chemical dust suppressant to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.h The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

2.i Implementation of the above-mentioned control measures in accordance with the terms
II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

   storage pile identification | minimum load-in inspection frequency
   Coke piles                 | Daily

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

   storage pile identification | minimum load-out inspection frequency
   Coke piles                 | Daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

   storage pile identification | minimum wind erosion inspection frequency
   Coke piles                 | Daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
FDS
PTI
Issued: To be entered upon final issuance

Emissions Unit ID: F002
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

7. The permittee shall maintain records of the following information:
   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
   c. the dates the control measures were implemented; and
   d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services in accordance with the reporting requirements of the General Terms and Conditions of this permit. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
   a. Emission Limitation:
0.19 ton of PM$_{10}$ as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. coke pile load-in

Multiply the maximum tons of coke handled per year (1,440,000 made enforceable by B901) times the 0.00034 pound/ton PM$_{10}$ emission factor times 0.15 (assuming an 85% control efficiency for partial enclosure and wetting) and divide by 2,000 pounds per ton = 0.037 ton/yr. The PM$_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

ii. coke pile wind erosion

Multiply the maximum tons of coke stored on the ground (15,000) times the 0.03430 pound/ton particulate emission factor times 0.30 (assuming a 70% control efficiency for the wetting) and divide by 2,000 pounds per ton = 0.077 ton/yr. The PM$_{10}$ emission factor was calculated in accordance with Kentucky's Department of Environmental Protection Study and the control efficiency was obtained from RACM, Table 2.2.1-2, dated 1/80.

iii. coke pile load-out

Multiply the maximum tons of coke handled in each of the operations below (1,440,000 made enforceable by B901) times one minus the PM$_{10}$ emission factor in pounds/ton times the listed control efficiency, and divide by 2,000 pounds per ton. The PM$_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency (85%) was supplied by the permittee. For the following:

- coke pile to front end loader with partial enclosure and wetting:
  \[ 1,440,000 \times 0.00034 \times (1 - 0.85) / 2000 = 0.037 \]

- front end loader to conveyor with partial enclosure and wetting:
  \[ 1,440,000 \times 0.00034 \times (1 - 0.85) / 2000 = 0.037 \]

b. Emission Limitation:

0.3 ton per year of PE
Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. coke pile load-in

Multiply the maximum tons of coke handled per year (1,440,000 made enforceable by B901) times the 0.00073 pound/ton particulate emission factor times 0.15 assuming a 85% control efficiency for partial enclosure and wetting and divide by 2,000 pounds per ton = 0.079 ton/yr. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

ii. coke pile wind erosion

Multiply the maximum tons of coke stored on the ground (15,000) times the 0.03430 pound/ton particulate emission factor times 0.30 assuming a 70% control efficiency for the wetting and divide by 2,000 pounds per ton. The particulate emission factor was calculated in accordance with Kentucky's Department of Environmental Protection Study and the control efficiency was obtained from RACM, Table 2.2.1-2, dated 1/80.

iii. coke pile load-out

Multiply the maximum tons of coke handled in each of the operations below (1,440,000 made enforceable by B901) times the emission factor in pounds/ton times one minus the listed control efficiency, and divide by 2,000 pounds per ton. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was obtained from RACM, Table 2.2.1-2, dated 10/80. For the following:

- coke pile to front end loader with partial enclosure and wetting:
  \[ 1,440,000 \times 0.00073 \times (1-0.85) / 2000 = 0.079 \]
- front end loader to conveyor with partial enclosure and wetting:
  \[ 1,440,000 \times 0.00073 \times (1-0.85) / 2000 = 0.079 \]

c. Emission Limitation:

There shall be no visible emissions except for one minute in any hour.
FDS Coke Plant, L.L.C.
PTI #
Issue

Emissions Unit ID: F002
FDS Coke Plant, L.L.C. Facility ID: 0448020084
PTI Application: 04-01360
Issued: To be entered upon final issuance

Emissions Unit ID: F002

2. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

   i. opacity: Method 22 of 40 CFR part 60, appendix A:

   The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall
submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F002 - Coke storage piles, including loading and loadout operations with partial enclosure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
FDS Coke Plant, L.L.C.

PTI #

Issue

Emissions Unit ID: F002
A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>inside the building</th>
</tr>
</thead>
<tbody>
<tr>
<td>F003 - Coal unloading and handling: railcar dumper with below grade hopper and vibratory feeder to dumper collecting conveyor, controlled by full enclosure and maintaining moisture levels</td>
<td>coal conveying operations controlled by enclosure and maintaining adequate moisture levels</td>
</tr>
<tr>
<td>Roller screen crusher with full enclosure and below ground level</td>
<td>Coal storage piles, including load-in and load-out with full enclosure and emissions controlled by a cyclone vented inside the building</td>
</tr>
<tr>
<td></td>
<td>Coal crushing and screening operation with transfer controlled by full enclosure with a cyclone vented</td>
</tr>
<tr>
<td></td>
<td>Coal stamping with full enclosure vented</td>
</tr>
</tbody>
</table>
Coal blending unit with full enclosure and cyclone vented inside to a baghouse

<table>
<thead>
<tr>
<th>Applicable Rules/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
<tr>
<td>OAC rule 3745-17-07 (B)(1)</td>
</tr>
<tr>
<td>OAC rule 3745-17-08 (B)</td>
</tr>
<tr>
<td>OAC rule 3745-31-10 thru 20</td>
</tr>
<tr>
<td>OAC rule 3745-17-07 (B)(1)</td>
</tr>
<tr>
<td>40 CFR Part 60, Subpart Y</td>
</tr>
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<tr>
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</tr>
<tr>
<td>40 CFR Part 60, Subpart Y</td>
</tr>
<tr>
<td>OAC rule 3745-17-08 (B)</td>
</tr>
<tr>
<td>Emissions Unit ID: F003</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>OAC rule 3745-31-10 thru 20</td>
</tr>
<tr>
<td>40 CFR Part 60, Subpart Y</td>
</tr>
<tr>
<td>OAC rule 3745-31-05(A)(3)</td>
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<tr>
<td>OAC rule 3745-17-08 (B)</td>
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<tr>
<td>OAC rule 3745-17-11</td>
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<tr>
<td>Emissions Unit ID: F003</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>less than 10 micron (PM$\text{_{10}}$) per hour, and see section A.I.2.a, 2.b. and 2.d.</td>
</tr>
<tr>
<td>0.014 pound per hour PM$\text{_{10}}$; and See section A.I.2.c.</td>
</tr>
<tr>
<td>0.05 pound per hour of particulate emissions (PE) per hour, 0.05 ton of PE per year, 0.02 pound per hour of particulate matter less than 10 micron (PM$\text{_{10}}$) per hour, and see section A.I.2.b, 2.d, 2.e., and 2.g</td>
</tr>
<tr>
<td>0.3 ton of PM$\text{_{10}}$ as a rolling, 12-month summation. See section A.I.2.c.</td>
</tr>
<tr>
<td>0.45 pound per hour of particulate emissions (PE) per hour, 0.46 ton of PE per year, 0.14 pound per hour of particulate matter less than 10 micron (PM$\text{_{10}}$) per hour, and see section A.I.2.b, 2.d., 2.e., and 2.g</td>
</tr>
<tr>
<td>0.026 ton of PM$\text{_{10}}$ as a rolling, 12-month summation See section A.I.2.c</td>
</tr>
<tr>
<td>0.02 pound per hour of particulate emissions (PE) per hour, 0.02 ton of PE per year, 0.01 pound per hour of particulate matter less than 10 micron (PM$\text{_{10}}$) per hour, and see section A.I.2.b., 2.d, 2.e., and 2.f.</td>
</tr>
<tr>
<td>0.15 ton of PM$\text{_{10}}$ as a rolling, 12-month summation. See section A.I.2.c.</td>
</tr>
<tr>
<td>0.024 pound per hour and 0.035 ton per year PE as 0.01 ton of PM$\text{_{10}}$ as a rolling, 12-month summation. See section A.I.2.c.</td>
</tr>
</tbody>
</table>
2. **Additional Terms and Conditions**

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20 and OAC rule 3745-17-08(b).

2.c The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.d i. The permittee shall employ best available control measures for all coal handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

   ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse or cyclone).

2.f Visible emissions particulate shall not exceed 5 percent opacity, as a 6-minute average, from any dust collector (e.g., baghouse) stack serving this emissions unit.
The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

<table>
<thead>
<tr>
<th>Company ID/Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 transfer points fully enclosed and inside</td>
</tr>
<tr>
<td>2 fully enclosed storage hoppers</td>
</tr>
<tr>
<td>Coal crushing, sizing, and blending equipment</td>
</tr>
<tr>
<td>All coal storage piles, including load-in and load-out</td>
</tr>
<tr>
<td>Coal stamping unit</td>
</tr>
<tr>
<td>Coal blending unit</td>
</tr>
</tbody>
</table>

II. Operational Restrictions

1. The permittee shall operate the cyclone whenever the coal crushing operation is in use.

2. The permittee shall operate the baghouse whenever the coal stamping operation is in use.

3. The permittee shall operate the cyclone whenever the coal blending unit is in use.

4. The permittee shall operate the cyclone during storage pile load-in and load-out operations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the cyclone was not in service when the coal crushing operation was in use.

2. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the coal stamping operation was in use.

3. The permittee shall maintain daily records that document any time periods when the cyclone was not in service when the coal blending unit was in use.

4. The permittee shall maintain daily records that document any time periods when the cyclone was not in service during coal storage pile load-in and load-out.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in
the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving the coal stamping unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the cyclone was not in service when the coal crushing operation was in use. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

2. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the coal stamping operation was in use. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

3. The permittee shall submit written quarterly deviation reports to the Toledo Division of
Environmental Services which identify all days during which the cyclone was not in service when coal blending unit was in use. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify all days during which the cyclone was not in service during storage pile coal load-in and load-out. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

5. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible fugitive particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

6. The permittee shall submit quarterly written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving the coal stamping unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the railcar dumper hopper, vibratory feeder and dumper collecting conveyor in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.28 pound per hour of particulate matter (PE).

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per hour (2000), times a particulate emissions factor calculated from
AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) times (1 - % control efficiency). The control efficiencies were supplied by the applicant as follows: fully enclosed 85%, fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

\[2000 \times (0.00056 \times (1-0.85) + 0.00056 \times 2 \times (1-0.95)) = 0.28 \text{ lb/hr}\]

b. Emission Limitation:

0.62 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) times (1 - % control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed 85%, fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

\[8,760,000 \times (0.00056 \times (1-0.85) + 0.00056 \times 2 \times (1-0.95)) / (2000 \text{ lb/ton}) = 0.62 \text{ ton/yr}\]

c. Emission Limitation:

0.14 pound per hour of particulate matter less than 10 micron (PM$_{10}$)

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per hour (2000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) times (1 - % control efficiency). The control efficiencies were supplied by the applicant as follows: fully enclosed 85%, fully enclosed and inside 95% for:

1 fully enclosed transfer point
2 fully enclosed and inside transfer points

\[2000 \times (0.00027 \times (1-0.85) + 0.00027 \times 2 \times (1-0.95)) = 0.14 \text{ lb/hr}\]
FDS
PTI
Issued: To be entered upon final issuance

Emissions Unit ID: F003
2. Compliance with the emission limitation(s) for the coal conveying operations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

    0.5 pound per hour of particulate matter (PE).

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) times (1- % control efficiency). The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95% for:

4 fully enclosed and inside transfer points at 2,000 lbs/hr
3 fully enclosed and inside transfer points at 1,000 lbs/hr
6 fully enclosed and inside transfer points at 500 lbs/hr
2 fully enclosed hoppers with a 4,000 ton capacity

\[ 0.00056(1-0.95)(4*2,000 + 3*1,000 + 6*500) + 0.00056(1-0.99)(2*4,000) = 0.4 \text{ lb/hr} \]
b. Emission Limitation:

0.6 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period, times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) times (1-% control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95%; fully enclosed hopper 99% for:

13 fully enclosed and inside transfer points at 2,058,600 tons/yr
2 fully enclosed hoppers with a 4,000 ton capacity

\[
\frac{0.00056(1-0.95)(13*2,058,600)+0.00056(1-0.99)(2*4,000)(8,760)}{2000} = 0.6 \text{ ton/yr}
\]

c. Emission Limitation:

0.2 pound per hour of particulate matter less than 10 micron (PM\(_{10}\)).

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) times (1-% control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95%; fully enclosed hopper 99% for:

4 fully enclosed and inside transfer points at 2,000 lbs/hr
3 fully enclosed and inside transfer points at 1,000 lbs/hr
6 fully enclosed and inside transfer points at 500 lbs/hr
2 fully enclosed hoppers with a 4,000 ton capacity

\[
0.00027(1-0.95)(4*2,000 + 3*1,000 + 6*500)+0.00027(1-0.99)(2*4,000) = 0.2 \text{ lb/hr}
\]

d. Emission Limitation:
0.3 ton of PM$_{10}$ as a rolling, 12-month summation.

**Applicable Compliance Method:**

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (2,058,600 enforceable by B901), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) times (1-% control efficiency), and divide by 2,000 pounds per ton. The control efficiencies were supplied by the applicant as follows: fully enclosed and inside 95%; fully enclosed hopper 99% for:

13 fully enclosed and inside transfer points at 2,058,600 tons/yr
2 fully enclosed hoppers with a 4,000 ton capacity

\[
\frac{[0.00027(1-0.95)(13*2,058,600) +0.00027(1-0.99)(2*4,000)(8,760)]}{2000} = 0.3 \text{ ton/yr}
\]

3. Compliance with the emission limitation(s) for the coal crushing and screening or transfer operations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. **Emission Limitation:**

0.45 pound per hour of particulate emissions (PE) per hour.

**Applicable Compliance Method:**

Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (1,000 tons/hr) by the permittee-supplied coal crushing particulate emission factor (0.020 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal crusher (0.40 lb/hr).

Multiply the maximum processing rate (1,000 tons/hr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) multiplied by 4 transfer points, and multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from coal transfer (0.05 lb/hr).

b. **Emission Limitation:**

0.46 ton of PE per year.
Applicable Compliance Method:

Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (2,058,600 tons/yr) by the permittee-supplied coal crushing particulate emission factor (0.020 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divide by 2000 lbs/ton to determine the emissions from the coal crusher (0.41 ton/yr).

Multiply the maximum processing rate (2,058,600 tons/yr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divided by 2000 lbs/ton to determine the emissions from coal transfer (0.05 ton/yr).

c. Emission Limitation:

0.14 pound of particulate matter less than 10 micron (PM_{10}) per hour

Applicable Compliance Method:

Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (1,000 tons/hr) by the permittee-supplied coal crushing particulate emission factor (0.006 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal crusher (0.12 lb/hr).

Multiply the maximum processing rate (1,000 tons/hr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) multiplied by 4 transfer points, and multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from coal transfer (0.02 lb/hr).

d. Emission Limitation:

0.15 ton of PM_{10} as a rolling, 12-month summation.

Applicable Compliance Method:
Compliance shall be demonstrated by adding the emissions from the coal crusher and the emissions from the coal transfer. Multiply the maximum processing rate (2,058,600 tons/yr) by the permittee-supplied coal crushing particulate emission factor (0.006 lb/ton) and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divide by 2000 lbs/ton to determine the emissions from the coal crusher (0.12 ton/yr).

Multiply the maximum processing rate (2,058,600 tons/yr) by the particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors and divided by 2000 lbs/ton to determine the emissions from coal transfer (0.02 ton/yr).

4. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:

10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

5 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

no visible emissions of fugitive dust
Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

5. Compliance with the emission limitation(s) for the coal storage piles, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.024 pound per hour PE

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in

Multiply the maximum tons of coal handled per hour (2,500) by the 0.00056 pound/ton PE emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) = 0.014 lb/hr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

ii. coal pile load-out

Multiply the maximum tons of coal handled per year (550) times the 0.00056 pound/ton emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) times 2 transfer points= 0.006 lb/hr. The particulate emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

b. Emission Limitation:

0.014 pound per hour PM$_{10}$ emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:
c. Emission Limitation:

0.03 ton of PE as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in

Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00056 pound/ton PE emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) and divide by 2,000 pounds per ton = 0.0058 ton/yr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

ii. coal pile load-out

Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00056 pound/ton emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors), times 2 transfer points and divide by 2,000 pounds per ton = 0.012 ton/yr. The particulate
d. Emission Limitation:

0.02 ton of PM$_{10}$ as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of the following:

i. coal pile load-in

Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00027 pound/ton PM$_{10}$ emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) and divide by 2,000 pounds per ton = 0.003 ton/yr. The particulate emission factor was calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

ii. coal pile load-out

Multiply the maximum tons of coal handled per year (2,058,600 made enforceable by B901) times the 0.00027 pound/ton PM$_{10}$ emission factor times 0.01 (assuming a 99% control efficiency for total enclosure with cyclone vented indoors) times 2 transfer points, and divide by 2,000 pounds per ton = 0.006 ton/yr. The PM$_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) and Table 13.2.4-1, dated 1/95. The control efficiency was supplied by the permittee.

6. Compliance with the emission limitation(s) for the roller screen crusher operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.2 pound per hour of particulate matter (PE).

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum
equipment capacity (2,000 tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation), multiplied by 3 transfer points, and multiplied by (1-% control efficiency). The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

\[0.00056(1-0.95)(3)(2,000) = 0.2 \text{ lb/hr}\]
b. Emission Limitation:

0.4 ton of PE per year

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation) multiplied by 3 transfer points, multiplied by (1- % control efficiency), and divide by 2,000 pounds per ton. The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

\[
0.00056(1-0.95)(3)(8,760,000)/ 2000 = 0.4 \text{ ton/yr}
\]

c. Emission Limitation:

0.08 pound per hour of particulate matter less than 10 micron (PM$_{10}$),

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (2,000 tons of coal per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation) multiplied by 3 transfer points, and multiplied by (1- % control efficiency). The control efficiency supplied by the applicant is 95% for being fully enclosed and inside:

\[
0.00027(1-0.95)(3)(2,000) = 0.08 \text{ lb/hr}
\]

d. Emission Limitation:

0.02 ton of PM$_{10}$ as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum tons of coal unloaded per rolling 12-month period (8,760,000), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated
1/95 (0.00027 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1 - % control efficiency), and divide by 2,000 pounds per ton. The control efficiency supplied by the applicant is 95% for being fully enclosed and inside.

$$0.00027(1-0.95)(3)(8,760,000) / 2000 = 0.2 \text{ ton/yr}$$

7. Compliance with the emission limitation(s) for the coal stamping unit in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.02 pound per hour of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation), multiplied by 3 transfer points and multiplying by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse to determine the emissions from the coal stamping unit (0.4 lb/hr).

If required, the permittee shall demonstrate compliance based upon emission testing performed in accordance with Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A or an acceptable alternative test method approved in writing by the director of the Ohio EPA.

b. Emission Limitation:

0.02 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.02 ton/yr).
c. Emission Limitation:

0.01 pound of particulate matter less than 10 micron (PM$_{10}$) per hour

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the PM$_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation), multiplied by 3 transfer points and multiplying by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse to determine the emissions from the coal stamping unit (0.01 lb/hr).

If required, the permittee shall demonstrate compliance through the emissions testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:

0.01 ton of PM$_{10}$ as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the PM$_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation), multiplied by 3 transfer points, multiplied by (1-0.99) to account for the permittee estimated overall control efficiency of a baghouse, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.01 ton/yr).

8. Compliance with the emission limitation(s) for the coal blending unit in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.05 pound per hour of particulate emissions (PE) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the particulate emissions factor calculated from AP-42 5th Edition, Section
13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation), multiplied by 4 transfer points and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal blending unit (0.05 lb/hr).

b. Emission Limitation:

0.05 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00056 pound/ton for each operation), multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors, and dividing by 2000 lb/ton to determine the emissions from the coal stamping unit (0.05 ton/yr).

c. Emission Limitation:

0.02 pound of particulate matter less than 10 micron ($PM_{10}$) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (1,000 tons/hr) by the $PM_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation), multiplied by 4 transfer points and multiplying by (1-0.98) to account for the permittee estimated control efficiency of a cyclone vented indoors to determine the emissions from the coal stamping unit (0.02 lb/hr).

d. Emission Limitation:

0.01 ton of $PM_{10}$ as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum processing rate (2,058,600 tons/yr) by the $PM_{10}$ emission factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00027 pound/ton for each operation), multiplied by 4 transfer points, multiplied by (1-0.98) to account for the permittee estimated control efficiency of a
cyclone vented indoors, and dividing by 2000 lb/ton to determine the emissions from the coal blending unit (0.02 ton/yr).

9. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. opacity: Method 9 of 40 CFR part 60, appendix A:

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report
on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.
FDS
PTI

Issued: To be entered upon final issuance

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F003 - Coal unloading and handling - railcar dumper, hopper below grade, vibratory feeder, conveyers, crushers, vibratory feeders, ground loading hoppers, weight feeders, blending bins</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None
FDS
PTI

Issued: To be entered upon final issuance

VI. Miscellaneous Requirements

None
Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Load-out from Nut Coke &amp; Breeze Hoppers</th>
<th>Applicable Rules/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>F004 - Coke handling - Coke Sizing Tower (Fully Enclosing the crushing and screening operations) controlled with a cyclone vented indoors</td>
<td></td>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OAC rule 3745-17-07 (B)(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OAC rule 3745-17-08 (B)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OAC rule 3745-31-10 thru 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 CFR Part 60, Subpart Y</td>
</tr>
<tr>
<td>Coke and Breeze Processing - Coke Hopper, Vibratory Feeder, Conveyors, Storage Hoppers, and Load-in &amp;</td>
<td></td>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OAC rule 3745-17-07 (B)(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OAC rule 3745-17-08 (B)</td>
</tr>
</tbody>
</table>
2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

<table>
<thead>
<tr>
<th>Company ID</th>
<th>Equipment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eight (8) partially enclosed transfer points with wetting or chute</td>
</tr>
</tbody>
</table>
Eight (8) fully enclosed and inside transfer points
Three (3) fully enclosed storage hoppers

2.b i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.c No visible emissions of fugitive dust from any full enclosure serving the processes comprising this emissions unit.

2.d The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20 and OAC rule 3745-17-08(B).

2.e The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.f The visible emissions of fugitive dust from any source that is not fully enclosed (as described above) shall not exceed 10% opacity as a 3-minute average.
II. Operational Restrictions

1. All of the equipment comprising the Coke Sizing Tower shall be fully enclosed and all emissions shall be controlled with a cyclone that exhausts to the interior of the sizing tower.

2. The permittee shall operate the Coke Sizing Tower cyclone whenever the respective emission unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the Coke Sizing Tower cyclone was not in service when the respective emissions unit was in operation.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which a baghouse was not in service when the respective emissions unit was in operation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
2. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible fugitive particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter. These reports are due by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

5% opacity, as a six-minute average

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.09 lbs/hr of PM$_{10}$

Applicable Compliance Method:

The total hourly PM$_{10}$ emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (500 tons/hr) by the coke crushing emission factor supplied by the permittee (0.006 lb PM$_{10}$/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (0.06 lb/hr). Multiply the maximum coke processing rate (500 tons/hr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 1/1995 (0.00034 lb PM$_{10}$/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (0.03 lb/hr). Add the emissions from coke crushing (0.06 lb/hr) to the emissions from coke screening and handling (0.03 lb/hr) to obtain the total emissions (0.09 lbs/hr).

c. Emission Limitation:

0.13 ton of PM$_{10}$ per year
Applicable Compliance Method:

The total annual PM$_{10}$ emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (1,440,000 tons/yr) by the coke crushing emission factor supplied by the permittee (0.006 lb PM$_{10}$/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (172.8 lbs/yr). Multiply the maximum coke processing rate (1,440,000 tons/yr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 1/1995 (0.00034 lb PM$_{10}$/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (88.1 lbs/yr). Add the emissions from coke crushing (172.8 lbs/yr) to the emissions from coke screening and handling (88.1 lbs/yr) and divide by 2000 lbs/ton to obtain the total emissions (0.13 ton/yr).

d. Emission Limitation:

0.27 lb/hr of PE

Applicable Compliance Method:

The total hourly particulate emissions are determined by adding the coke crushing, screening and material handling emissions. Multiply the maximum coke processing rate (500 tons/hr) by the coke crushing emission factor supplied by the permittee (0.02 lb PE/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (0.2 lb/hr). Multiply the maximum coke processing rate (500 tons/hr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 1/1995 (0.00073 lb PE/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (0.066 lb/hr). Add the emissions from coke crushing (0.2 lb/hr) to the emissions from coke screening and handling (0.066 lb/hr) to obtain the total emissions (0.27 lbs/hr).

e. Emission Limitation:

0.48 ton of PE per year.

Applicable Compliance Method:

The total annual particulate emissions are determined by adding the coke crushing,
screening and material handling emissions. Multiply the maximum coke processing rate (1,440,000 tons/yr) by the coke crushing emission factor supplied by the permittee (0.02 lb PE/ton) multiplied by (1-0.98) to account for the estimated overall control efficiency to determine the emissions from coke crushing (576 lbs/yr). Multiply the maximum coke processing rate (1,440,000 tons/yr) by the number of screening and transfer points (9), and multiply by the coke handling emission factor from AP-42 Section 13.2.4-1 dated 1/1995 (0.00073 lb PE/ton), and multiply by (1-0.98) to account for the estimated overall control efficiency of 98% to obtain the emissions from coke screening and handling (189.2 lbs/yr). Add the emissions from coke crushing (576 lbs/yr) to the emissions from coke screening and handling (189.2 lbs/yr) and divide by 2000 lbs/ton to obtain the total emissions (0.48 ton/yr).

f. Emission Limitation:

10% opacity, as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(3).

g. Emission Limitation:

0.07 lb/hr of PM$_{10}$

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coke per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00034 pound/ton for each operation) times (1- % control efficiency). The control efficiencies are based on the applicant's estimate as follows: partial enclosure and adequate moisture or chutes - 85% and95% for FE and indoors (TDOES is accepting this control estimate based upon compliance with 10 % opacity) for:

Four (4) partially enclosed transfer points with wetting or chute at 210 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 30 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 15 tons/hr
Five (5) fully enclosed and inside transfer points at 210 tons/hr
One (1) fully enclosed and inside transfer point at 500 tons/hr
One (1) fully enclosed and inside transfer point at 30 tons/hr
One (1) fully enclosed and inside transfer point at 15 tons/hr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a
This results in the following calculation: 

\[
\frac{\left(2 \times 1000\right) + \left(2 \times 1000\right)}{2000} = 0.1 \text{ ton/yr}
\]

\(i.\) Emission Limitation:

0.2 lb/hr of PE

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the annual processing rate at each transfer point, times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00034 pound/ton for each operation) times (1- % control efficiency) divided by 2000 pounds per ton. The control efficiencies are based on the applicant's estimate as follows: partial enclosure and adequate moisture - 85% and 95% for FE and indoors (TDOES is accepting this control estimate based upon no visible emissions) for:

Two (2) partially enclosed transfer points with wetting or chute at 1,039,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 57,600 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 43,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 297,840 tons/yr
One (1) fully enclosed and inside transfer points at 61,320 tons/yr
One (1) fully enclosed and inside transfer points at 43,800 tons/yr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

The above hourly capacities are based an annual average

This results in the following calculation:

\[
\frac{\left(1039200 \times 0.85 \times 0.00034\right) + \left(57600 \times 0.95 \times 0.00034\right) + \left(43200 \times 0.99 \times 0.00034\right)}{2000} = 0.1 \text{ ton/yr}
\]
FDS Coke Plant, L.L.C.

PTI

Issue

Emissions Unit ID: F004
Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the maximum equipment capacity (tons of coke per hour), times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00073 pound/ton for each operation) times (1- % control efficiency). The control efficiencies were obtained from the company as follows: partial enclosure with adequate moisture or chute - 85%, and 95% for full enclosure and inside (TDOES is accepting this control estimate based upon no visible emissions) for:

Four (4) partially enclosed transfer points with wetting or chute at 210 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 30 tons/hr
Two (2) partially enclosed transfer points with wetting or chute at 15 tons/hr
Five (5) fully enclosed and inside transfer points at 210 tons/hr
One (1) fully enclosed and inside transfer point at 500 tons/hr
One (1) fully enclosed and inside transfer point at 30 tons/hr
One (1) fully enclosed and inside transfer point at 15 tons/hr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

This results in the following calculation: 
\[\frac{\left(\left(4 \times 210\right) + \left(2 \times 30\right) + \left(2 \times 15\right)\right) \times \left(1-0.85\right) \times 0.00073 + \left(\left(5 \times 210\right) + \left(1 \times 500\right) + \left(1 \times 30\right) + \left(1 \times 15\right)\right) \times \left(1-0.95\right) \times \left(0.00073\right) + \left(1 \times 2000\right) + \left(2 \times 1000\right)\} \times \left(1-0.99\right) \times 0.00073/8760}{8760}\] = 0.2 lb/hr

j. Emission Limitation:

0.24 ton of PE per year.

Applicable Compliance Method:

Compliance shall be demonstrated by the following calculation: multiply the annual processing rate at each transfer point, times a particulate emissions factor calculated from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (0.00073 pound/ton for each operation) times (1- % control efficiency) divided by 2000 pounds per ton. The control efficiencies were obtained from the company as follows: partial enclosure with adequate moisture or chute - 85%, and 95% for full enclosure and inside (TDOES is accepting this control estimate based upon no visible emissions) for:

Two (2) partially enclosed transfer points with wetting or chute at 1,039,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 57,600 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 43,200 tons/yr
Two (2) partially enclosed transfer points with wetting or chute at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 718,320 tons/yr
Two (2) fully enclosed and inside transfer points at 297,840 tons/yr
One (1) fully enclosed and inside transfer points at 61,320 tons/yr
One (1) fully enclosed and inside transfer points at 43,800 tons/yr
Three (3) fully enclosed storage hoppers, (2) with a 1,000 ton capacity and (1) with a 2,000 ton capacity

The above hourly capacities are based an annual average

This results in the following calculation: 
\[
\frac{[(2 \times 1,039,200) + (2 \times 57,600) + (2 \times 43,200) + (2 \times 718,320) \times (1-0.85) \times 0.00073) + ((2 \times 718,320) + (2 \times 297,840) + (1 \times 61,320) + (1 \times 43,800)) \times (1-0.95) \times 0.00073] + ((1 \times 2000) + (2 \times 1000)) \times (1-0.99) \times 0.00073]}{2000} = 0.24 \text{ ton/yr}
\]

k. Emission Limitation:

no visible emissions of fugitive dust

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

2. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. opacity: Method 9 of 40 CFR part 60, appendix A:
iii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected
facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

e. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None
FDS Coke Plant, L.L.C. Facility ID: 0448020084
PTI Application: 04-01360
Issued: To be entered upon final issuance

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>F004 - Coke handling - Coke Sizing Tower (Fully Enclosing the crushing and screening operations) controlled with a cyclone vented indoors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements
Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

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<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P001 - Quench Tower 1 for A Battery - quench tower controlled by a water spray tower with internal baffles</td>
<td>OAC rule 3745-17-07(A)(1)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(B)(1)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-08(B)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-11(A)(2)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-10 through 20</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-05(C)</td>
</tr>
<tr>
<td></td>
<td>40 CFR Part 63, Subpart CCCCC</td>
</tr>
<tr>
<td></td>
<td>40 CFR Part 63, Subpart A</td>
</tr>
</tbody>
</table>
Applicable Emissions Limitations/Control Measures

0.0020 lb/hr Lead
0.2 lb/hr HAPs
See section A.1.2.a.

151.38 lbs/hr particulate emissions (PE)
16.82 lbs/hr PM
See section A.1.2.b thru e.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20 and OAC rule 3745-17-11.

0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emission units P001 and P002.

0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emission units P001 and P002.
See section A.1.2.f.

Visible particulate emissions from the quench tower shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

See section A.1.2.g.

See section A.1.2.g.

463.19 TPY PE as a rolling, 12-month summation, combined limit for emission units P001 and P002.

54.5 TPY PM$_{10}$ as a rolling, 12-month summation, combined limit for emission units P001 and P002.
See sections A.1.2.h. and A.1.2.i. below.
See section A.1.2.i.
See section A.1.2.j.
2. Additional Terms and Conditions

2.a These hourly emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per hour (336.4, see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.b The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.c There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collection device (i.e., quench tower or baghouse).

2.d Visible emissions particulate shall not exceed 20% percent opacity, as a 6-minute average, from any dust collector (i.e., quench tower) stack serving this emissions unit.
2.e  
   i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

   ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.f  These annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.g  The emission limitation specified by this applicable regulation is less stringent than the emission limitation established by OAC rule 3745-31-05.

2.h  These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Compliance with OAC rules 3745-31-05, 3745-31-15 and 40 CFR Part 52.21 shall also be demonstrated by a TDS concentration limit of 1100 mg/L or less and the operation and maintenance of an interior baffle system with coverage of not less than ninety-five per cent of the cross-sectional area of the tower.

2.i  [40 CFR 63.7295 (a)(1)(i) or (ii)]
   The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L).

2.j  [40 CFR 63.7350]
   Table 1 of 40 CFR Part 63, Subpart CCCCC, as stated in Part II of this permit, section A.65., shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply.

II. Operational Restrictions

1. [40 CFR 63.7295 (a)(2)]
   The permittee shall use acceptable makeup water for quenching as defined in 40 CFR 63.7352 in
2. The permittee shall meet the requirements for quenching as stated in 40 CFR Part 63.7295(b) in Part II of this permit, section A.39, in regards to equipping the quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky, daily washing of the baffles, inspecting the quench tower monthly and repairing missing or damaged baffles.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the general requirements for complying with 40 CFR Part 63.7310, of Subpart CCCCC, stated in Part II of this permit, section A.42.

2. The permittee shall demonstrate continuous compliance with the TDS limit for quenching, 1100 mg/L or less, in 40 CFR Part 63.7333(f), of Subpart CCCCC, stated in Part II of this permit, section A.55.

3. The permittee shall demonstrate continuous compliance with the work practice standards for quenching in 40 CFR Part 63.7334(e), of Subpart CCCCC, stated in Part II of this permit, section A.56.

4. The permittee shall demonstrate continuous compliance for deviations and startup, shutdowns and malfunctions as required in 40 CFR Part 63.7336, of Subpart CCCCC, stated in Part II of this permit, section A.58.

5. The permittee shall keep the required records for quenching as stated in 40 CFR Part 63.7342, of Subpart CCCCC, stated in Part II of this permit, section A.61.

6. The permittee shall retain the records for quenching as stated in 40 CFR Part 63.7343, of Subpart CCCCC, stated in Part II of this permit, section A.62.

7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.
The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identifies each instance the facility had deviations or did not operate according to the startup, shutdown and malfunction plan as required in 40 CFR Part 63.7336, of Subpart CCCCC, stated in Part II of this permit, section A.58.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.

3. The permittee shall submit the semi-annual compliance reports for the deviations in A.IV.1. and 2. as required in 40 CFR Part 63.7341(c)(1), (2),(3), (4) and (7) and (d), of Subpart CCCCC, stated in Part II of this permit, section A.60.

4. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit notification reports, if required, in accordance with 40 CFR Part 63.7340, of Subpart CCCCC, stated in Part II of this permit, section A.59.

6. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements
1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.0020 lb/hr Lead

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the lead emission factor in pounds/ton coal charged (5.74x10^{-6} at 1100mg TDS/L), from Jewell test data, January 1999, times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content maintained is at less than or equal to 1100 mg/L.

   b. Emission Limitation:

      0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emissions units P001 and P002

      Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the lead emission factor, in pounds/ton coal charged (5.74x10^{-6} at 1100mg TDS/L), from Jewell test data, January 1999, times the wet tons of coal charged per rolling 12-month period (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

   c. Emission Limitation:

      0.2 lb/hr HAPs

      Applicable Compliance Method:

      Compliance is demonstrated by multiplying the HAP emission factor, in pounds/ton coal charged, (0.00051) lb HAPs per ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). Compliance is assured by the monitoring of the analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods to ensure the TDS content is less than or equal to 1100 mg/L.
FDS
PTI

Issued: To be entered upon final issuance

Emissions Unit ID: P001
d. Emission Limitation:

0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds/ton coal charged, (0.00051 lb HAPs/ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the wet tons of coal charged per rolling 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton.

Compliance is assured by the monitoring of the analysis of the quench water for TDS in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

e. Emission Limitation:

151.38 lbs/hr PE

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds PE per ton times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

\[ y = 0.000115x + 0.323 \]

where:
\[ y = \text{lbs PE/wet ton coal}, \text{ and} \]
\[ x = \text{total dissolved solids (TDS) concentration of quench water (mg/L)} \]

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

f. Emission Limitation:

16.82 lbs/hr PM\(_{10}\)
Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.05 lb PM\(_{10}\) per wet ton coal charged times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The PM\(_{10}\) emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is PM\(_{10}\)).

Emission Limitation:

463.19 TPY PE as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds per ton times the maximum wet tons of coal charged per rolling, 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

\[
y = 0.000115x + 0.323
\]

where:

- \(y\) = lbs PE/wet ton coal, and
- \(x\) = total dissolved solids concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

Emission Limitation:

54.5 TPY PM\(_{10}\) as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the PM\(_{10}\) emission factor of 0.053 pounds/ton coal charged, times the tons of coal charged per year (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. The PM\(_{10}\) emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is PM\(_{10}\)).
i. Emission Limitation:

The concentration of total dissolved solids (TDS) in the water used for quenching shall not exceed 1,100 milligrams per liter (mg/L).

Applicable Compliance Method:

Compliance shall be demonstrated by using the test methods and procedures in 40 CFR Part 63.7325(a), of Subpart CCCCC, stated in Part II of this permit, section A.48, to demonstrate compliance with the TDS constituent limits for quench water.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:

Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

10% opacity as a 3-minute average for fugitive dust emissions from all equipment comprising this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

no visible emissions of fugitive dust from any egress in any building enclosing any process of this emissions unit served by a collection device (i.e., quench tower).
FDS
PTI
Issued: To be entered upon final issuance

Emissions Unit ID: P001
Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

3. The permittee shall conduct performance test and/or other initial compliance demonstrations as required in 40 CFR Part 63.7320(b) and (c), of Subpart CCCCC, stated in Part II of this permit, section A.43.

4. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources and from all stacks.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. stack opacity: Method 9 of 40 CFR part 60, appendix A:

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates.
of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES's refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

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</thead>
<tbody>
<tr>
<td>P001 - Quench Tower 1 for A Battery - quench tower, water sprays, baffles</td>
<td>Air Toxics Policy</td>
<td>See Section B.III.1.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P001) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

- Pollutant: Phosphorus
- TLV (mg/m3): 0.10
Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
### Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

#### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P002 - Quench Tower 2 for B Battery - quench tower controlled by a water spray tower with internal baffles</td>
<td>OAC rule 3745-31-05(A)(3)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(B)(1)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-08(B)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-11(A)(2)</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-10 through 20</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-05(C)</td>
</tr>
<tr>
<td></td>
<td>40 CFR Part 63, Subpart CCCCC</td>
</tr>
<tr>
<td></td>
<td>40 CFR Part 63, Subpart A</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(A)(1)</td>
</tr>
</tbody>
</table>
### Applicable Emissions Limitations/Control Measures

<table>
<thead>
<tr>
<th>Emission Limitation</th>
<th>Computed Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0020 lb/hr Lead</td>
<td>See section A.I.2.a.</td>
</tr>
<tr>
<td>0.2 lb/hr HAPs</td>
<td>See section A.I.2.a.</td>
</tr>
<tr>
<td>151.38 lbs/hr particulate emissions (PE)</td>
<td>See section A.I.2.b thru e.</td>
</tr>
<tr>
<td>16.82 lbs/hr PM$_{10}$</td>
<td>See section A.I.2.b thru e.</td>
</tr>
<tr>
<td>0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emission units P001 and P002.</td>
<td>See sections A.I.2.h. and A.I.2.i. below.</td>
</tr>
<tr>
<td>0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emission units P001 and P002.</td>
<td>See section A.I.2.i.</td>
</tr>
<tr>
<td>463.19 TPY PE as a rolling, 12-month summation, combined limit for emission units P001 and P002.</td>
<td>See section A.I.2.j.</td>
</tr>
</tbody>
</table>

See section A.I.2.g.
2. **Additional Terms and Conditions**

2.a These hourly emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per hour (336.4, see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.b The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.c There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collection device (i.e., quench tower or baghouse).

2.d Visible emissions particulate shall not exceed 20% percent opacity, as a 6-minute average, from any dust collector (i.e., quench tower) stack serving this emissions unit.

2.e i. The permittee shall employ best available control measures for all coke handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements.

2.f These annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

2.g The emission limitation specified by this applicable regulation is less stringent than the emission limitation established by OAC rule 3745-31-05.

2.h These emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit based on the maximum tons wet coal charged per year (2,058,600 see emissions unit B901). Compliance with OAC rules 3745-31-05, 3745-31-15 and 40 CFR Part 52.21 shall also be demonstrated by a TDS concentration limit of 1100 mg/L or less and the operation and maintenance of an interior baffle system with coverage of not less than ninety-five per cent of the cross-sectional area of the tower.
2.i  [40 CFR 63.7295 (a)(1)(i) or (ii)]  
The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L).

2.j  [40 CFR 63.7350]  
Table 1 of 40 CFR Part 63, Subpart CCCCC, as stated in Part II of this permit, section A.65., shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply.

II. Operational Restrictions  
1.  [40 CFR 63.7295 (a)(2)]  
The permittee shall use acceptable makeup water for quenching as defined in 40 CFR 63.7352 in Part II of this permit, section A.65.

2.  The permittee shall meet the requirements for quenching as stated in 40 CFR Part 63.7295(b) in Part II of this permit, section A.39, in regards to equipping the quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky, daily washing of the baffles, inspecting the quench tower monthly and repairing missing or damaged baffles.

III. Monitoring and/or Recordkeeping Requirements  
1.  The permittee shall comply with the general requirements for complying with 40 CFR Part 63.7310, of Subpart CCCCC, stated in Part II of this permit, section A.42.

2.  The permittee shall demonstrate continuous compliance with the TDS limit for quenching, 1100 mg/L or less, in 40 CFR Part 63.7333(f), of Subpart CCCCC, stated in Part II of this permit, section A.55.

3.  The permittee shall demonstrate continuous compliance with the work practice standards for quenching in 40 CFR Part 63.7334(e), of Subpart CCCCC, stated in Part II of this permit, section A.56.

4.  The permittee shall demonstrate continuous compliance for deviations and startup, shutdowns and malfunctions as required in 40 CFR Part 63.7336, of Subpart CCCCC, stated in Part II of this permit, section A.58.

5.  The permittee shall keep the required records for quenching as stated in 40 CFR Part 63.7342, of Subpart CCCCC, stated in Part II of this permit, section A.61.
6. The permittee shall retain the records for quenching as stated in 40 CFR Part 63.7343, of Subpart CCCCC, stated in Part II of this permit, section A.62.

7. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identifies each instance the facility had deviations or did not operate according to the startup, shutdown and malfunction plan as required in 40 CFR Part 63.7336, of Subpart CCCCC, stated in Part II of this permit, section A.58.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the concentration of TDS of the quench water did not comply with the TDS requirements specified above.

3. The permittee shall submit the semi-annual compliance reports for the deviations in A.IV.1. and 2. as required in 40 CFR Part 63.7341(c)(1), (2),(3), (4) and (7) and (d), of Subpart CCCCC, stated in Part II of this permit, section A.60.

4. The permittee shall submit quarterly written reports that:
   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and
   b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit notification reports, if required, in accordance with 40 CFR Part 63.7340, of Subpart CCCCC, stated in Part II of this permit, section A.59.

6. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which (a) identify all days during which any visible particulate emissions were observed from the equipment comprising this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
a. Emission Limitation:

0.0020 lb/hr Lead

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the lead emission factor in pounds/ton coal charged \((5.74 \times 10^{-6} \text{ at } 1100 \text{mg TDS/L})\), from Jewell test data, January 1999, times the maximum wet tons of coal charged per hour \((336.4, \text{ see emissions unit B901})\). Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content maintained is at less than or equal to 1100 mg/L.

b. Emission Limitation:

0.0059 TPY Lead as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the lead emission factor, in pounds/ton coal charged \((5.74 \times 10^{-6} \text{ at } 1100 \text{mg TDS/L})\), from Jewell test data, January 1999, times the wet tons of coal charged per rolling 12-month period \((2,058,600, \text{ see emissions unit B901})\) and dividing by 2,000 pounds/ton. Compliance is assured by the monitoring of the analysis of the quench water for TDS, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

c. Emission Limitation:

0.2 lb/hr HAPs

Applicable Compliance Method:

Compliance is demonstrated by multiplying the HAP emission factor, in pounds/ton coal charged, \((0.00051 \text{ lb HAPs per ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L})\) times the maximum wet tons of coal charged per hour \((336.4, \text{ see emissions unit B901})\). Compliance is assured by the monitoring of the analysis of the quench water for HAPs, in accordance with U.S. EPA approved test methods to ensure the TDS content is less than or equal to 1100 mg/L.
d. Emission Limitation:

0.59 TPY HAPs as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor, in pounds/ton coal charged, (0.00051 lb HAPs/ton coal charged, provided by the company, based on a summation of the HAPs emitted for this source using emission factors from Jewell test data, January 1999, at 1100mg TDS/L) times the wet tons of coal charged per rolling 12-month period (2,058,600 see emissions unit B901) and dividing by 2,000 pounds/ton. Compliance is assured by the monitoring of the analysis of the quench water for TDS in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

e. Emission Limitation:

151.38 lbs/hr PE

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds PE per ton times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

\[ y = 0.000115x + 0.323 \]

where:
y = lbs PE/wet ton coal, and
x = total dissolved solids (TDS) concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

f. Emission Limitation:

16.82 lbs/hr PM\textsubscript{10}
FDS
PTI
Emissions Unit ID: P002

Issued: To be entered upon final issuance
Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.05 lb PM$_{10}$ per wet ton coal charged times the maximum wet tons of coal charged per hour (336.4, see emissions unit B901). The PM$_{10}$ emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged and 9.8% of PE is PM$_{10}$).

g. Emission Limitation:

463.19 TPY PE as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the emission factor of 0.450 pounds per ton times the maximum wet tons of coal charged per rolling, 12-month period (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. The particulate emission factor was determined based on the following equation from U. S. EPA, Region 5:

\[ y = 0.000115x + 0.323 \]

where:
\[ y \] = lbs PE/wet ton coal, and
\[ x \] = total dissolved solids concentration of quench water (mg/L)

Compliance is assured by the monitoring of the analysis of the quench water, in accordance with U.S. EPA approved test methods to ensure the TDS content is maintained at less than or equal to 1100 mg/L.

h. Emission Limitation:

54.5 TPY PM$_{10}$ as a rolling, 12-month summation, combined limit for emissions units P001 and P002

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the PM$_{10}$ emission factor of 0.053 pounds/ton coal charged, times the tons of coal charged per year (2,058,600, see emissions unit B901) and dividing by 2,000 pounds/ton. The PM$_{10}$ emission factor was obtained from AP-42 5th Edition, Section 12.2, Tables 12.2-2 and 12.2-4 (the PE emission factor for quenching with baffles and clean water is 0.54 lb PE/ton coal charged.
and 9.8% of PE is PM$_{10}$).

i. Emission Limitation:

The concentration of total dissolved solids (TDS) in the water used for quenching shall not exceed 1,100 milligrams per liter (mg/L).

Applicable Compliance Method:

Compliance shall be demonstrated by using the test methods and procedures in 40 CFR Part 63.7325(a), of Subpart CCCCC, stated in Part II of this permit, section A.48, to demonstrate compliance with the TDS constituent limits for quench water.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:

Visible particulate emissions from each quench tower shall not exceed 20 percent opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures required in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

10% opacity as a 3-minute average for fugitive dust emissions from all equipment comprising this emissions unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

no visible emissions of fugitive dust from any egress in any building enclosing any process of this emissions unit served by a collection device (i.e., quench tower).
Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

3. The permittee shall conduct performance test and/or other initial compliance demonstrations as required in 40 CFR Part 63.7320(b) and (c), of Subpart CCCCC, stated in Part II of this permit, section A.43.

4. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all emissions sources comprising this emissions unit in accordance with the following requirements.

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Toledo Division of Environmental Services.

b. The emission testing shall be conducted to demonstrate compliance with the visible emission limitations from all fugitive sources and from all stacks.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. stack opacity: Method 9 of 40 CFR part 60, appendix A:

ii. fugitive building emissions: compliance shall be determined in accordance with Test Method 22. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services (TDOES). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates
of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the TDOES’s refusal to accept the results of the emission tests.

Personnel from the TDOES shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the TDOES within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>P002 - Quench Tower 2 for Battery - quench tower, water sprays, baffles</td>
<td>Air Toxics Policy</td>
<td>See section B.III.1.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P002) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Phosphorus

TLV (mg/m3): 0.10
Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
FDS Coke Plant, L.L.C. Facility ID: 0448020084
PTI Application: 04-01360
Issued: To be entered upon final issuance

Emissions Unit ID: P002

3

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>P003 - lime silo controlled by fabric filtration</td>
<td>OAC rule 3745-31-05(A)(3)</td>
<td>0.04 pound of particulate emissions (PE) per hour, 0.2 ton of PE per year, 0.04 pound of particulate matter less than 10 micron (PM_{10}) per hour, and see sections A.I.2.a, 2.b, 2.c and 2.d.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(A)(1)</td>
<td>See section A.I.2.e.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-11(A)(2)</td>
<td>See section A.I.2.f.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-10 thru 20</td>
<td>0.2 ton of PM_{10} as a rolling, 12-month summation.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse).

2.c Visible emissions of particulate shall not exceed 5 percent opacity, as a 6-minute average, from the stack serving this emissions unit.
2.d i. The permittee shall employ best available control measures for all lime handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20.

2.f The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall operate the baghouse whenever the lime handling operation is in use.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the lime handling operation was in use.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions and/or stack particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.
FDS Coke Plant, L.L.C.
PTI #
Issue

Emissions Unit ID: P003

Facility ID: 0449030084

Issued: To be entered upon final issuance
The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the lime handling operation was in use. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly written reports that:
   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and
   b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the lime handling operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
   a. Emission Limitation:

      0.04 pound of particulate emissions (PE) per hour.

   Applicable Compliance Method:

      Compliance shall be demonstrated by multiplying the uncontrolled particulate emission factor for lime transfer and conveying from Table 11.17-4 of AP-42 Section 11.17 dated 10/2001 (2.2 lb/ton) by the maximum transfer rate (2 tons/hr), multiply by 1 transfer point, and multiply by one minus the percentage control efficiency of the baghouse (1-0.99).
b. Emission Limitation:

0.2 ton of PE per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the allowable PE emission limitation (0.04 pound of PE per hour) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

0.04 pound of particulate matter less than 10 micron (PM$_{10}$) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the uncontrolled particulate emission factor for lime transfer and conveying from Table 11.17-4 of AP-42 Section 11.17 dated 10/2001 (2.2 lb/ton) by the maximum transfer rate (2 tons/hr), multiply by 1 transfer point, and multiply by one minus the percentage control efficiency of the baghouse (1-0.99).

d. Emission Limitation:

0.2 ton of PM$_{10}$ as a rolling, 12-month summation.

Applicable Compliance Method:

This emission limitation was developed by multiplying the allowable PM$_{10}$ emission limitation (0.04 pound of PM$_{10}$ per hour) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

5 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

no visible emissions of fugitive dust

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
<thead>
<tr>
<th>Operations, Property, and/or Equipment</th>
<th>Applicable Rules/Requirements</th>
<th>Applicable Emissions Limitations/Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>P003 - Lime Silo</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None
A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>P004 - flue gas desulfurization dust silo controlled by fabric filtration</td>
<td>OAC rule 3745-31-05(A)(3)</td>
<td>0.004 pound of particulate emissions (PE) per hour, 0.02 ton of PE per year, 0.002 pound of particulate matter less than 10 micron (PM(_{10})) per hour, and see sections A.I.2.a thru 2.e.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-07(A)(1)</td>
<td>See section A.I.2.f.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-17-11(A)(2)</td>
<td>See section A.I.2.f.</td>
</tr>
<tr>
<td></td>
<td>OAC rule 3745-31-10 thru 20</td>
<td>0.009 ton of PM(_{10}) as a rolling, 12-month summation.</td>
</tr>
</tbody>
</table>

2. Additional Terms and Conditions

2.a The visible emissions of fugitive dust from all equipment comprising in this emissions unit shall not exceed 10% opacity as a 3-minute average.

2.b There shall be no visible emissions of fugitive dust from any egress in any building (i.e., tower) enclosing any process of this emissions unit which is served by a dust collector (e.g., baghouse).

2.c Visible emissions of particulate shall not exceed 5 percent opacity, as a 6-minute average, from the stack serving this emissions unit.
2.d i. The permittee shall employ best available control measures for all desulfurization dust handling operations for the purpose of ensuring compliance with the emissions limitations above. These control measures shall include, but not be limited to, the addition of moisture, the enclosure of the emissions sources and the addition of dust control systems.

ii. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.e The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rules 3745-31-10 thru 20.

2.f The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall operate the baghouse whenever the desulfurization dust handling operation is in use.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the desulfurization dust handling operation was in use.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions and/or stack particulate emissions from the listed equipment comprising this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.
The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

IV. Reporting Requirements

1. The permittee shall submit written quarterly reports to the Toledo Division of Environmental Services which identify all days during which the baghouse was not in service when the desulfurization dust handling operation was in use. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit quarterly written reports that:
   a. identify all days during which any visible particulate emissions were observed from this emissions unit; and
   b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) for the desulfurization dust handling operation in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
   a. Emission Limitation:

      0.004 pound of particulate matter (PE) per hour.

   Applicable Compliance Method:

   Compliance shall be demonstrated by multiplying the controlled particulate emission factor for unloading to elevated silo from Table 11.12-2 of AP-42 Section 11.12 dated 10/2001 (0.00099 lb/ton) by the maximum transfer rate (2.09 tons/hr), and multiply by 2 transfer points.
FDS Coke Plant, L.L.C.  
PTI #  
Issue  
Emissions Unit ID: P004
b. Emission Limitation:

0.02 ton of PE per year.

Applicable Compliance Method:

This emission limitation was developed by multiplying the allowable PE emission limitation (0.004 pound of PE per hour) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

0.002 pound of particulate matter less than 10 micron (PM$_{10}$) per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the controlled particulate emission factor for unloading to elevated silo from Table 11.12-2 of AP-42 Section 11.12-2 dated 10/2001 (0.00034 lb/ton) by the maximum transfer rate (2.09 tons/hr), and multiply by 2 transfer points.

d. Emission Limitation:

0.009 ton of PM$_{10}$ as a rolling, 12-month summation.

Applicable Compliance Method:

This emission limitation was developed by multiplying the allowable PM$_{10}$ emission limitation (0.002 pound of PM$_{10}$ per hour) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

2. Compliance with the visible emission limitation(s) for all emissions sources comprising this emissions unit, as listed in Section A.I. of these terms and conditions, shall be determined in accordance with the following method(s):

a. Emission Limitation:
10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

5 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

no visible emissions of fugitive dust

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(4).

VI. Miscellaneous Requirements

None
B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

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<tr>
<td>P004 - Desulfurization Silo</td>
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</table>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None