



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

6/19/2013

Certified Mail

Mr. Dennis Hale  
CARGILL, INCORPORATED  
2400 Industrial Drive  
Sidney, OH 45365-8952

Facility ID: 0575010160  
Permit Number: P0088881  
County: Shelby

RE: DRAFT AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Sidney Daily News. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Southwest District Office  
401 East Fifth Street  
Dayton, OH 45402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Southwest District Office at (937)285-6357.

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*  
Ohio EPA-SWDO; Indiana



PUBLIC NOTICE  
6/19/2013 Issuance of Draft Air Pollution Title V Permit

CARGILL, INCORPORATED  
2400 INDUSTRIAL DRIVE,  
Sidney, OH 45365-8952  
Shelby County  
FACILITY DESC.: Soybean Processing  
PERMIT #: P0088881  
PERMIT TYPE: Renewal  
PERMIT DESC: Soybean processing facility Renewal Title V

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Craig Osborne, Ohio EPA DAPC, Southwest District Office, 401 East Fifth Street, Dayton, OH 45402. Ph: (937)285-6357





**Statement of Basis**  
 CARGILL, INCORPORATED  
 Permit Number: P0088881  
 Facility ID: 0575010160

## Statement of Basis For Air Pollution Title V Permit

Facility ID:	0575010160
Facility Name:	CARGILL, INCORPORATED
Facility Description:	Soybean processing including: soybean oil extraction and refining
Facility Address:	2400 INDUSTRIAL DRIVE, Sidney, OH 45365-8952
Permit #:	P0088881, Renewal
This facility is subject to Title V because it is major for: <input type="checkbox"/> Lead <input type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/> Carbon Monoxide <input checked="" type="checkbox"/> Volatile Organic Compounds <input checked="" type="checkbox"/> Nitrogen Oxides <input checked="" type="checkbox"/> Particulate Matter ≤ 10 microns <input type="checkbox"/> Single Hazardous Air Pollutant <input type="checkbox"/> Combined Hazardous Air Pollutants <input type="checkbox"/> Maximum Available Control Technology Standard(s) <input type="checkbox"/> GHG <input type="checkbox"/> Title IV	

### A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A



Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	Since the Title V issuance on, June 20, 2003 the following PTI's were issued for this facility: 05-11956, 05-12183, 05-13045, and P0105193. PTI's 05-11956, 05-12183, and 05-13045 have been revoked due to either change in production and/or the new installation was never implemented. In most cases the emissions units were either shutdown, removed, or reverted to previous permit requirements. PTI 05-12183 was a PSD permit, but changes were never implemented. PTI 05-12183 was revoked and existing emissions units maintained compliance with previous permit requirements. The special terms and conditions of PTI P0105193, which covers changes to emissions unit P903, Truck Soybean Receiving, have been in cooperated into this Title V renewal.
Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.	N/A

**B. Facility-Wide Terms and Conditions**

Term and Condition (paragraph)	Basis		Comments
	SIP (3745- )	Other	
(1) Once the MACT is revised and reissued final emissions units B001 and B002 will need to comply.		40 CFR Part 63 Subpart DDDDD Boiler MACT	
CAM for B001, B002, P004, and P008		40 CFR Part 64	



**C. Emissions Unit Terms and Conditions**

Key:													
EU = emissions unit ID							R = record keeping requirements						
ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)							Rp = reporting requirements						
OR = operational restriction							ET = emission testing requirements (not including compliance method terms)						
M = monitoring requirements							St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement						
ENF = did noncompliance issues drive the monitoring requirements?							Misc = miscellaneous requirements						
EU(s)	Limitation	Basis		ND	OR	M	ENF	R	Rp	ET	St	Misc	Comments
		SIP (3745- )	Other										
B001: 54.35 mmBtu/hr [derated to 35.02 mmBtu/hr], coal-fired boiler #1, equipped with a baghouse	baghouse that will be monitored and maintained	31-05(A)(3)		N	Y	Y	N	Y	Y	N	Y	N	Permittee is to monitor steam rate and pressure drop.
	0.27 lbs of particulate emissions (PE)/ mmBTU of actual heat input	17-10(C)(1) Figure I Curve P-1		N	N	N	N	N	N	N	Y	N	Compliance based on stack test.
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
	3.6 lbs of SO2/mmBtu of actual heat input	18-81		N	Y	Y	N	Y	Y	N	Y	N	Use of SO2 continuous monitoring system with required monitoring, testing and reporting.
	Permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop.		40 CFR Part 64	n	n	y	n	n	n	n	n	n	CAM is based on monitoring to assure that filters are continuously maintained.
B002: 54.35 mmBtu/hr [derated to 26.4 mmBtu/hr], coal-fired boiler #2, equipped with a baghouse	baghouse that will be monitored and maintained	31-05(A)(3) 17-10(C)(1) Figure I Curve P-1		N	Y	Y	N	N	Y	Y	Y	N	Permittee is to monitor steam rate and pressure drop.
	0.30 lbs of particulate emissions (PE)/ mmBTU of actual heat input			N	N	N	N	N	N	N	Y	N	Compliance based on stack test.



	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	N	Y	Y	Y	N	Daily visible emission checks and reporting
	3.6 lbs of SO2/mmBtu of actual heat input	18-81		N	Y	Y	N	N	Y	Y	Y	N	Use of SO2 continuous monitoring system with required monitoring, testing and reporting.
	Permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop.		40 CFR Part 64	n	n	y	n	n	n	n	n	n	CAM is based on monitoring to assure that filters are continuously maintained.
B005: 21.86 MMBTU/HR NG- FIRED REACTOR	The emissions rate shall not exceed the following lbs per mmBtu actual heat input:  0.02 lbs of PE; 0.0006 lb of SO2; 0.14 lb of NOx; 0.084 lb of CO; and 0.006 lb of VOC.	31-05 (A)(3)		N	N	N	N	N	N	N	Y	N	Compliance is based on the use of natural gas as fuel, fuel usage records and reporting requirements.
	burn only natural gas in this emissions unit			N	Y	Y	N	Y	N	N	Y	N	
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
	no specific additional requirements under 40 CFR Part 60 Subpart Dc since this emissions unit employees only natural gas as fuel		40 CFR Part, 60, Subpart Dc	N	N	N	N	N	N	N	N	N	Compliance is based on the use of natural gas as fuel, fuel usage records and reporting requirements.
B006: BOILER #4, 62 MMBTU/HR NG- FIRED	The emissions rate shall not exceed the following lbs per mmBtu actual heat input:  0.02 lbs of PE; 0.0006 lb of SO2;	31-05 (A)(3)		N	N	N	N	N	N	N	Y	N	Compliance is based on the use of natural gas as fuel, fuel usage records and reporting requirements



	0.14 lb of NOx; 0.084 lb of CO; and 0.006 lb of VOC.												
	burn only natural gas in this emissions unit			N	Y	Y	N	Y	N	N	Y	N	
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
	no specific additional requirements under 40 CFR Part 60 Subpart Dc since this emissions unit employees only natural gas as fuel		40 CFR Part, 60, Subpart Dc	N	N	N	N	N	N	N	N	N	Compliance is based on the use of natural gas as fuel, fuel usage records and reporting requirements.
P004: Scalper equipped with enclosure and filter system, EL-5.	0.54 lb of particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Visible PE from the stack shall not exceed 0% opacity		40 CFR, Part 60, Subpart DD	N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	PM shall not exceed 0.01 grains per dry standard cubic feet			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop.		40 CFR Part 64	n	n	y	n	n	n	n	n	n	CAM is based on monitoring to assure that filters are continuously maintained.
P005: Head house equipped with enclosure and	3.0 lb of particulate emissions (PE) per hour.	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	emissions shall be vented to			N	Y	Y	N	Y	N	Y	n	N	Permittee is to monitor pressure



filter system, EL-4	the baghouse												drop.
	Equipped with an enclosures that minimize or eliminate fugitive emissions.			N	N	N	N	N	N	N	N	N	
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	N	Y	N	N	Record keeping and reporting requirements
	Visible PE from the stack shall not exceed 0% opacity		40 CFR, Part 60, Subpart DD	N	Y	Y	N	Y	N	Y	Y	N	daily checks visible particulate emissions
	PM shall not exceed 0.01 grains per dry standard cubic feet												When requested, the permittee shall conduct or have conducted and compliance test
P006: 22 mmBtu/hr fuel oil fired column grain dryer with enclosure, settling chamber, and dryer plate	The daily emissions from the fuel usage shall not exceed the following:  187.3 pounds of SO2; 18.8 pounds of CO; 75.4 pounds of NOx; and 1.3 pounds of VOC.	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	Compliance is based on the use only distillate fuel oil or natural gas, fuel usage records and reporting requirements
	Visible PE shall not exceed 10% opacity, as a 6-minute average, except as provided by the rule.			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	Combined PM emissions from P006 and P034 shall not exceed 21.8 of particulate material (PM) per hour.			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Combined PM10 emissions from P006 and P034 shall not exceed 5.5 per hour.			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test



	Combined PM emissions from P006 and P034 shall not exceed 57.2 tons per rolling 12-month period	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements
	Combined PM10 emissions from P006 and P034 shall not exceed 14.3 tons per rolling 12-month period.			N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Compliance with BAT is more stringent than Subpart DD		40 CFR, Part 60, Subpart DD										Compliance with BAT
P007: Milling operation equipped with enclosure and filter system PR-1	0.41 lb of PE per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	N	Y	Y	N	daily checks visible particulate emissions
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	N	Y	N	N	Record keeping and reporting requirements
P008: Secondary De-hulling equipped with enclosure and filter system, PR-2	0.24 lb of PE per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	emissions shall be vented to the baghouse			N	Y	Y	N	Y	N	Y	n	N	Permittee is to monitor pressure drop.
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	N	Y	Y	N	Daily visible emission checks and reporting
	Permittee shall properly install, operate, and maintain equipment to continuously		40 CFR Part 64	n	n	y	n	n	n	n	n	n	CAM is based on monitoring to assure that filters are continuously maintained.



	monitor the pressure drop.												
	Permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop.		40 CFR Part 64	n	n	y	n	n	n	n	n	n	CAM is based on monitoring to assure that filters are continuously maintained.
P009: De-huller and Classification operation equipped with enclosure and filter system	0.41 lb of particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	emissions shall be vented to the baghouse			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
P010: Flaker equipped with enclosure and cyclones	3.33 lb of particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	equipped with enclosures and cyclones			N	N	N	N	N	N	N	N	N	Daily checks visible particulate emissions with a review of controls and operation when VE's are observed.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P011: Hull Grinder equipped with enclosure and filter system	0.02 lb of particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions



	emissions shall be vented to the baghouse			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
P012: Soybean Conditioner equipped with enclosure and cyclone	3.5 lb of PE per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	equipped with enclosures and cyclones			N	N	N	N	N	N	N	N	N	Daily checks visible particulate emissions with a review of controls and operation when VE's are observed.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P015: Meal grinding and sifting equipped with cyclone and filter system	0.19 lbs of PE per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	equipped with cyclone and filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements



P016: Meal Screening equipped with enclosure and fabric filter system, PR-10	2.0 lbs of PE per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	equipped with cyclone and filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P018: Vegetable Oil Extraction with solvent recovery system	Vent shall not exceed 0.045 pounds VOC per ton of meal processed.	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.			N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	The oilseed solvent loss		40 CFR,	N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting



	factor shall not exceed 0.2 gallon per ton of soybean processed		Part 63, Subpart GGGG										requirements
	The compliance ratio for HAP shall not exceed 1.0			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
2. P024: 3. ASPIRATOR - SHARED CD AND STACK WITH P004	0.04 lbs of particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	equipped with filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
4. P030: 5. 100 tons/hr meal dryer/cooler EX-2	VOC emission rate shall not exceed 23.6 pounds per hours nor 0.236 pounds per ton of meal processed.	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	PE rate from this emissions unit shall not exceed 4.2 pounds per hour nor 0.042 pounds per ton of meal processed			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	PM10 emissions from this emissions unit shall not exceed 2.52 pounds per hour.			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.				N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	VOC emissions from P015,	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane



	P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.												usage.
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
6. P031 - Soybean Oil Refinery	VOC emissions shall not exceed 13.0 lbs/hour, as a monthly average	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	VOC emissions shall not exceed 4.84 tons/month			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	VOC emissions shall not exceed 55.0 tons per rolling, 12-month summation	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
P032, MEAL STORAGE TANK WEST (44%)	0.55 lb particulate emissions (PE) per hour	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.			N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	Visible PE from the stack shall not exceed 10% opacity			N	Y	Y	N	Y	Y	N	Y	N	daily checks visible particulate emissions
	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.





	from P006 and P034 shall not exceed 21.8 of particulate material (PM) per hour.													
	Combined PM10 emissions from P006 and P034 shall not exceed 5.5 per hour.	31-05(D)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test	
	Combined PM emissions from P006 and P034 shall not exceed 57.2 tons per rolling 12-month period			N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements	
	Combined PM10 emissions from P006 and P034 shall not exceed 14.3 tons per rolling 12-month period.			N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements	
	soybeans processed shall not exceed 945,000 tons per rolling, 12-month summation			N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements	
	Compliance with BAT is more stringent than Subpart DD		40 CFR, Part 60, Subpart DD	N	Y	Y	N	Y	Y	N	Y	N	Compliance with BAT	
P901: Meal Truck Loading equipped with enclosure and filter system	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.	31-05(A)(3)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.	
	equipped with filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.	
	Combined PE from P901 and P902 shall not exceed 1.6 lbs/hr.			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test	
	VOC emissions P015, P016, P018, P030, P032, P033, P901, and P902 shall not	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements	



	exceed 340 tons per rolling 12 month period.												
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P902: Meal Railcar Loading equipped with enclosure and filter system	VOC emissions from P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.	31-05(A)(3)		N	Y	Y	N	Y	Y	N	Y	N	Facility mass balance of Hexane usage.
	equipped with filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	Combined PE from P901 and P902 shall not exceed 1.6 lbs/hr.			N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	VOC emissions P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.	31-05(D)		N	Y	Y	N	Y	Y	N	Y	N	Record keeping and reporting requirements
	Visible PE shall not exceed 20% opacity, as a 6-minute average.	17-07(A)		N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P903: Soybean truck dump controlled by baghouse	PE shall not exceed 20.8 pounds per hour	17-11(B)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	(BAT) 31-05(A)(3) do not apply to the controlled PE emissions are less than ten tons per year.	31-05(A)(3)(a)(ii)		N	N	N	N	N	N	N	Y	N	Compliance based on calculation of maximum controlled.
	Visible PE from fugitive dust shall not exceed 5% opacity		40 CFR, Part 60, Subpart DD	N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting



	Visible PE from the stack shall not exceed 0% opacity			N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
P904: RAIL RECEIVING	PE shall not exceed 3.38 pounds per hour.	31-05(A)(3)		N	N	N	N	N	N	N	Y	N	When requested, the permittee shall conduct or have conducted and compliance test
	Visible PE from fugitive dust shall not exceed 5% opacity			N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
	Visible PE from the stack shall not exceed 0% opacity			N	N	Y	N	Y	Y	N	Y	N	Daily visible emission checks and reporting
	equipped with filter system			N	Y	Y	N	Y	Y	N	n	N	Permittee is to monitor pressure drop.
	Compliance with BAT is more stringent than Subpart DD		40 CFR, Part 60, Subpart DD	N	Y	Y	N	Y	Y	N	Y	N	Compliance with BAT
T002: Hexane Tank #85, Underground HEXANE Storage Emissions included in P018	1.63 tons/year of volatile organic compounds (VOC)	31-05(A)(3)		N	N	N	N	Y	Y	N	Y	N	Based on calculations and throughput records
	Maximum true vapor pressure of VOL stored in this emissions unit at less than 27.6 kPa.		40 CFR Part 60, Subpart Kb	N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements
T003: Hexane Tank #85, Underground HEXANE Storage Emissions included in P018	1.63 tons/year of volatile organic compounds (VOC)	31-05(A)(3)		N	N	N	N	Y	Y	N	Y	N	Based on calculations and throughput records
	Maximum true vapor pressure of VOL stored in this emissions unit at less than 27.6 kPa.		40 CFR Part 60, Subpart Kb	N	Y	Y	N	Y	Y	N	N	N	Record keeping and reporting requirements





**DRAFT**

**Division of Air Pollution Control  
Title V Permit  
for  
CARGILL, INCORPORATED**

Facility ID:	0575010160
Permit Number:	P0088881
Permit Type:	Renewal
Issued:	6/19/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control  
Title V Permit  
for  
CARGILL, INCORPORATED**

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**Draft Title V Permit**  
CARGILL, INCORPORATED  
**Permit Number:** P0088881  
**Facility ID:** 0575010160

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 0575010160  
Facility Description: Soybean processing including: soybean oil extraction and refining  
Application Number(s): A0020102, A0020103, A0020104  
Permit Number: P0088881  
Permit Description: Soybean processing facility Renewal Title V  
Permit Type: Renewal  
Issue Date: 6/19/2013  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0088880

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

CARGILL, INCORPORATED  
2400 INDUSTRIAL DRIVE  
Sidney, OH 45365-8952

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office  
401 East Fifth Street  
Dayton, OH 45402  
(937)285-6357

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Southwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



**Draft Title V Permit**  
CARGILL, INCORPORATED  
**Permit Number:** P0088881  
**Facility ID:** 0575010160  
**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

## **2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- 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 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*



- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive



measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the



insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Southwest District Office.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **3. Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **4. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## **5. 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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **6. 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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **7. 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, in accordance with Standard Term and Condition A.11 below. 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.

- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## **9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*



## **10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

## **11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **12. 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.

*(Authority for term: OAC rule 3745-77-07(B))*

## **13. Compliance Requirements**

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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:
  - (1) 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.
  - (2) 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 paragraph (E) of OAC rule 3745-77-03.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) 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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.



- d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

#### **14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

#### **15. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

#### **16. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*



## **17. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*

## **18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

## **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*



**20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.



- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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 (i.e., postmarked) quarterly, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

*(Authority for term: OAC rule 3745-77-07(C))*

**27. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

**28. 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.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



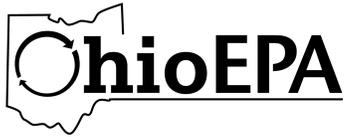
**Draft Title V Permit**  
CARGILL, INCORPORATED  
**Permit Number:** P0088881  
**Facility ID:** 0575010160  
**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. The following are facility-wide terms and conditions:
  - a) Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, and well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21. The following emissions units are defined as insignificant emission units at this facility and meet the requirements of either an exemption under OAC rule 3745-31-03 or have a uncontrolled potential of less than 5 tons per year as defined under OAC rule 3745-77-01(U):
    - (1) B003, refinery deodorizer high boiler # 3, 4.2 mmBtu/hr;
    - (2) F001, COAL PILE & HANDLING
    - (3) F002, PAVED HAUL ROAD
    - (4) P020, Ash Handling System B-2;
    - (5) P022, Meal Flowing Agent Clay Receiving (Storage Tank) and Handling;
    - (6) P023, Railcar receiving scale and garners vented indoor and insignificant
    - (7) P026, High Pressure Boiler # 2; and
    - (8) P029, Powdered Processing Transfer.
  - a) The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart DDDDD. The final rules found in 40 CFR Part 63, Subpart DDDDD establish national emission standards for hazardous air pollutants (NESHAP), operational limits, work practice standards, and compliance requirements for industrial, commercial, and institutional boilers located at a major source of hazardous air pollutants (HAP). The permittee shall comply with the requirements and limits of this NESHAP for the facility's new (commenced construction after 6/4/10) boilers by January 31, 2013, or upon startup, whichever is later; and the facility's existing boilers shall be in compliance with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016.

[40 CFR 63.6(b)(2)], [40 CFR 63.7485], [40 CFR 63.7490], and [40 CFR 63.7495]
  - b) The terms in this permit identify the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) contained in 40 CFR Part 63, Subpart DDDDD and are meant to help the permittee maintain compliance with this NESHAP. The requirements of this



Subpart apply to the facility's boilers and process heaters according to their applicable subcategory, as identified in 40 CFR 63.7499 and as defined in 40 CFR 63.7575.

[40 CFR Part 63, Subpart DDDDD]

- c) Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for emissions units B001, B002, P004 and P008. The permittee shall comply with the provisions of the plan (as specified in Part C- Terms and Conditions for Emissions Units) during any operation of the aforementioned emissions units.

Pursuant to 40 CFR 64.2(b), CAM will not apply to MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule.

[Authority for term: 40 CFR Part 64]



**Draft Title V Permit**  
CARGILL, INCORPORATED  
**Permit Number:** P0088881  
**Facility ID:** 0575010160  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. B001, BOILER #1**

**Operations, Property and/or Equipment Description:**

54.35 mmBtu/hr [derated to 35.02 mmBtu/hr], coal-fired boiler #1, equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-00219)	This emissions unit shall be equipped with a baghouse that will be monitored and maintained in accordance with the requirements of this permit.
b.	OAC rule 3745-17-10(C)(1) Figure I Curve P-1	0.27 lbs of particulate emissions (PE)/ mmBTU of actual heat input.  The emission limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR Part 63, Subpart DDDDD.
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.  The visible emissions limitation specified in this rule is less stringent than the visible emissions limitation established pursuant to Part 63, Subpart DDDDD.
d.	OAC rule 3745-18-81	3.6 lbs of SO <sub>2</sub> /mmBtu of actual heat input
e.	OAC rule 3745-31-05(F)	The combined SO <sub>2</sub> emissions from emissions units B001 and B002 shall not exceed 1,095 tons per rolling 12-month period.



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	<p>40 CFR Part 63, Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63.7485 -7575)  <u>Effective Date: January 31, 2013</u></p> <p><u>Compliance Date January 31, 2016 for existing sources.</u></p>	<p>The emissions from the boilers shall not exceed the following emission standards or the emissions limitations specified in Table 2 for existing units:</p> <p><u>HCl emissions must not exceed:</u>            2.2E-02 lb per MMBtu of heat input;</p> <p><u>Mercury emissions must not exceed:</u>            5.7 E-06 lb per MMBtu of heat input;</p> <p><u>Filterable PM emissions must not exceed:</u>            4.0E-02 lb per MMBtu of heat input;            or 5.3 E-05 lb per MMBtu of heat input;</p> <p><u>CO emissions must not exceed:</u>            160 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 3- run average;            or if using CEMS: 340 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 30-day rolling average;</p> <p>OR output limits (option)</p> <p><u>HCl emissions must not exceed:</u>            or 2.5 lb per MMBtu of steam output;            or 0.27 lb per MWh.</p> <p><u>Mercury emissions must not exceed:</u>            or 6.4 E-06 lb per MMBtu of steam output;            or 7.3E-05 lb per MWh.</p> <p><u>Filterable PM emissions must not exceed:</u>            or 4.2E-02 lb per MMBtu of steam output;            or 4.9E-01 lb per MWh;            or 5.6E-05 lb per MMBtu of steam output;            or 6.5E-04 lb per MWh.</p> <p><u>CO emissions must not exceed:</u>            or 0.14 lb per MMBTU of steam output;            or 1.7 lb per MWh, 3 run average.</p>
h.	<p>40 CFR Part 63, Subpart DDDDD Table 10</p>	<p>The applicability of the General Provision in Part 63 Subpart A to boilers subject to Subpart DDDDD are identified in Table 10 to the subpart.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
i.	40 CFR Part 64	See Facility Wide Terms B.2.(c), and b(2)e., c(2),d(1), d(4), d(5), e(1), and e(4),

(2) Additional Terms and Conditions

a. Pursuant to OAC rule 3745-17-10, the total heat input for this emissions unit has been derated from 54.35 mmBtu/hr to 35.02 mmBtu/hr. The derated total heat input of 35.02 mmBtu/hr corresponds to a steam load of 41,400 pounds per hour. Using the derated total heat input, the allowable particulate emissions rate for this emissions unit, from Figure I of OAC rule 3745-17-10, is 0.27 pound per mmBtu actual heat input.

b. The SO<sub>2</sub> continuous monitoring system shall be certified by the Ohio EPA, to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO<sub>2</sub> emissions from the continuous monitor(s), in units of the applicable standard(s). 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<sub>2</sub> monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F].

c. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

d. The coal burned in this emissions unit shall have a sulfur content that, when calculated in terms of pounds of sulfur dioxide per million Btu of heat content, complies with the allowable sulfur dioxide emission limitation contained in this permit.

[OAC rule 3745-18-04(D)]



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- e. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(A)(1)]

- f. Pursuant to 40 CFR 64.2 (b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule.

[Authority for term: 40 CFR Part 64]

- g. The permittee shall comply with the applicable requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
i.	40 CFR 63.7500)	Emission Limitations, Work Practice Standards, and Operating Limits
ii..	40 CFR 63.7510	Initial Compliance Requirements
iii..	40 CFR 63 Subpart DDDDD, Table 2	Emission Limits for Existing Boilers and Process Heaters

c) Operational Restrictions

- (1) At no time shall the steam flow rate from this emissions unit exceed 41,400 pounds per hour (as an hourly average).

[OAC rule 3745-31-05(A)(3)].

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 8.0 inches of water.

[OAC rule 3745-31-05(A)(3), 40 CFR Part 64]

- (3) The permittee shall comply with the applicable operational requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7525	Monitoring, Installation, Operation, and Maintenance Requirements
b.	40 CFR 63 Subpart DDDDD, Table 3	Work Practice Standards
c.	40 CFR 63 Subpart DDDDD, Table 4	Operating Limits for Boilers and Process Heaters



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by



the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a PTI review and modification of the Title V permit.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(C)(1), 40 CFR Part 64].

- (2) The permittee shall continuously monitor and record the steam flow rate, in pounds/hr, from this emissions unit. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the Ohio EPA, Southwest District Office) upon verbal or written request.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(C)(1)].

- (3) 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 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]

- (4) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B, 40 CFR Part 64]

- (5) The permittee shall install, operate, and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> (s), in pounds emitted per million BTU's of actual heat input;
- c. the monthly (for B001 and B002, combined) emission rates of sulfur dioxide, in tons;
- d. the combined rolling 12-month (for B001 and B002, combined) emission rates of sulfur dioxide, in tons;
- e. results of quarterly cylinder gas audits;
- f. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- g. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- h. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- i. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;



- j. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO2 monitoring system; as well as,
- k. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F, 40 CFR Part 64]]

(6) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions until the compliance date in 40 CFR Part 63, Subpart DDDDD, are the opacity of the visible particulate emissions from the exhaust stack, and pressure drop readings across the baghouse. The monitoring requirements specified in 40 CFR Part 63, Subpart DDDDD will replace the monitoring requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

a. In order to comply with the requirements out lined in its CAM plan, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the control stack for this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. The permittee shall also note the following information in the operational log:

the date, time observation was completed; and

the opacity of the visible emissions observed.

b. In order to comply with the requirements out lined in its CAM plan, the permittee shall record the pressure drop across the baghouse on daily basis. The permittee shall maintain records of the following information for each investigation:

i. the date and time the pressure drop was recorded; and

ii. the pressure drop in inches of water.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63 Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7521	Fuel Analyses, fuel specification, and procedures
b.	40 CFR 63.7522	Emissions Averaging
c.	40 CFR 63.7525	Monitoring, Installation, Operation, and Maintenance Requirements
d.	40 CFR 63.7530	Initial Compliance Demonstration
e.	40 CFR 63.7535	Minimum Amount of Monitoring Data



f.	40 CFR 63.7540 & 7541	Ongoing Compliance Demonstration
g.	40 CFR 63 Subpart DDDDD, Table 6	Fuel Analysis Requirements
h.	40 CFR 63 Subpart DDDDD, Table 7	Establishing Operating Limits
e.	40 CFR 63 Subpart DDDD, Table 8	Demonstrating Continuous Compliance

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):

- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
- c. each incident of deviation described in section “(1)a” (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in section “(1)a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken;
- e. each incident of deviation described in section “(1)a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit;

[OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C); and OAC rule 3745-77-07(C)(1), and 40 CFR Part 64]

(2) If for any reason the steam flow rate from this emissions unit exceeded 41,400 pounds per hour, the following information shall be reported within 5 business days after the exceedance occurs:

- a. the date of the exceedance;
- b. the time interval over which the exceedance occurred;
- c. the value of the exceedance;
- d. the cause(s) of the exceedance;
- e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and



- f. a copy of the steam chart which shows the exceedance.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[Authority for term 3745-77-07(A)(3)(c), 3745-15-03(B)(1)(a), and 3745-15-03(C)]

- (3) The permittee shall submit semiannual written reports that identify:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
- b. any corrective actions taken to minimize or 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.

[OAC rule 3745-77-07(A)(3)(c)]

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
  - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;



- iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total SO<sub>2</sub> emissions for the calendar quarter (tons), based on SO<sub>2</sub> continuous monitoring data;
- vi. the combined total SO<sub>2</sub> emissions for emissions unit B001 and B002 in tons per rolling 12 month period;
- vii. the total operating time (hours) of the emissions unit;
- viii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
- ix. results and dates of quarterly cylinder gas audits;
- x. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- xi. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
- xii. the date, time, and duration of any/each malfunction\*\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
- xiii. the date, time, and duration of any downtime\*\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
- xiv. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xii) and (xiii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[40 CFR 60.7, 40 CFR Part 64]



Effective Date: To be entered upon final issuance

- (5) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM reporting requirements for particulate emissions, until the compliance date in 40 CFR Part 63, Subpart DDDDD, shall be:

The permittee shall submit semi-annual written reports that:

- a. identify all days that visible emissions from the baghouse exhaust serving this emissions unit were greater than 20% opacity, as a 6-minute average, except as provided by the rule; and
- b. identify all days that pressure drop readings of the baghouse serving this emissions unit was outside the allowable range of 0.5 to 4.0 inches of water.

The CAM semi-annual deviation (excursion) reports shall be submitted by January 31st and July 31st of each calendar year and shall cover the previous 6 month period.

The reporting requirements specified in 40 CFR Part 63 Subpart DDDDD will replace the reporting requirements of 40 CFR Part 64, and therefore this provision will no longer apply after the compliance date in 40 CFR part 63, Subpart DDDDD.

[Authority for term: 40 CFR Part 64]

- (6) The permittee shall comply with the applicable reporting requirements required under 40 CFR 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7545	Notifications
b.	40 CFR 63.7550	Reporting
c.	40 CFR 63, Subpart DDDDD, Table 9	Reporting Requirements

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.27 lbs of PE/ mmBTU of actual heat input.

The above allowable is based on the following equation  $E=0.8 \times H-0.3010$

Where:

E= Pounds of emissions per million BTU actual heat input; and

H = Total Heat Input, millions of BTU per hour.



Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of stack testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

b. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-17-03(B)(1)(a)]

c. Emission Limitation:

3.6 lbs of SO<sub>2</sub>/mmBtu of actual heat input

Sulfur dioxide emissions from solid fuel samples shall be calculated as follows:

$$ER = (1 \times 10^6) / H \times S \times 1.9$$

Where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the solid fuel in Btu per pound; and

S = the decimal fraction of sulfur in the solid fuel.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements in section d)(5) above.

d. Emission Limitation

1,095 tons of SO<sub>2</sub> per rolling 12-month period (for B001 and B002, combined)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements in section d)(5) above.

e. Emission Limitation

The emissions from the boilers shall not exceed the following emission standards or the emissions limitations specified in Table 2 for existing units:



HCl emissions must not exceed:

2.2E-02 lb per MMBtu of heat input;

Mercury emissions must not exceed:

5.7 E-06 lb per MMBtu of heat input;

Filterable PM emissions must not exceed:

4.0E-02 lb per MMBtu of heat input;  
or 5.3 E-05 lb per MMBtu of heat input;

CO emissions must not exceed:

160 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 3- run average;  
or if using CEMS: 340 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 30-day rolling average;

OR output limits (option)

HCl emissions must not exceed:

or 2.5 lb per MMBtu of steam output;  
or 0.27 lb per MWh.

Mercury emissions must not exceed:

or 6.4 E-06 lb per MMBtu of steam output;  
or 7.3E-05 lb per MWh.

Filterable PM emissions must not exceed:

or 4.2E-02 lb per MMBtu of steam output;  
or 4.9E-01 lb per MWh;  
or 5.6E-05 lb per MMBtu of steam output;  
or 6.5E-04 lb per MWh.

CO emissions must not exceed:

or 0.14 lb per MMBTU of steam output;  
or 1.7 lb per MWh, 3 run average.

Applicable Compliance Method:

The permittee shall conduct an initial performance test within 180 days after the compliance date to demonstrate compliance with the limitations in the NESHAP. Initial compliance with 40 CFR Part 63, Subpart DDDDD shall be demonstrated through performance testing according to 40 CFR 63.7520 and Table 5; by conducting a fuel analysis for each type of fuel burned according to 40 CFR 63.7521 and Table 6; by establishing operating limits (Table 4) according to 40 CFR 63.7530 and Table 7; and/or by conducting CMS performance evaluations according to 40 CFR 63.7525 in conjunction with the stack test.

The performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The



percent load of the boiler maintained during the performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 1, Appendix A, Part 60 to select the sampling ports locations and number of traverse points;

Method 2, 2F, or 2G, Appendix A, Part 60 to determine the velocity and volumetric flow-rate of the stack gases;

Method 3A or 3B, Appendix A, Part 60, or other method allowed per Table 5 of the Subpart to determine the oxygen and/or carbon dioxide concentrations, excess air, and dry molecular weight of the stack gases;

Method 4, Appendix A, Part 60 to measure the moisture content of the stack gases;

Method 5 or 17 Appendix A, Part 60 for the particulate matter (PM) emission concentration (positive pressure fabric filters shall use Method 5D);

Method 10 Appendix A-4, Part 60 to measure the carbon monoxide (CO) emission concentration;

Method 26 or 26A, Appendix A, Part 60 to measure the hydrogen chloride (HCl) and chlorine emission concentrations;

Method 29, 30A, or 30B, Appendix A, Part 60 or Method 101A in Appendix B to Part 61 or other method allowed per Table 5 of the Subpart for the mercury (Hg) emission concentration;

Method 19 F-factor methodology, Appendix A to Part 60 to convert emissions concentration to pound per mmBtu emission rates; and

COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test, where compliance with the opacity limitation is met by using COMS data.

Sampling sites shall be located at after the control device and prior to any releases to the atmosphere.

[40 CFR 63.7510(a); and 40 CFR 63.7530(a) and (b)]

- (2) 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 1 year of the expiration of this permit



- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
  - i. PE: Methods 1-5 of 40 CFR, Part 60, Appendix A; and
  - ii. SO<sub>2</sub>: Methods 1-4 and 6C of 40 CFR, Part 60, Appendix A.

If applicable, alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Southwest District Office.

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent-to-Test" notification to the Ohio EPA, Southwest District Office. 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Southwest District Office 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 Ohio EPA, Southwest District Office 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 Ohio EPA, Southwest District Office.

- (3) Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.
- (4) Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.



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Within 1 year of the expiration of this permit, the permittee shall conduct certification tests of the SO2 continuous monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(l).

Personnel from the Ohio EPA Central Office and 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. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(l).

Ongoing compliance with the SO2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (5) The permittee shall comply with the applicable testing requirements required under 40 CFR 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7515	Performance Tests, fuel analyses, or tune-ups
b.	40 CFR 63.7520	Stack Tests and Procedures
c.	40 CFR 63.7540	Demonstration of Continuous Compliance
d.	40 CFR 63, Subpart DDDDD, Table 5	Performance Testing Requirements

- g) Miscellaneous Requirements

- (1) None.



**2. B002, BOILER #2**

**Operations, Property and/or Equipment Description:**

54.35 mmBtu/hr [derated to 26.4 mmBtu/hr], coal-fired boiler #2, equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-00219)	This emissions unit shall be equipped with a baghouse that will be monitored and maintained in accordance with the requirements of this permit.
b.	OAC rule 3745-17-10(C)(1) Figure I Curve P-1	0.30 lbs of particulate emissions (PE)/ mmBTU of actual heat input.  The emission limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR Part 63, Subpart DDDDD.
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.  The visible emissions limitation specified in this rule is less stringent than the visible emissions limitation established pursuant to Part 63, Subpart DDDDD.
d.	OAC rule 3745-18-81	3.6 lbs of SO <sub>2</sub> /mmBtu of actual heat input
e.	OAC rule 3745-31-05(F)	The combined SO <sub>2</sub> emissions from emissions units B001 and B002 shall not exceed 1,095 tons per rolling 12-month period.



**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	<p>40 CFR Part 63, Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63.7485 -7575) <u>Effective Date: January 31, 2013</u></p> <p><u>Compliance Date January 31, 2016 for existing sources.</u></p>	<p>The emissions from the boilers shall not exceed the following emission standards or the emissions limitations specified in Table 2 for existing units:</p> <p>HCl emissions must not exceed: 2.2E-02 lb per MMBtu of heat input;</p> <p>Mercury emissions must not exceed: 5.7 E-06 lb per MMBtu of heat input;</p> <p>Filterable PM emissions must not exceed: 4.0E-02 lb per MMBtu of heat input; or 5.3 E-05 lb per MMBtu of heat input;</p> <p>CO emissions must not exceed: 160 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 3- run average; or if using CEMS: 340 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 30-day rolling average;</p> <p>OR output limits (option)</p> <p>HCl emissions must not exceed: or 2.5 lb per MMBtu of steam output; or 0.27 lb per MWh.</p> <p>Mercury emissions must not exceed: or 6.4 E-06 lb per MMBtu of steam output; or 7.3E-05 lb per MWh.</p> <p>Filterable PM emissions must not exceed: or 4.2E-02 lb per MMBtu of steam output; or 4.9E-01 lb per MWh; or 5.6E-05 lb per MMBtu of steam output; or 6.5E-04 lb per MWh.</p> <p>CO emissions must not exceed: or 0.14 lb per MMBTU of steam output; or 1.7 lb per MWh, 3 run average.</p>
h.	40 CFR Part 63, Subpart DDDDD Table 10	The applicability of the General Provision in Part 63 Subpart A to boilers subject to Subpart DDDDD are identified in Table 10 to the subpart.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
i.	40 CFR Part 64	See Facility-wide Terms B.2.c), b(2)e., c)(2), d)(1), d)(4), d)(5), e)(1), and e)(4),

(2) Additional Terms and Conditions

a. Pursuant to OAC rule 3745-17-10, the total heat input for this emissions unit has been derated from 54.35 mmBtu/hr to 26.04 mmBtu/hr. The derated total heat input of 26.04 mmBtu/hr corresponds to a steam load of 37,000 pounds per hour. Using the derated total heat input, the allowable particulate emissions rate for this emissions unit, from Figure I of OAC rule 3745-17-10, is 0.27 pound per mmBtu actual heat input.

b. The continuous SO<sub>2</sub> monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO<sub>2</sub> emissions from the continuous monitor(s), in units of the applicable standard(s). 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<sub>2</sub> monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F].

c. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

d. The coal burned in this emissions unit shall have a sulfur content that, when calculated in terms of pounds of sulfur dioxide per million Btu of heat content, complies with the allowable sulfur dioxide emission limitation contained in this permit.

[OAC rule 3745-18-04(D)]

e. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(A)(1)]



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- f. Pursuant to 40 CFR 64.2 (b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule.

[Authority for term: 40 CFR Part 64]

- g. The permittee shall comply with the applicable requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
i.	40 CFR 63.7500)	Emission Limitations, Work Practice Standards, and Operating Limits
ii..	40 CFR 63.7510	Initial Compliance Requirements
iii..	40 CFR 63 Subpart DDDDD, Table 2	Emission Limits for Existing Boilers and Process Heaters

c) Operational Restrictions

- (1) At no time shall the steam flow rate from this emissions unit exceed 41,400 pounds per hour (as an hourly average).

[OAC rule 3745-31-05(A)(3)].

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.5 to 8.0 inches of water.

[OAC rule 3745-31-05(A)(3), 40 CFR Part 64]

- (3) The permittee shall comply with the applicable operational requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7525	Monitoring, Installation, Operation, and Maintenance Requirements
b.	40 CFR 63 Subpart DDDDD, Table 3	Work Practice Standards
c.	40 CFR 63 Subpart DDDDD, Table 4	Operating Limits for Boilers and Process Heaters

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with



the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the



range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a PTI review and modification of the Title V permit.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(C)(1), 40 CFR Part 64].

- (2) The permittee shall continuously monitor and record the steam flow rate, in pounds/hr, from this emissions unit. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the Ohio EPA, Southwest District Office) upon verbal or written request.

[OAC rule 3745-31-05(A)(3)] and [OAC rule 3745-77-07(C)(1)].

- (3) 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 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3), 40 CFR Part 64]



- (4) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (5) The permittee shall install, operate, and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. CO<sub>2</sub> in percent;
- c. Stack flow rate;
- d. emissions of SO<sub>2</sub> in all units of the applicable standard(s), in pounds emitted per million BTU's of actual heat input;
- e. the monthly (for B001 and B002, combined) emission rates of sulfur dioxide, in tons;
- f. the combined rolling 12-month (for B001 and B002, combined) emission rates of sulfur dioxide, in tons;
- g. results of quarterly cylinder gas audits;
- h. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- i. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- j. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- k. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;
- l. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,



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- m. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F, 40 CFR Part 64]

- (6) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions until the compliance date in 40 CFR Part 63, Subpart DDDDD, are the opacity of the visible particulate emissions from the exhaust stack, and pressure drop readings across the baghouse. The monitoring requirements specified in 40 CFR Part 63, Subpart DDDDD will replace the monitoring requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

- a. In order to comply with the requirements out lined in its CAM plan, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the control stack for this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. The permittee shall also note the following information in the operational log:

- i. the date, time observation was completed; and
- ii. the opacity of the visible emissions observed.

- b. In order to comply with the requirements out lined in its CAM plan, the permittee shall record the pressure drop across the baghouse on daily basis. The permittee shall maintain records of the following information for each investigation:

- i. the date and time the pressure drop was recorded; and
- ii. the pressure drop in inches of water.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (7) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63 Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7521	Fuel Analyses, fuel specification, and procedures
b.	40 CFR 63.7522	Emissions Averaging
c.	40 CFR 63.7525	Monitoring, Installation, Operation, and Maintenance Requirements
d.	40 CFR 63.7530	Initial Compliance Demonstration
e.	40 CFR 63.7535	Minimum Amount of Monitoring Data
f.	40 CFR 63.7540 & 7541	Ongoing Compliance Demonstration
g.	40 CFR 63 Subpart DDDDD, Table 6	Fuel Analysis Requirements



h.	40 CFR 63 Subpart DDDDD, Table 7	Establishing Operating Limits
e.	40 CFR 63 Subpart DDDD, Table 8	Demonstrating Continuous Compliance

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):

- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;
- c. each incident of deviation described in section “(1)a” (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in section “(1)a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken;
- e. each incident of deviation described in section “(1)a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit;

[OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C); OAC rule 3745-77-07(C)(1), and 40 CFR Part 64]

(2) If for any reason the steam flow rate from this emissions unit exceeded 41,400 pounds per hour, the following information shall be reported within 5 business days after the exceedance occurs:

- a. the date of the exceedance;
- b. the time interval over which the exceedance occurred;
- c. the value of the exceedance;
- d. the cause(s) of the exceedance;
- e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and
- f. a copy of the steam chart which shows the exceedance.



These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[Authority for term 3745-77-07(A)(3)(c), 3745-15-03(B)(1)(a), and 3745-15-03(C)]

- (3) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or 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.

[OAC rule 3745-77-07(A)(3)(c)]

- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
    - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
    - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;



- v. the total SO<sub>2</sub> emissions for the calendar quarter (tons), based on SO<sub>2</sub> continuous monitoring data;
- vi. the combined total SO<sub>2</sub> emissions for emissions unit B001 and B002 in tons per rolling 12 month period;
- vii. the total operating time (hours) of the emissions unit;
- viii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
- ix. results and dates of quarterly cylinder gas audits;
- x. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- xi. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
- xii. the date, time, and duration of any/each malfunction\*\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
- xiii. the date, time, and duration of any downtime\*\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
- xiv. the reason (if known) and the corrective actions taken (if any) for each event in (xii) and (xiii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[40 CFR 60.7]

- (5) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM reporting requirements for particulate emissions, until the compliance date in 40 CFR Part 63, Subpart DDDDD, shall be:



The permittee shall submit semi-annual written reports that:

- a. identify all days that visible emissions from the baghouse exhaust serving this emissions unit were greater than 20% opacity, as a 6-minute average, except as provided by the rule; and
- b. identify all days that pressure drop readings of the baghouse serving this emissions unit was outside the allowable range of 0.5 to 4.0 inches of water.

The CAM semi-annual deviation (excursion) reports shall be submitted by January 31st and July 31st of each calendar year and shall cover the previous 6 month period.

The reporting requirements specified in 40 CFR Part 63 Subpart DDDDD will replace the reporting requirements of 40 CFR Part 64, and therefore this provision will no longer apply after the compliance date in 40 CFR part 63, Subpart DDDDD.

[Authority for term: 40 CFR Part 64]

- (6) The permittee shall comply with the applicable reporting requirements required under 40 CFR 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7545	Notifications
b.	40 CFR 63.7550	Reporting
c.	40 CFR 63, Subpart DDDDD, Table 9	Reporting Requirements

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.30 lbs of PE/ mmBTU of actual heat input.

The above allowable is based on the following equation  $E=0.8 \times H-0.3010$

Where:

E= Pounds of emissions per million BTU actual heat input; and

H = Total Heat Input, millions of BTU per hour.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of stack testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.



b. Emission Limitation

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-17-03(B)(1)(a)]

c. Emission Limitation:

3.6 lbs of SO<sub>2</sub>/mmBtu of actual heat input

Where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the solid fuel in Btu per pound; and

S = the decimal fraction of sulfur in the solid fuel.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements in section d)(5) above.

d. Emission Limitation

1,095 tons of SO<sub>2</sub> per rolling 12-month period (for B001 and B002, combined)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above through the record keeping requirements in section d)(5) above.

e. Emission Limitation

The emissions from the boilers shall not exceed the following emission standards or the emissions limitations specified in Table 2 for existing units:

HCl emissions must not exceed:

2.2E-02 lb per MMBtu of heat input;

Mercury emissions must not exceed:

5.7 E-06 lb per MMBtu of heat input;



Filterable PM emissions must not exceed:

4.0E-02 lb per MMBtu of heat input;  
or 5.3 E-05 lb per MMBtu of heat input;

CO emissions must not exceed:

160 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 3- run average;  
or if using CEMS: 340 ppmv on a dry basis corrected to 3% O<sub>2</sub>, 30-day rolling average;

OR output limits (option)

HCl emissions must not exceed:

or 2.5 lb per MMBtu of steam output;  
or 0.27 lb per MWh.

Mercury emissions must not exceed:

or 6.4 E-06 lb per MMBtu of steam output;  
or 7.3E-05 lb per MWh.

Filterable PM emissions must not exceed:

or 4.2E-02 lb per MMBtu of steam output;  
or 4.9E-01 lb per MWh;  
or 5.6E-05 lb per MMBtu of steam output;  
or 6.5E-04 lb per MWh.

CO emissions must not exceed:

or 0.14 lb per MMBTU of steam output;  
or 1.7 lb per MWh, 3 run average.

Applicable Compliance Method:

The permittee shall conduct an initial performance test within 180 days after the compliance date to demonstrate compliance with the limitations in the NESHAP. Initial compliance with 40 CFR Part 63, Subpart DDDDD shall be demonstrated through performance testing according to 40 CFR 63.7520 and Table 5; by conducting a fuel analysis for each type of fuel burned according to 40 CFR 63.7521 and Table 6; by establishing operating limits (Table 4) according to 40 CFR 63.7530 and Table 7; and/or by conducting CMS performance evaluations according to 40 CFR 63.7525 in conjunction with the stack test.

The performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The percent load of the boiler maintained during the performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.



The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Method 1, Appendix A, Part 60 to select the sampling ports locations and number of traverse points;

Method 2, 2F, or 2G, Appendix A, Part 60 to determine the velocity and volumetric flow-rate of the stack gases;

Method 3A or 3B, Appendix A, Part 60, or other method allowed per Table 5 of the Subpart to determine the oxygen and/or carbon dioxide concentrations, excess air, and dry molecular weight of the stack gases;

Method 4, Appendix A, Part 60 to measure the moisture content of the stack gases;

Method 5 or 17 Appendix A, Part 60 for the particulate matter (PM) emission concentration (positive pressure fabric filters shall use Method 5D);

Method 10 Appendix A-4, Part 60 to measure the carbon monoxide (CO) emission concentration;

Method 26 or 26A, Appendix A, Part 60 to measure the hydrogen chloride (HCl) and chlorine emission concentrations;

Method 29, 30A, or 30B, Appendix A, Part 60 or Method 101A in Appendix B to Part 61 or other method allowed per Table 5 of the Subpart for the mercury (Hg) emission concentration;

Method 19 F-factor methodology, Appendix A to Part 60 to convert emissions concentration to pound per mmBtu emission rates; and

COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test, where compliance with the opacity limitation is met by using COMS data.

Sampling sites shall be located at after the control device and prior to any releases to the atmosphere.

[40 CFR 63.7510(a); and 40 CFR 63.7530(a) and (b)]

- (2) 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 1 year of the expiration of this permit
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO<sub>2</sub>.



- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
  - i. PE: Methods 1-5 of 40 CFR, Part 60, Appendix A; and
  - ii. SO<sub>2</sub>: Methods 1-4 and 6C of 40 CFR, Part 60, Appendix A.

If applicable, alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, Southwest District Office.

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent-to-Test" notification to the Ohio EPA, Southwest District Office. 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, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Southwest District Office 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 Ohio EPA, Southwest District Office 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 Ohio EPA, Southwest District Office.

- (3) Within 1 year of the expiration of this permit, the permittee shall conduct certification tests of the SO<sub>2</sub> continuous monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(l).

Personnel from the Ohio EPA Central Office and 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. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.



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Certification of the continuous SO2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Ongoing compliance with the SO2 emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (4) The permittee shall comply with the applicable testing requirements required under 40 CFR 63, Subpart DDDDD, including the following sections:

	Applicable Rule	Requirement
a.	40 CFR 63.7515	Performance Tests, fuel analyses, or tune-ups
b.	40 CFR 63.7520	Stack Tests and Procedures
c.	40 CFR 63.7540	Demonstration of Continuous Compliance
d.	40 CFR 63, Subpart DDDDD, Table 5	Performance Testing Requirements

- g) Miscellaneous Requirements

- (1) None.



**3. B005, HYDROGEN PLANT**

**Operations, Property and/or Equipment Description:**

HYDROGEN PLANT, INCLUDING 21.86 MMBTU/HR NG-FIRED REACTOR, HYDROGEN STORAGE

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3) (PTI 05-07314)	0.02 lbs of particulate emissions (PE) per mmBtu of actual heat input  0.0006 lb of sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input  0.14 lb of nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input  0.035 lb of carbon monoxide (CO)/mmBtu of actual heat input  0.003 lb of volatile organic compounds (VOC)/mmBtu of actual heat input
b.	OAC rule 3745-17-10(B)(1)	The PE emission limitation under this rule is equal to the required emissions under OAC 3745-31-05(A)(3), (BAT).
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR Part, 60, Subpart Dc	See Section b)(2)b., below.

- (2) Additional Terms and Conditions
  - a. There is no sulfur dioxide emission limitation established by OAC Chapter 3745-18 for this emissions unit because the emissions unit employs only natural gas.



- b. There are no specific additional requirements under 40 CFR Part 60 Subpart Dc since this emissions unit employs only natural gas as fuel.
- c) Operational Restrictions
  - (1) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) For each day during which the permittee burns a fuel other than natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term 3745-77-07(A)(3)(c), 3745-15-03(B)(1)(a), and 3745-15-03(C)]

- (2) 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 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]



e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term 3745-77-07(A)(3)(c), 3745-15-03(B)(1)(a), and 3745-15-03(C)]

- (2) The permittee shall submit the following information in the quarterly deviation reports in accordance monitoring requirements for visible emissions in term number d)(2) above:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit;
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions;
  - d. 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
  - e. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

0.020 pound PE/mmBtu of actual heat input

The above limit is based on the required limitations in Ohio Administrative Code (OAC) rule 3745-17-10(B)(1).

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the PE limitation. The compliance stack test shall be determined in accordance with the Methods 1 - 5 of 40 CFR, Part 60, Appendix A.



b. Emission Limitation

0.0006 lb of SO<sub>2</sub>/mmBtu of actual heat input

The above limit is based on AP-42 Table 1.4-2 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the SO<sub>2</sub> emission limitation. The compliance stack test shall be determined in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

If required, compliance with the SO<sub>2</sub> emission limitation above shall be determined by emission testing performed in accordance

c. Emission Limitation:

0.14 lb of NO<sub>x</sub>/mmBtu of actual heat input

The above limit is based on manufacturer's specifications in the initial PTI application.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the NO<sub>x</sub> emission limitation. The compliance stack test shall be determined in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

0.035 lb CO/mmBtu of actual heat input

The above limit is based on AP-42 Table 1.4-2 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the CO emission limitation. The compliance stack test shall be determined in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.



e. Emission Limitation:

0.003 lb VOC/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

The above limit is based on AP-42 Table 1.4-1 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the PE limitation. The compliance stack test shall be determined in accordance with the Methods 1 through 4, 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

f. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-17-03(B)(1)(a)] and [OAC rule 3745-17-07(A)(1)]

g) Miscellaneous Requirements

(1) None.



**4. B006, BOILER #4**

**Operations, Property and/or Equipment Description:**

BOILER #4, 62 MMBTU/HR NG-FIRED

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3) (PTI 05-07314)	0.02 lbs of particulate emissions (PE) per mmBtu of actual heat input  0.0006 lb of sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input  0.04 lb of nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input  0.035 lb of carbon monoxide (CO)/mmBtu of actual heat input  0.003 lb of volatile organic compounds (VOC)/mmBtu of actual heat input.
b.	OAC rule 3745-17-10(B)(1)	The PE emission limitation under this rule is equal to the required emissions under OAC 3745-31-05(A)(3), (BAT).
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	40 CFR Part, 60, Subpart Dc	See Section b)(2)b., below.
e.	40 CFR Part 63, Subpart DDDDD	Applicable Work Practice Standards in table 3 to Subpart DDDDD of 40 CFR Part 63 (subject to change based on the issuance of the Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD by U.S. EPA).  See Sections B.2.b), B.2 c), and b)(2)c.



(2) Additional Terms and Conditions

- a. There is no sulfur dioxide emission limitation established by OAC Chapter 3745-18 for this emissions unit because the emissions unit employs only natural gas.
- b. There are no specific additional requirements under 40 CFR Part 60 Subpart Dc since this emissions unit employs only natural gas as fuel.

[Authority for term 3745-77-07(A)(1)]

- c. The requirements of 40 CFR Part 63, Subpart DDDDD are currently effective due to the January 9, 2012 decision by the United States District Court for the District of Columbia to vacate the administrative stay that U.S. EPA put in place during the reconsideration of the March, 2011 final rules. On February 7, 2012, U.S. EPA issued a "No Action Assurance" letter to facilities and indicated that U.S. EPA will exercise its enforcement discretion to not pursue enforcement action of violations of the Initial Notification deadlines established in the rule. This letter further notes that U.S. EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements on the Boiler MACT rule) and to the subcategories for some units. U.S. EPA plans to issue a Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD in the spring of 2012.

[40 CFR Part 63 Subpart DDDDD]

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for term 3745-77-07(A)(1)]

- (2) This emissions unit shall be equipped with a low NOx burner.

[Authority for term 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term 3745-77-07(A)(3)]

- (2) 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 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-17-07(A)] or [OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term 3745-77-07(A)(3)]

- (2) The permittee shall submit the following information in the quarterly deviation reports in accordance monitoring requirements for visible emissions in term number d)(2) above:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit;
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions;



- d. 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
- e. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

0.020 pound PE/mmBtu of actual heat input

The above limit is based on the required limitations in Ohio Administrative Code (OAC) rule 3745-17-10(B)(1).

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the PE limitation. The compliance stack test shall be determined in accordance with the Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- b. Emission Limitation

0.0006 lb of SO<sub>2</sub>/mmBtu of actual heat input

The above limit is based on AP-42 Table 1.4-2 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the SO<sub>2</sub> emission limitation. The compliance stack test shall be determined in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

If required, compliance with the SO<sub>2</sub> emission limitation above shall be determined by emission testing performed in accordance



c. Emission Limitation:

0.04 lb of NO<sub>x</sub>/mmBtu of actual heat input

The above limit is based on manufacturer's specifications in the initial PTI application of 0.04 lbs of NO<sub>x</sub>/mmBtu and a Jan. 6, 1995, letter from Mr. Michael Hoerle, of Cargill requesting the 0.5 lbs limit as a compliance safety margin.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the NO<sub>x</sub> emission limitation. The compliance stack test shall be determined in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

0.035 lb CO/mmBtu of actual heat input

The above limit is based on AP-42 Table 1.4-2 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the CO emission limitation. The compliance stack test shall be determined in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

e. Emission Limitation:

0.003 lb VOC/mmBtu of actual heat input.

Applicable Compliance Method:

The above limit is based on AP-42 Table 1.4-1 emission factors with a natural gas heat value of 1000 Btu's per cubic feet.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas.

If required, the permittee shall conduct or have conducted a compliance stack test in order to verify with the PE limitation. The compliance stack test shall be determined in accordance with the Methods 1 through 4, 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.



f. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

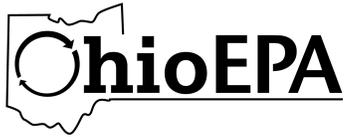
Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-17-03(B)(1)(a)] and [OAC rule 3745-17-07(A)(1)]

g) Miscellaneous Requirements

(1) None.



**5. P004, Scalper**

**Operations, Property and/or Equipment Description:**

Scalper equipped with enclosure and filter system, EL-5

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	0.54 lb of particulate emissions (PE) per hour.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	40 CFR, Part 60, Subpart DD	Visible PE from the stack shall not exceed 0% opacity.  The particulate matter emitted from this emissions unit shall not exceed 0.01 grains per dry standard cubic feet.
d.	OAC rule 3745-17-07(A)	The visible PE limitation specified by OAC rule 3745-17-07(A) is less stringent than the visible PE limitation required by 40 CFR, Part 60, Subpart DD.
e.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for PE emissions)	See Section c)(3), d)(2), d)(3), and d)(4) below.



(2) Additional Terms and Conditions

- a. The hourly particulate limitation of 0.54 pounds from this emissions unit is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

[Authority for term 3745-77-07(A)(1)]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.

- (2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

[Authority for term 3745-77-07(C) (1), 40 CFR Part 64]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the amount of soybeans processed; and  
b. the rolling, 12-month summation of the amount of soybeans processed.

[Authority for term 3745-77-07(A)(3)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;  
b. the magnitude of the deviation at that time;



- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

[Authority for term 3745-77-07(A)(3) and 40 CFR Part 64]

- (3) The permittee shall maintain records of the following information for each corrective action taken:
  - a. a description of the corrective action;
  - b. the date corrective action was completed;
  - c. the date and time the deviation ended;
  - d. the total period of time (in minutes) during which there was a deviation;
  - e. the pressure drop readings immediately after the corrective action was implemented; and
  - f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64]

- (4) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section c)(2); and
  - b. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in section (3)a. (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section (3)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section (3)a. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

0.54 lbs of particulate emissions (PE)/hr

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (180 tons per hour);

Ef = Emission factor, in pounds per ton processes, (5.00 lbs/ton uncontrolled from PTI application);

Ce = Control efficiency, in percent reduced, (99.9%).

Applicable Compliance Method:

Compliance is based on the maximum process capacity for this emissions unit is 180 tons per hour and the use of an enclosure and fabric filter system. Prior to the initiation of any modification of this emissions unit or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Emission Limitation:

0.1 gr PE/dscf

Applicable Compliance Method:

When requested, the permittee shall conduct or have conducted and compliance test on the particulate emissions from this emissions unit. The compliance test shall be conducted in accordance with the test results based on emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

c. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.



d. Emission Limitation:

Visible PE from the stack shall not exceed 0% opacity.

Applicable Compliance Method:

The record keeping requirements established in section d)(4) of this permit shall be used to determine compliance with the usage restriction above.

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**6. P005, Head house (P005 was Scalper in PTI 05-7365 and Headhouse in Title V)**

**Operations, Property and/or Equipment Description:**

Head house equipped with enclosure and filter system, EL-4

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	3.0 lb of particulate emissions (PE) per hour.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	40 CFR, Part 60, Subpart DD	Visible PE from the stack shall not exceed 0% opacity.  The particulate matter emitted from this emissions unit shall not exceed 0.01 grains per dry standard cubic feet.
d.	OAC rule 3745-17-07(A)	The visible PE limitation specified by OAC rule 3745-17-07(A) is less stringent than the visible PE limitation required by 40 CFR, Part 60, Subpart DD.
e.	OAC rule 3745-17-11(B)	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) Additional Terms and Conditions

a. The hourly particulate limitation of 3.0 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.



c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (2) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.

[Authority for term 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

[Authority for term 3745-77-07(C)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the amount of soybeans processed; and
- b. the rolling, 12-month summation of the amount of soybeans processed.

[Authority for term 3745-77-07(A)(3)]

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.



In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended.

[Authority for term 3745-77-07(A)(3)]

- (3) The permittee shall maintain records of the following information for each corrective action taken:
- a. a description of the corrective action;
  - b. the date corrective action was completed;
  - c. the date and time the deviation ended;
  - d. the total period of time (in minutes) during which there was a deviation;
  - e. the pressure drop readings immediately after the corrective action was implemented; and
  - f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (4) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons; and
  - b. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section c)(2).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.



These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described section (3)a. (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section (3)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section (3)a. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. **Emission Limitation:**  
  
3.0 lb of particulate emissions (PE)/hr  
  
The above allowable is based on PTI 05-07365 and the use of enclosures and fabric filters.  
  
Applicable Compliance Method:  
  
Compliance is based on the continuous use of the control systems.  
  
If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.



b. Emission Limitation:

0.1 gr PE/dscf

Applicable Compliance Method:

When requested, the permittee shall conduct or have conducted and compliance test on the particulate emissions from this emissions unit. The compliance test shall be conducted in accordance with the test results based on emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

Visible PE from the stack shall not exceed 0% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

g) Miscellaneous Requirements

(1) None.



**7. P006, GRAIN Steam DRYER 1**

**Operations, Property and/or Equipment Description:**

Column grain dryer with enclosure, settling chamber, and dryer plate

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) <sup>1</sup> .	<p>The combined particulate material (PM) emissions from emissions units P006 and P034 shall not exceed 21.6 of particulate material (PM) per hour.</p> <p>The combined PM10 emissions from emissions units P006 and P034 shall not exceed 5.4 of particulate material (PM) per hour.</p> <p>Visible PE shall not exceed 10% opacity, as a 6-minute average, except as provided by the rule.</p>
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	<p>The combined particulate material (PM) emissions from emissions units P006 and P034 shall not exceed 56.7 tons per rolling 12-month period.</p> <p>The combined PM10 emissions from emissions units P006 and P034 shall not exceed 14.16 tons per rolling 12-month period.</p> <p>The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR, Part 60, Subpart DD	The emission limitation and requirements specified by this rule is equal to the emission limitation and requirements established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(A)	The emission limitation and requirements specified by this rule is equal to the emission limitation and requirements established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(B)(1)	When combusting gaseous fuels and/or number two fuel oil, the particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

<sup>1</sup> Combined limitations are based on PTI 05-09010, that covered the installation of emissions unit P034. In order to eliminate any increase in overall facility emissions from the installation of emissions unit P034, Cargill requested that the combined emissions from emissions unit P006 and P034 be regulated to not exceed the limits established in PTI 05-07365 for emissions unit P006.

(2) Additional Terms and Conditions

a. The combined hourly particulate material limitation of 21.6 pounds from emissions units P006 and P034, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

[Authority for term 3745-77-07(A)(1)]

b. The combined hourly PM10 limitation of 5.4 pounds from emissions units P006 and P034, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

[Authority for term 3745-77-07(A)(1)]

c) Operational Restrictions

(1) The permittee shall maintain dryer plate perforations less than or equal to 0.094 inch (2.4 mm) in diameter for this emissions unit.

[Authority for term 3745-77-07(A)(1)]

(2) This emissions unit shall be equipped with a settling chamber that minimizes and/or eliminates the release of particulate emissions.

[Authority for term 3745-77-07(A)(1)]



- (3) The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.

[Authority for term 3745-77-07(A)(1)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]



- (2) The permittee shall maintain monthly records of the following information:
  - a. the amount of soybeans processed; and
  - b. the rolling, 12-month summation of the amount of soybeans processed.

[Authority for term 3745-77-07(A)(1)]

- (3) For each day during which the permittee burns a fuel other than distillate fuel oil or natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term 3745-77-07(A)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than distillate fuel oil or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1). of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:

Combined emissions from P006 and P034, of 21.6 lbs of particulate material (PM)/hr

The above limitation was established based on the following equation:



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$$HER = (M_p \times E_f) \times (1 - C_e)$$

Where:

HER= Hourly emission rate, in pounds per hour;

$M_p$ = Maximum Process Rate, in tons of grain processed, (180 tons/hr);

$E_f$ = emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

$C_e$ = control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the use and maintenance of the settling chamber and column plate along with the maximum throughput of this emissions unit is 180 tons per hour. Prior to the initiation of any modification of this emissions unit and/or change in control equipment that would cause an increase in the potential emissions from this emissions unit, the modifications would need to be review under appropriate air pollution permit review.

b. Emission Limitation:

Combined emissions from P006 and P034, of 56.7 tons of particulate material (PM)/ rolling 12-month period.

The above limitation was established based on the following equation:

$$AER = (M_p \times E_f) \times (1 - C_e)$$

Where:

AER= Annual emission rate, in pounds per hour;

$M_p$ = Maximum Annual Process Rate, in tons of grain processed, (945,000 tons/rolling 12-month period);

$E_f$ = emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

$C_e$ = control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the rolling 12-month 945,000 throughput limitation and the recordkeeping requirements in Section d)(2) of this permit.



c. Emission Limitation:

Combined emissions from P006 and P034, of 5.4 lbs of PM10/hr

The above limitation was established based on the following equation:

$$\text{HER} = [(M_p \times E_f) \times (1 - C_e)] \times 25\%$$

Where:

HER= Hourly emission rate, in pounds per hour;

M<sub>p</sub>= Maximum Process Rate, in tons of grain processed, (180 tons/hr);

E<sub>f</sub>= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

C<sub>e</sub>= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the use and maintenance of the settling chamber and column plate along with the maximum throughput of this emissions unit is 180 tons per hour. Prior to the initiation of any modification of this emissions unit and/or change in control equipment that would cause an increase in the potential emissions from this emissions unit, the modifications would need to be review under appropriate air pollution permit review.

d. Emission Limitation:

Combined emissions from P006 and P034, of 14.18 tons of PM10/ rolling 12-month period.

The above limitation was established based on the following equation:

$$\text{AER} = [(M_p \times E_f) \times (1 - C_e)] \times 25\%$$

Where:

AER= Annual emission rate, in pounds per hour;

M<sub>p</sub>= Maximum Annual Process Rate, in tons of grain processed, (945,000 tons/rolling 12-month period);

E<sub>f</sub>= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

C<sub>e</sub>= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).



Applicable Compliance Method:

Compliance is based on the rolling 12-month 945,000 throughput limitation and the recordkeeping requirements in Section d)(2) of this permit.

e. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3).

f. Emission Limitation:

When combusting gaseous fuels and/or number two fuel oil, the particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

Compliance is assumed as long as only natural gas and/or number two fuel oil are employed as fuel in this emissions unit. Prior to employing alternative fuels, the permittee may need to process additional air pollution permits to address any changes in the allowable emissions. Compliance will also be assured through the record keeping and reporting requirements under sections d)(3) and e)(3), of this permit.

g. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(2) of this permit shall be used to determine compliance with the usage restriction above.

g) Miscellaneous Requirements

(1) None.



**8. P007, SCALPING & CRACKING**

**Operations, Property and/or Equipment Description:**

Milling operation equipped with enclosure and filter system PR-1

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	0.41 lb of particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The emission limitation and requirements specified by this rule is less restrictive than emission pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	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) Additional Terms and Conditions

a. The hourly particulate limitation of 0.41 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.



c) Operational Restrictions

- (1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.
- (2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

[Authority for term 3745-77-07(C)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;



- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:
  - a. the amount of soybeans processed; and
  - b. the rolling, 12-month summation of the amount of soybeans processed.

[Authority for term 3745-77-07(A)(1)]

- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly



readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section b)(2); and
  - b. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):



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- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. an identification of each incident of deviation described in section “(3)a.” (above) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in section “(3)a.” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in section “(3)a.” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.41 lb/hr PE

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (125 tons per hour);

Ef = Emission factor, in pounds per ton processes, (3.3 lbs/ton uncontrolled from PTI application);

Ce = Control efficiency, in percent reduced, (99.9%).



Applicable Compliance Method:

Compliance is based on the maximum process capacity for this emissions unit is 125 tons per hour and the use of an enclosure and fabric filter system. Prior to the initiation of any modification of this emissions unit or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

c. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**9. P008, SECONDARY DEHULLING (#2 DUST COLLECTOR)**

**Operations, Property and/or Equipment Description:**

Secondary De-hulling equipped with enclosure and filter system, PR-2

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-00230)	The permittee shall employ air pollution and properly maintain controls and/or enclosures in such a manner to minimize and/or eliminate particulate emissions (PE) from this emissions unit.
b.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity.
c.	OAC rule 3745-17-11(B) Figure II curve P1 equation (b)	Particulate emissions (PE) from this emissions unit shall not exceed 4.5 pounds per hour.
d.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for PE emissions)	See Section d)(1), below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

[Authority for term 3745-77-07(A)(1); 40 CFR Part 64]



d) Monitoring and/or Recordkeeping Requirements

- (1) In order to assure that the particulate emissions (PE) from this emissions unit are being minimized and/or eliminated, the permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.



This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR part 64]

- (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less



frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all periods of time during which a baghouse is being employed to minimize and/or eliminate particulate emissions (PE) from this emissions unit, the pressure drop across the baghouse did not comply with the allowable range specified above in section c)(1).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):

- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. an identification of each incident of deviation described in section “(3)a.” (above) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in section “(3)a.” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in section “(3)a.” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.



These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

4.5 lb of particulate emissions (PE) per hour

The above allowable is based on the following equation from OAC rule 3745-17-11(B)(1) Figure II curve P1 equation (b):

$$A = 0.5782 \times (U)^{0.6456}$$

Where:

A = Maximum Allowable Mass Rate of Emissions, in pounds per hour;

U = Uncontrolled Mass Rate of Emissions, in pounds per hour.

Applicable Compliance Method:

Compliance is assumed based on the use, maintenance and record keeping of the baghouse the permittee is employing to minimize and/or eliminate the particulate emissions (PE) from this emissions unit. Any failure to maintain the control equipment may result in an increase in the actual emissions and a possible exceedance of the above limitation.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Please note that since this facility is regulated under OAC rule 3745-17-11(B)(1) the particulate emissions are limited by either Table I or Figure II, whichever is more stringent. Based on the information available the process weight rate is 112.5 tons per hour, which in Table 1 would give an allowable rate of particulate emission of 52.5 pounds per hour; while, the uncontrolled mass rate of emissions is 24 pounds, which based on Figure II would give a maximum allowable mass rate of emissions of 4.5 pounds per hour. Since the maximum allowable mass rate of emissions is the most restrictive, Figure II is used to determine the allowable.



b. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**10. P009, PRIMARY DEHULLING (#3 & #4 DUST COLLECTORS)**

**Operations, Property and/or Equipment Description:**

De-huller and Classification operation equipped with enclosure and filter system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	0.41 lb of particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The emission limitations and requirements specified by this rule is less restrictive than emission limitations and requirements pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emission limitations and requirements specified by this rule is less restrictive than emission limitations and requirements pursuant to OAC rule 3745-31-05(A)(3).



(2) Additional Terms and Conditions

- a. The hourly particulate limitation of 0.41 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

[Authority for term 3745-77-07(A)(1)]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.

[Authority for term 3745-77-07(A)(1)]

- (2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.



In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:
  - a. the amount of soybeans processed; and
  - b. the rolling, 12-month summation of the amount of soybeans processed.
- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section b)(2); and
  - b. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]



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- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in section “(3)a.” (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section “(3)a.” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section “(3)a.” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.41 lb/hr PE

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:



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HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (125 tons per hour);

Ef = Emission factor, in pounds per ton processes, (3.3 lbs/ton uncontrolled from PTI application);

Ce = Control efficiency, in percent reduced, (99.9%).

Applicable Compliance Method:

Compliance is based on the maximum process capacity for this emissions unit is 125 tons per hour and the use of an enclosure and fabric filter system. Prior to the initiation of any modification of this emissions unit or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

c. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**11. P010, FLAKERS**

**Operations, Property and/or Equipment Description:**

Flaker equipped with enclosure and cyclones

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	The particulate emissions (PE) shall not exceed 3.32 lb of per hour.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	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) Additional Terms and Conditions

a. The hourly particulate limitation of 3.32 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

(1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.



- (2) The emissions from this emissions unit shall be vented to cyclones at all times the emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
    - a. the amount of soybeans processed; and
    - b. the rolling, 12-month summation of the amount of soybeans processed.
  - (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

3.32 lbs of particulate emissions (PE)/hr

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (113.17 tons per hour, from PTI 05-07365 review, in 1995);

Ef = Emission factor, in pounds per ton processes, (0.57 lbs/ton uncontrolled from old AP-42 Table 6.4-6, used in PTI 05-07365 review);



Ce = Control efficiency, in percent reduced, (95%).

Applicable Compliance Method:

Compliance is based on the maximum process capacity for this emissions unit is 113.17 tons per hour and the use of an enclosure and a cyclone system. Prior to the initiation of any modification of this emissions unit or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

c. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**12. P011, HULL AND POD GRINDING**

**Operations, Property and/or Equipment Description:**

Hull Grinder equipped with enclosure and filter system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	0.02 lb of particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this facility shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The emission limitations and requirements specified by this rule is less restrictive than emission limitations and requirements pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emission limitations and requirements specified by this rule is less restrictive than emission limitations and requirements pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The hourly particulate limitation of 0.02 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.



c) Operational Restrictions

- (1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.
- (2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;



- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:
  - a. the amount of soybeans processed; and
  - b. the rolling, 12-month summation of the amount of soybeans processed.
- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.



The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section b)(2); and
  - b. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;



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- b. an identification of each incident of deviation described in section “(3)a.” (above) where a prompt investigation was not conducted;
- c. an identification of each incident of deviation described in section “(3)a.” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in section “(3)a.” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.02 lb/hr PE

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (8.1 tons per hour, from PTI 05-07365 review, in 1995);

Ef = Emission factor, in pounds per ton processes, (2.0 lbs/ton uncontrolled from old AP-42 Table 6.4-6, used in PTI 05-07365 review);

Ce = Control efficiency, in percent reduced, (99.9%).

Applicable Compliance Method:

Compliance will be assumed as long as the control system is maintained in proper working order and there are no chronic high visible emissions observed



during the scheduled visible emissions observations are required by section d)(3) of this permit.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

c. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**13. P012, CONDITIONER**

**Operations, Property and/or Equipment Description:**

Soybean Conditioner equipped with enclosure and cyclone

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	3.5 lb of particulate emissions (PE) per hour.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	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) Additional Terms and Conditions

a. The hourly particulate limitation of 3.5 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

(1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.



- (2) The emissions from this emissions unit shall be vented to cyclones at all times the emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
    - a. the amount of soybeans processed; and
    - b. the rolling, 12-month summation of the amount of soybeans processed.
  - (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

3.5 lbs of particulate emissions (PE)/hr

The above allowable is based on the following equation:

$$HER = (Mc \times Ef)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (113.2 tons per hour, from PTI 05-07365 review in 1995); and

Ef = Emission factor, in pounds per ton processes, (0.10 lbs/ton uncontrolled Stack test on June 16, 1988).



Applicable Compliance Method:

Compliance will be assumed as long as the control system is maintained in proper working order and there are no chronic high visible emissions observed during the scheduled visible emissions observations are required by section d)(2) of this permit.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(1) of this permit shall be used to determine compliance with the usage restriction above.

c. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**14. P015, MEAL GRINDING & SIFTING**

**Operations, Property and/or Equipment Description:**

Meal grinding and sifting equipped with cyclone and filter system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  Particulate Emissions (PE) shall not exceed 0.19 lbs of particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.  The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The hourly particulate limitation of 0.19 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

(1) This emissions unit shall be equipped with a filter system that minimizes and/or eliminates the release of particulate emissions.

(2) The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the “soybean oil-soybean flake separation process”<sup>1</sup>:

- a. the company name and identification number for each liquid organic material “added”<sup>2</sup>;
- b. the amount of each liquid organic material added, in gallons;
- c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
- d. the amount of VOC emissions from the added liquid organic materials , tons per month, (the sum of: [(“b” x “c”)/2000]); and
- e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month (“d”) plus the total amount of VOC emissions for (“d”) in the 11 previous calendar months).

<sup>1</sup>. The “soybean oil-soybean flake separation process” is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.



2. The “added” liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the amount of soybeans processed, in tons; and
  - b. the rolling, 12-month summation of the amount of soybeans processed, in tons.
- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less



frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month;
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period; and
  - c. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons;

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in section "(2)a." (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section "(2)a." where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section "(2)a." where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.



These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) **Testing Requirements**

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. **Emission Limitation:**

50 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

**Applicable Compliance Method:**

Compliance is based on the monthly records and monitor as required in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is a set maximum monthly rate that would reflect the worst case situation and was defined as part of the BAT determination in PTI 05-07365.

b. **Emission Limitation:**

340 ton of VOC per rolling twelve month period from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

**Applicable Compliance Method:**

Compliance is based on the rolling 12 month summation in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is set as a synthetic minor limitation that allowed for the changes in PTI 05-07365 to be done without triggering Federal Regulation under 40 CFR Part 52, the Prevention of Significant Deterioration (PSD) and the requirement of best availability control technology.



c. Emission Limitation:

0.19 lbs of particulate emissions (PE)/hr

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (90.9 tons per hour, from PTI 05-07365 review, in 1995);

Ef = Emission factor, in pounds per ton processes, (2.0 lbs/ton uncontrolled from old AP-42 Table 6.4-6, used in PTI 05-07365 review);

Ce = Control efficiency, in percent reduced, (99.9%).

Applicable Compliance Method:

Compliance will be assumed as long as the control system is maintained in proper working order and there are no chronic high visible emissions observed during the scheduled visible emissions observations are required by section d) of this permit.

d. If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

e. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section b)(1) of the permit for emissions unit P004 shall be used to determine compliance with the usage restriction above.

g) Miscellaneous Requirements

(1) None.



**15. P016, MEAL SCREENING**

**Operations, Property and/or Equipment Description:**

Meal Screening equipped with enclosure and fabric filter system, PR-10

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-00230) <sup>1</sup> .	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  1.13 pounds of particulate emissions (PE) per hour.
b.	OAC rule 3745-31-05(D) <sup>1</sup> .	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity.
d.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

<sup>1</sup> Combined limitations are based on PTI 05-07365, that covered the modifications throughout this facility. In order to avoid triggering PSD requirements, the facility agreed to federally enforceable limits on its overall hexane (VOC) emissions. Since some hexane may be carried out and emitted in the meal and the soybean oils this emissions unit was included as a possible emission point in the facility-wide hexane (VOC) emission limitation.



(2) Additional Terms and Conditions

- a. The hourly particulate limitation of 1.13 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

- (1) This emissions unit shall be equipped with enclosures that minimize or eliminate fugitive emissions.
- (2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the "soybean oil-soybean flake separation process"<sup>1</sup>:
  - a. the company name and identification number for each liquid organic material "added"<sup>2</sup>;
  - b. the amount of each liquid organic material added, in gallons;
  - c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
  - d. the amount of VOC emissions from the added liquid organic materials , tons per month, (the sum of: [(“b” x “c”)/2000]); and
  - e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month (“d”) plus the total amount of VOC emissions for (“d”) in the 11 previous calendar months).

<sup>1</sup>. The "soybean oil-soybean flake separation process" is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.

<sup>2</sup>. The "added" liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.



- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information



obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month;
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period; and
  - c. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section b)(2).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

50 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

Applicable Compliance Method:

Compliance is based on the monthly records and monitor as required in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is a set maximum monthly rate that would reflect the worst case situation and was defined as part of the BAT determination in PTI 05-07365.



b. Emission Limitation:

340 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

Applicable Compliance Method:

Compliance is based on the rolling 12 month summation in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is set as a synthetic minor limitation that allowed for the changes in PTI 05-07365 to be done without triggering Federal Regulation under 40 CFR Part 52, the Prevention of Significant Deterioration (PSD) and the requirement of best availability control technology.

c. Emission Limitation:

1.13 lb of particulate emissions (PE) per hour

Applicable Compliance Method:

The above limitation was established in PTI 05-00230, which was issued on October 13, 1988, and reflects the maximum potential. Prior to the initiation of any modification of this emissions unit and/or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**16. P018, VEGETABLE OIL EXTRACTION**

**Operations, Property and/or Equipment Description:**

4,500 tons per day soybean oil extraction, which includes the desolventizers and the mineral oil system

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  The VOC emissions from the final process vent shall not exceed 0.045 pounds per ton of meal processed *.
b.	OAC rule 3745-31-05(D)	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-31-05(F) Voluntary Limits	The oilseed solvent loss factor shall not exceed 0.143 gallon per ton of soybean processed based on a 12-month rolling average.
d.	40 CFR, Part 63, Subpart GGGG	The oilseed solvent loss factor specified by this rule is less stringent than the oilseed solvent loss factor established pursuant to OAC rule 3745-31-05(F).  The compliance ratio for hazardous air pollutants (HAP) shall not exceed 1.0 (effective April 12, 2004).



\* This limit is based on PTI 05-06134, that was a synthetic minor, issued final on Sept. 22, 1993. This emission limitation was part of the netting out of PSD requirements for changes to emissions unit P030, 100 tons/hr meal dryer/cooler.

- (2) Additional Terms and Conditions
  - a. None.
- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the "soybean oil-soybean flake separation process":
    - a. the company name and identification number for each liquid organic material "added" ;
    - b. the amount of each liquid organic material added, in gallons;
    - c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
    - d. the amount of VOC emissions from the added liquid organic materials , tons per month, (the sum of: [(“b” x “c”)/2000]); and
    - e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month ("d") plus the total amount of VOC emissions for (“d”) in the 11 previous calendar months).

The "soybean oil-soybean flake separation process" is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.

The "added" liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.

- (2) The permittee shall maintain monthly records of the following:
  - a. total monthly crush, in tons;
  - b. total 12-month rolling rush, in tons;
  - c. monthly solvent loss, in gallons;



- d. 12-month rolling solvent loss, in gallons;
  - e. 12-month rolling malfunction period solvent loss, in gallons;
  - f. monthly adjusted solvent loss (i.e., total solvent losses minus malfunction losses), in gallons; and
  - g. 12-month rolling solvent loss rate, in gallons per ton.
- (3) The permittee shall maintain monthly records of the following information for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined:
- a. the amount of hexane in the inventory at the beginning of each month, in tons;
  - b. the amount of hexane added to the inventory during each month, in tons;
  - c. the amount of hexane in the inventory at the end of each month, in tons;
  - d. the total amount of hexane lost from the hexane inventory for the month, in tons  $\{(a - c) + b\}$ ;
  - e. the rolling, 12-month hexane emissions, in tons;
  - f. the total amount of soybeans processed, in tons; and
  - g. the rolling, 12-month soybean usage rates, in tons.
- (4) Pursuant to 40 CFR Subpart 63.2840, at the end of each operating month, the permittee shall calculate the compliance ratio, comparing the actual HAP loss to the allowable HAP loss, as calculated in the following equations (effective April 12, 2004) [if the compliance ratio is less than or equal to 1.00, the source is in compliance with the solvent and HAP emissions requirements for the previous operating month and/or rolling, 12-months]:
- (5) The following equation (Equation 1 from Subpart 63.2840) shall be used to determine each monthly compliance ratio: Compliance Ratio = actual HAP loss / allowable HAP loss The above equation can also be expressed as a function of total solvent loss as shown in the following equation: Compliance Ratio = (f) x (Actual Solvent Loss) / (0.64) x [(Oilseed) x (SLF)]

Where

f = the weighted average volume fraction of HAP in the solvent received during the operating month, dimensionless

0.64 = the average volume fraction of HAP in solvent in the baseline performance data, dimensionless



Actual Solvent Loss = gallons of actual solvent loss during the operating month

oilseed = tons of soybean processed during the operating month

SLF = the allowable solvent loss factor (gallons/ton) for soybean processing; 0.143 gallon/ton (b(1)c.)

- (6) Pursuant to 40 CFR Subpart 63.2840(b), after the source has processed the listed oilseed for 12 operating months, the permittee shall calculate the compliance ratio at the end of each calendar month for the previous 12 operating months per the following equation (Equation 2 from 40 CFR Subpart 63.2840): Compliance Ratio =  $(f) \times (\text{Actual Solvent Loss}) / (0.64) \times [(Oilseed a \times SLF) + (Oilseed b \times SLF) + \dots (Oilseed n \times SLF)]$

Where

f = the weighted average volume fraction of HAP in the solvent received during the previous 12 operating months

0.64 = the average volume fraction of HAP in solvent in the baseline performance data, dimensionless

Actual Solvent Loss = gallons of actual solvent loss during the previous 12 operating months

Oilseed a...n = tons of soybean processed during the previous 12 operating months

SLF = the allowable solvent loss factor (gallons/ton) for soybean processing; 0.143 gallon/ton ((b)(1)c.)

- (7) Pursuant to 40 CFR Subpart 63.2853, at the end of each calendar month, the permittee shall determine the actual solvent loss, in gallons, for the previous operating month (effective April 12, 2004). The actual solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. After 12 or more operating months have been documented, the permittee shall also determine the rolling, 12-month summation of actual solvent loss, in gallons, by summing the monthly actual solvent loss for the previous 12 operating months. To determine the actual solvent loss from an emissions unit, the permittee shall follow the procedures in the plan for demonstrating compliance. The permittee shall maintain monthly records of the following solvent inventory and usage for the emissions unit:

- a. the dates that define each operating status period during a calendar month;
- b. the emissions unit's operating status, categorized as described in Table 1 of Subpart 63.2853;
- c. the beginning and ending solvent inventory (gallons of extraction solvent in the inventory on the first and last day of each normal operating period);
- d. gallons of extraction solvent received, purchased, and recovered during the operating period;



- e. solvent inventory adjustments with reasonable justification for the adjustment;
- f. the total solvent loss for each calendar month, regardless of the operating status of the facility's emissions units covered by this standard;
- g. the actual solvent loss, in gallons, for each operating month, calculated as follows:

$$\text{Actual Solvent Loss (gal)} = \text{SOLVB} - \text{SOLVE} + \text{SOLVR} \pm \text{SOLVA}$$

Where:

SOLVB = gallons of solvent in the inventory at the beginning of the operating month;

SOLVE = gallons of solvent in the inventory at the end of the operating month;

SOLVR = gallons of solvent received between the beginning and ending inventory dates of the operating month; and

SOLVA = gallons of solvent added or removed from the extraction solvent inventory during the operating month.

- h. beginning after the first 12 operating months, the rolling, 12-month summation of the actual solvent loss, in gallons.
- (8) In accordance with the procedures described in 40 CFR Subpart 63.2854, at the end of each calendar month, the permittee shall calculate the volume fraction of HAP in the extraction solvent as follows (effective April 12, 2004):
- a. Maintain a record of the volume fraction of each HAP comprising more than 1 percent by volume of the extraction solvent in each delivery of solvent, including solvent recovered from off-site oil, determined as follows:
    - i. EPA Method 311 of Appendix A of Part 63, a material safety data sheet, the manufacturer's certificate of analysis\*, or an approved alternative method shall be used to determine the HAP content of each delivery of the extraction solvent (hexane); and/or
    - ii. the Administrator/Director may require a test using EPA Method 311 to confirm the reported HAP content in the extraction solvent.

\* a certificate of analysis shall list the test method(s) and analytical results that determine the chemical properties of the solvent and the volume percentage of all HAP components present in the solvent, at quantities greater than 1 percent by volume



- (9) Calculate the weighted average volume fraction of HAP in the extraction solvent each operating month:
- a. the weighted average volume fraction of HAP for an operating month shall include all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery; and
  - b. the monthly weighted average volume fraction of HAP shall be determined by summing the products of the HAP volume fraction of each delivery, and the volume of each delivery, and dividing the sum by the total volume of all deliveries as expressed in the following equation:

$$\text{HAPavg} = (\text{Ra} \times \text{Ca}) + (\text{Rb} \times \text{Cb}) + \dots (\text{Rn} \times \text{Cn}) / (\text{total received})$$

Where:

HAPavg = Monthly weighted average HAP content of extraction solvent (volume fraction);

a...n = gallons of extraction solvent received in each delivery a...n;

Ca...n = the volume fraction of HAP in extraction solvent delivery a...n; and

total received = total gallons of extraction solvent received since the end of the previous operating month.

- (10) Calculate the volume fraction of HAP in the extraction solvent, as a weighted average, for the previous 12 operating months; calculated by summing the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and dividing by the total volume of solvent received for the 12 operating months, using the following formula:

$$\text{HAPavg} = (\text{Ra} \times \text{Ca}) + (\text{Rb} \times \text{Cb}) + \dots (\text{Rn} \times \text{Cn}) / (\text{total received})$$

Where:

HAPavg = 12-month weighted average HAP content of extraction solvent (volume fraction);

Ra...n = gallons of extraction solvent received in each delivery a...n;

Ca...n = the volume fraction of HAP in extraction solvent delivery a...n total received = total gallons of extraction solvent received during the previous 12 operating months.

- (11) In accordance with the procedures described in 40 CFR Subpart 63.2855, at the end of each calendar month, the permittee shall determine the quantity of oilseed processed, in tons, for the previous operating month (effective April 12, 2004). The quantity of oilseed processed shall be determined on an as received basis as defined in Subpart 63.2855. After 12 or more operating months have been documented, the permittee shall also determine the rolling, 12-month summation of the quantity of oilseed processed, in tons, by summing the monthly quantity of oilseed processed figures for the previous 12



operating months. To determine the quantity of oilseed processed, the permittee shall follow the procedures in the plan for demonstrating compliance. The permittee shall maintain monthly records of the following:

- a. the dates that defines each operating status period during a calendar month;
- b. the source operating status, categorized as described in Table 1 of Subpart 63.2853;
- c. the beginning and ending inventory for each oilseed, (tons of oilseed in the inventory on the first and last day of each normal operating period);
- d. the tons of each oilseed received;
- e. oilseed inventory adjustments with reasonable justification for the adjustment;
- f. the total quantity of each oilseed type processed during a normal operating periods recorded within a calendar month, calculated as follows:

$$\text{Monthly Quantity of Each Oilseed Processed (tons)} = \text{SEEDB} - \text{SEEDE} + \text{SEEDR} \pm \text{SEEDA}$$

Where:

SEEDB = tons of oilseed in the inventory at the beginning of normal operating month;

SEEDE = tons of oilseed in the inventory at the end of normal operating month;

SEEDR = tons of oilseed received during the operating month;

SEEDA = tons of oilseed added or removed from the oilseed inventory during the operating month; and

the rolling, 12-month summation of the quantities of oilseed processed, in tons.

- (12) For each operating month, the permittee shall maintain records of the following information (effective April 12, 2004):
  - a. the gallons of extraction solvent received in each delivery;
  - b. the calculated volume fraction of HAP, as a weighted average, in the extraction solvent;
  - c. beginning after the first 12 operating months, the calculated volume fraction of HAP, as weighted average, in the extraction solvent for the previous 12 operating months;
  - d. the actual solvent loss, as calculated;



- e. beginning after the first 12 operating months, the actual solvent loss, as calculated, for the previous 12 operating months;
  - f. the amount of soybean material processed, in tons;
  - g. beginning after the first 12 operating months, the rolling, 12-month summation of soybean material processed, in tons. Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative soybean throughput, in tons, for each calendar month;
  - h. the monthly compliance ratio;
  - i. beginning after the first 12 operating months, the compliance ratio for the previous 12 operating months; and
  - j. the oilseed solvent loss factor, i.e., (e) / (g).
- (13) The permittee shall maintain monthly records of the following information on this emissions unit:
- a. the amount of soybean meal processed, in tons;
  - b. the amount of solvent (hexane) added, in tons;
  - c. the estimated solvent (hexane) loss soybean extraction, in tons, (the sum of: ["b" x 80%<sup>1</sup>]); and
  - d. VOC emission rate, in pounds per ton of meal processed, (the sum of: [{"a' x 2000} / "c"])\*.

<sup>1</sup>. The 80% is based on information provided to Ohio EPA SWDO by Mr. Keith Kuhlman, of Cargill, in June 1993.

\* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month;
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period;
  - c. all exceedances of the oilseed solvent loss factor of 0.143 gallon/ton of soybean processed; and



- d. all exceedances of the VOC emissions rate of 0.045 pounds per ton of meal processed\*.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

\* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) Prior to performing a significant modification as defined in Subpart 63.2872, the permittee must submit the following:
  - a. Pursuant to Subpart 63.2860(c), the permittee shall submit an initial notification to Ohio EPA Southwest District Office 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification, and include the following:
    - i. the expected startup date of the modified source; and
    - ii. a description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors, desolventizer toasters, and meal dryer coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.
  - b. Pursuant to Subpart 63.2860(c), the permittee shall submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the following:
    - i. the initial startup date of the modified source;
    - ii. an indication whether you have elected to operate under an initial startup period subject to Subpart 63.2850(d)(2);
    - iii. the anticipated duration of any initial startup period; and
    - iv. a justification for the anticipated duration of any initial startup period.
- (3) Pursuant to 40 CFR Subpart 63.2860(d), the permittee shall submit a notification of compliance status to the Ohio EPA, Southwest District Office no later than 60 days after determining the initial 12 operating months compliance ratio. For existing sources, the notification shall be due no later than 50 calendar months after the effective date of



these NESHAP or June 12, 2005. For new or modified sources, the notification shall be due no later than 20 calendar months after initial startup. It shall be signed by the official responsible for facility compliance, who shall certify its accuracy, attesting to whether the affected emissions units are in compliance. This notification shall include the following:

- a. the name and address of the permittee;
  - b. the physical address of the vegetable oil production process;
  - c. each listed oilseed type processed during the previous 12 operating months;
  - d. each HAP identified under Subpart 63.2854(a), as being present in concentrations greater than 1 percent by volume, in each delivery of solvent received during the 12 operating months period used for the initial compliance determination;
  - e. a statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source; and
  - f. a compliance certification indicating whether the facility was in compliance with all of the requirements of this subpart, throughout the 12 operating months used for the initial compliance determination. This notification must include the following:
    - i. certification that the plan for demonstrating compliance (as described in Subpart 63.2851) and SSM plan (as described in Subpart 63.2852) are complete and available on-site for inspection;
    - ii. certification that procedures are being followed as described in the plan for demonstrating compliance; and
    - iii. certification that the compliance ratio is less than or equal to 1.00.
- (4) Pursuant to 40 CFR Subpart 63.2861(a), the permittee shall submit an annual compliance certification to the Ohio EPA, Southwest District Office 12 calendar months after the submission of the notification of compliance status. The annual compliance certification provides the compliance status for each operating month during the 12 calendar month period. The report shall be due 60 days after the end of each 12-month period. This notification shall include the following:
- a. the name and address of the permittee;
  - b. the physical address of the vegetable oil production process;
  - c. each listed oilseed type processed during the 12 calendar months period covered by the report;
  - d. each HAP identified under Subpart 63.2854(a), as being present in concentrations greater than 1 percent by volume, in each delivery of extraction solvent received during the 12 calendar months period covered by the report;



- e. a statement designating the facility as a major source of HAP or a demonstration that the source qualifies as an area source; and
  - f. a compliance certification to indicate whether the facility was in compliance for each compliance determination made during the 12 calendar months period covered by the report, which shall include the following:
    - i. certification that the procedures described in the plan for demonstrating compliance have been followed during the reporting period; and
    - ii. certification that the compliance ratio was less than or equal to 1.00.
- (5) Pursuant to 40 CFR Subpart 63.2861(b), the permittee shall submit deviation notification reports, to Ohio EPA Southwest District Office, for each compliance determination in which the compliance ratio exceeds 1.00 (effective April 12, 2004). The deviation notification report shall be submitted by the end of the month following the calendar month in which it is determined the deviation occurred. This deviation report shall include the following:
- a. the name and address of the permittee;
  - b. the physical address of the vegetable oil production process;
  - c. each listed oilseed type processed during the 12 operating months period in which the deviation occurred; and
  - d. the ratio comprising the deviation, as calculated in Section A.III.1.
- (6) Pursuant to 40 CFR Subpart 63.2861(c), if the permittee chooses to operate the emissions unit under an initial startup period subject to Subpart 63.2850(c)(2) or (d)(2) or a malfunction period subject to Subpart 63.2850(e)(2), the permittee shall submit a periodic Startup, Shutdown, and Malfunction (SSM) report, to Ohio EPA, Southwest District Office, by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The SSM report must include the following:
- a. the name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan;
  - b. a description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period; and
  - c. an estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.
- (7) Pursuant to 40 CFR Subpart 63.2861(d), the permittee shall submit an Immediate Startup, Shutdown, and Malfunction (SSM) report, to Ohio EPA Southwest, District Office, if a startup, shutdown, and/or malfunction event is not conducted as specified in the facility's SSM plan. The Immediate SSM report consists of a telephone call or



facsimile transmission to Ohio EPA, Southwest District Office within 2 working days after starting actions inconsistent with the facility SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the following:

- a. the name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan;
- b. a description and date of the SSM event, its duration, and reason it qualifies as a SSM; and
- c. an estimate of the solvent loss for the duration of the SSM event with supporting documentation.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

50 tons OC per month

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in section in d) of the terms and conditions of this permit.

b. Emission Limitation:

340 tons OC per rolling, 12-month summation (for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in section in d) of the terms and conditions of this permit.

c. Emission Limitations:

The oilseed solvent loss factor shall not exceed 0.143 gallon per ton of soybean processed.

The compliance ratio for HAPs shall not exceed 1.0.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in sections in d) of the terms and conditions of this permit.



d. Emission Limitations:

The VOC emissions shall not exceed 0.045 pounds per ton of meal processed\*.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in sections in d) of the terms and conditions of this permit.

\* (Based on netting out of PSD in PTI 05-06134, issued for emissions unit P030 on Sept. 22, 1993).

g) Miscellaneous Requirements

(1) None.



**17. P024, ASPIRATOR**

**Operations, Property and/or Equipment Description:**

ASPIRATOR - SHARED CD AND STACK WITH P004

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	Particulate Emissions (PE) shall not exceed 0.98 lbs of particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The amount of soybeans processed through this facility shall not exceed 945,000 tons per rolling, 12-month summation.
c.	OAC rule 3745-17-07(A)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The hourly particulate limitation of 0.98 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.



c) Operational Restrictions

- (1) This emissions unit shall be equipped with a cyclone and filter system that minimizes and/or eliminates the release of particulate emissions.
- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.
- (3) The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse 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 the baghouse on a daily basis.
- (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the



emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

- (3) The permittee shall maintain monthly records of the following information for this facility:
  - a. the amount of soybeans processed, in tons; and
  - b. the rolling, 12-month summation of the amount of soybeans processed, in tons.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons;

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in section "(2)a." (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section "(2)a." where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section "(2)a." where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.



If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.98 lbs of particulate emissions (PE)/hr

The above allowable is based on the following equation:

$$HER = (Mc \times Ef) \times (1 - Ce)$$

Where:

HER = Hourly emission rate, in pounds per hour;

Mc = Maximum throughput, in tons per hour, (121.25 tons per hour);

Ef = Emission factor, in pounds per ton processes, (4.01 lbs/ton uncontrolled from PTI 05-07635 information and calculation sheet); and

Ce = Control efficiency, in percent reduced, (99.8% from PTI 05-07635 information and calculation sheet).

Applicable Compliance Method:

Compliance is based on the maximum process capacity for this emissions unit at 121.25 tons per hour and the use of a cyclone and the data from PTI 05-07635 review. Prior to the initiation of any modification of this emissions unit or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.



If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d) of the permit for shall be used to determine compliance with the usage restriction above.

g) Miscellaneous Requirements

(1) None.



**18. P030, DRYER/COOLER EX-2**

**Operations, Property and/or Equipment Description:**

100 tons/hr meal dryer/cooler EX-2

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-06134 <sup>1</sup> )	<p>The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.</p> <p>The VOC emission rate from this emissions unit shall not exceed 23.6 pounds per hours nor 0.236 pounds per ton of meal processed.</p> <p>The particulate emission (PE) rate from this emissions unit shall not exceed 4.2 pounds per hour nor 0.042 pounds per ton of meal processed.</p> <p>The PM10 emissions from this emissions unit shall not exceed 2.52 pounds per hour.</p>
b.	OAC rule 3745-31-05(D) (to avoid PSD requirements <sup>1</sup> )	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation specified by OAC rule 3745-31-05(A)(3).

<sup>1</sup> Overall facility-wide VOC/OC emissions is from PTI 05-07365 that was a synthetic minor to avoid PSD requirements and was issued final on August 16, 1995. This emissions unit was included in the limitations in order to allow for the modifications without triggering PSD and BACT requirements.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The amount of meal processed in this emissions unit shall not exceed 100 tons per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the "soybean oil-soybean flake separation process"<sup>1</sup>:

- a. the company name and identification number for each liquid organic material "added"<sup>2</sup>;
- b. the amount of each liquid organic material added, in gallons;
- c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
- d. the amount of VOC emissions from the added liquid organic materials, tons per month, (the sum of: [(*"b"* x *"c"*)/2000]); and
- e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month ("*d*") plus the total amount of VOC emissions for ("*d*") in the 11 previous calendar months).

<sup>1</sup> The "soybean oil-soybean flake separation process" is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.

<sup>2</sup> The "added" liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.



- (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

- (3) The permittee shall maintain monthly records of the following information for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined:
- a. the amount of hexane in the inventory at the beginning of each month, in tons;
  - b. the amount of hexane added to the inventory during each month, in tons;
  - c. the amount of hexane in the inventory at the end of each month, in tons;



- d. the total amount of hexane lost from the hexane inventory for the month, in tons  $\{(a - c) + b\}$ ;
  - e. the rolling, 12-month hexane emissions, in tons;
  - f. the total amount of soybeans processed, in tons;
  - g. the rolling, 12-month soybean usage rates, in tons; and
  - h. the rolling, 12-month average hexane loss, in percent by weight of soybeans processed  $[(e/g) \times 100\%]$ .
- (4) The permittee shall collect and record the following information each day for this emissions unit:
- a. the amount of meal processed, in tons;
  - b. the total number of hours the emissions unit was in operation;
  - c. the average amount of meal processed (a/b), in tons per hour (average);
  - d. the average hourly PE emission rate, i.e.,  $(c) \times (0.042 \text{ lb/ton}^1)$ , in pounds/hour (average);
  - e. the average hourly PM10 emissions rate, i.e.,  $(d) \times (0.60^2)$ , in pounds/hour (average); and
  - f. the average hourly VOC rate, i.e.  $(c) \times (0.236 \text{ lbs/ton}^3)$ , in pounds/ hour (average).

<sup>1</sup> emission factor is based on PTI 05-06134, requirements.

<sup>2</sup> 60% of the PE are assumed to be 10 micrometers in diameter or smaller

<sup>3</sup> emission factor is based on PTI 05-06134, requirements.

The above emissions factors are based on PTI 05-06134. These emission rates may be adjusted due to stack test results.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month;
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period;



- c. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period;
- d. all exceedances of the hourly amount of meal processed of 100 tons (average); and
- e. all exceedances of the hourly PM10 emissions rate of 3.15 pounds.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) **Testing Requirements**

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

50 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

**Applicable Compliance Method:**

Compliance is based on the monthly records and monitor as required in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is a set maximum monthly rate that would reflect the worst case situation and was defined as part of the BAT determination in PTI 05-07365.

- b. **Emission Limitation:**

340 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

**Applicable Compliance Method:**

Compliance is based on the rolling 12 month summation in section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean



flake. The limit is set as a synthetic minor limitation that allowed for the changes in PTI 05-07365 to be done without triggering Federal Regulation under 40 CFR Part 52, the Prevention of Significant Deterioration (PSD) and the requirement of best availability control technology.

c. Emission Limitation:

0.042 lb PE/ton meal

Applicable Compliance Method:

Compliance with the PE limitation shall be determined in accordance with the test requirements under section f) of this permit.

d. Emission Limitation:

4.2 lbs of PE/hr

Applicable Compliance Method:

Compliance shall be determined through the record keeping requirements established in section d) of this permit.

e. Emission Limitation:

2.52 lbs of PM10/hr

Applicable Compliance Method:

Compliance shall be determined through the record keeping requirements established in section d) of this permit.

If required, compliance with the PM10 emission limitation shall be determined in accordance with Methods 201 or 202 of 40 CFR, Part 60, Appendix A.

f. Emission Limitation:

0.236 lb VOC/ton meal

Applicable Compliance Method:

Compliance with the VOC limitation shall be determined in accordance with the test requirements under section f) of this permit.

g. Emission Limitation:

23.6 lbs of VOC/hr

Applicable Compliance Method:

Compliance shall be determined through the record keeping requirements established in section d) of this permit.



h. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

(2) 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 approximately 2.5 years after permit issuance and within 6 months prior to permit renewal;
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC, of 0.236 pounds per ton of meal processed;
- c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions (PE), of 0.042 pounds per ton of soybeans processed;
- d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
  - i. VOC: Methods 25 of 40 CFR Part 60, Appendix A; and
  - ii. PE: Methods 1-5 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- e. 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 appropriate Ohio EPA District Office or local air agency.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).
- g. Personnel from the appropriate Ohio EPA District Office or local air agency 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.



- h. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

(Term ID:K2:01/23/07)

- g) Miscellaneous Requirements

- (1) None.



19. P031, VEGETABLE OIL REFINERY

Operations, Property and/or Equipment Description:

P031 - Soybean Oil Refinery

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-11781)	<p>Volatile Organic compounds (VOC) emissions shall not exceed 13.0 lbs/hour, as a monthly average.</p> <p>VOC emissions shall not exceed 4.84 tons/month.</p>
b.	OAC rule 3745-31-05(D) (to avoid PSD requirements <sup>1</sup> .)	VOC emissions shall not exceed 55.0 tons per rolling, 12-month summation.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The maximum annual production rate for this emissions unit shall not exceed 550,000 tons of soybean oil processed, based upon a rolling, 12-month summation of the monthly production rates.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the month and year;

b. the amount of in-house soybean oil processed, in tons/month;

c. the amount of outside soybean oil processed, in tons/month;



- d. the combined amount of in-house and outside soybean oil processed, i.e., [(b) + (c)], in tons/month;
  - e. the rolling, 12-month summation of in-house and outside soybean oil processed, in tons;
  - f. the average hexane content of the in-house soybean oil, in ppm, with the average determined from the testing results from Section d)(2) below and the volume each sample represents;
  - g. the average hexane content of the outside soybean oil, in ppm, with the average determined from the testing results from Section d)(3) below and the volume each sample represents;
  - h. the total VOC, hexane, emissions from soybean oil, i.e., [(b)\*(f) + (c)\*(g)], in tons;
  - i. the rolling, 12-month summation of VOC, hexane, emissions from soybean oil, in tons;
  - j. the total number of hours the emissions unit was in operation; and
  - k. the average hourly VOC emissions from soybean oil, i.e., [(h)/(j)], in pounds per hour.
- (2) On a daily basis, the permittee shall collect a representative sample of in-house oil processed through this emissions unit. At the end of each calendar month, the daily samples shall be combined into a composite sample and analyzed to determine the average hexane content of the in-house oil using a gas chromatograph (GC). The test results shall be in parts per million (ppm). The GC shall be operated and maintained in accordance with the manufacturer's instructions.
- (3) The permittee shall collect a representative sample of each shipment of outside soybean oil received for processing through this emissions unit. At the end of each calendar month the daily samples shall be combined into a composite sample and analyzed to determine the average hexane content of the outside oil using a GC. The test results shall be in ppm. The GC shall be operated and maintained in accordance with the manufacturer's instructions.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. the average hourly VOC emission rate (13.0 lbs/hr);
  - b. the monthly allowable VOC emission rate (4.84 tons/month);
  - c. the rolling, 12-month VOC emission limitation (55.0 tons/year); and
  - d. the rolling, 12-month production rate limitation (550,000 tons of soybean oil processed).



The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

13.0 lb VOC/hr, based on a monthly average

Applicable Compliance Method:

Compliance with the VOC limitation shall be determined in accordance with the recordkeeping under section d)(1) of this permit.

b. Emission Limitation:

4.84 tons per month

Applicable Compliance Method:

Compliance with the VOC limitation shall be determined in accordance with the recordkeeping under section d)(1) of this permit.

c. Emission Limitation:

55 tons per month

Applicable Compliance Method:

Compliance with the VOC limitation shall be determined in accordance with the recordkeeping under section d)(1) of this permit.

g) Miscellaneous Requirements

(1) None.



**20. P032, MEAL STORAGE TANK WEST (44%)**

**Operations, Property and/or Equipment Description:**

Meal Storage Tank West equipped with filter system (44%)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  0.55 lb particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation specified by OAC rule 3745-31-05(A)(3).



(2) Additional Terms and Conditions

- a. The hourly particulate limitation of 0.55 pounds from this emissions unit, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:



- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.



The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section c)(2); and

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):

- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;



- c. an identification of each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) **Testing Requirements**

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitations:**

0.55 lb PE per hour

**Applicable Compliance Method:**

Compliance may be determined by multiplying the maximum capacity (120 tons/hr) by the emission factor of 0.27 lb PE/ton (from AP-42, Volume I, Fifth Edition, Table 9.11.1-1 (revised 11/95)), and then multiplying by a control factor of (1 - 0.999\*).

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

\* The control efficiency for the baghouse is assumed to be 99.9%.

- b. **Emission Limitation:**

50 tons VOC per month

**Applicable Compliance Method:**

Compliance shall be demonstrated based upon the record keeping requirements established in other emissions units within this facility that limits the monthly processing of meal through this emissions unit.



c. Emission Limitation:

340 tons VOC per rolling, 12-month summation

(for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in other emissions units within this facility that limits the monthly processing of meal through this emissions unit.

d. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**21. P033, MEAL STORAGE TANK EAST (48%)**

**Operations, Property and/or Equipment Description:**

Meal Storage Tank East equipped with filter system (48%)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-07365)	The combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  0.55 lb particulate emissions (PE) per hour.  Visible PE from the stack shall not exceed 10% opacity.
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation specified by OAC rule 3745-31-05(A)(3).



(2) Additional Terms and Conditions

- a. The hourly particulate limitation of 0.55 pounds from this emissions unit is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the "soybean oil-soybean flake separation process"<sup>1</sup>:

- a. the company name and identification number for each liquid organic material "added"<sup>2</sup>;
- b. the amount of each liquid organic material added, in gallons;
- c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
- d. the amount of VOC emissions from the added liquid organic materials, tons per month, (the sum of: [(*b* x *c*)/2000]); and
- e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month ("*d*") plus the total amount of VOC emissions for ("*d*") in the 11 previous calendar months).

<sup>1</sup>. The "soybean oil-soybean flake separation process" is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.

<sup>2</sup>. The "added" liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The



monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate



emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

- (3) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. the combined volatile organic compound (VOC) emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month; and
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period.

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above in section c); and

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.



If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.55 lb PE per hour

Applicable Compliance Method:

Compliance may be determined by multiplying the maximum capacity (120 tons/hr) by the emission factor of 0.27 lb PE/ton (from AP-42, Volume I, Fifth Edition, Table 9.11.1-1 (revised 11/95)), and then multiplying by a control factor of (1 - 0.999\*).

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

\* The control efficiency for the baghouse is assumed to be 99.9%.

b. Emission Limitation:

50 tons VOC per month

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in other emissions units within this facility that limits the monthly processing of meal through this emissions unit.

c. Emission Limitation:

340 tons VOC per rolling, 12-month summation

(for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined).



Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in other emissions units within this facility that limits the monthly processing of meal through this emissions unit.

d. Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



**22. P034, Steam Heated COLUMN GRAIN DRYER #2**

**Operations, Property and/or Equipment Description:**

22 mmBtu/hr column grain dryer with enclosure, settling chamber, and dryer plate

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) <sup>1</sup> (PTI 05-09010)	<p>The combined particulate material (PM) emissions from emissions units P006 and P034 shall not exceed 21.6 of particulate material (PM) per hour.</p> <p>The combined PM10 emissions from emissions units P006 and P034 shall not exceed 5.4 of particulate material (PM) per hour.</p> <p>Visible PE shall not exceed 10% opacity, as a 6-minute average, except as provided by the rule.</p>
b.	OAC rule 3745-31-05(D) (To avoid PSD thresholds and BACT requirements)	<p>The combined particulate material (PM) emissions from emissions units P006 and P034 shall not exceed 56.7 tons per rolling 12-month period.</p> <p>The combined PM10 emissions from emissions units P006 and P034 shall not exceed 14.16 tons per rolling 12-month period.</p> <p>The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR, Part 60, Subpart DD	The emission limitation and requirements specified by this rule is equal to the emission limitation and requirements established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(A)	The emission limitation and requirements specified by this rule is equal to the emission limitation and requirements established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(B)(1)	When combusting gaseous fuels and/or number two fuel oil, the particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

<sup>1</sup>. Combined limitations are based on PTI 05-09010, that covered the installation of emissions unit P034. In order to eliminate any increase in overall facility emissions from the installation of emissions unit P034, Cargill requested that the combined emissions from emissions unit P006 and P034 be regulated to not exceed the limits established in PTI 05-07365 for emissions unit P006.

(2) Additional Terms and Conditions

- a. The combined hourly particulate material limitation of 21.6 pounds from emissions units P006 and P034, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.
- b. The combined hourly PM10 limitation of 5.4 pounds from emissions units P006 and P034, is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) Operational Restrictions

- (1) The permittee shall maintain dryer plate perforations less than or equal to 0.094 inch (2.4 mm) in diameter for this emissions unit.
- (2) This emissions unit shall be equipped with a settling chamber that minimizes and/or eliminates the release of particulate emissions.
- (3) The amount of soybeans processed through this emissions unit shall not exceed 945,000 tons per rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

- (2) The permittee shall maintain monthly records of the following information:
  - a. the amount of soybeans processed; and
  - b. the rolling, 12-month summation of the amount of soybeans processed.
- (3) For each day during which the permittee burns a fuel other than distillate fuel oil or natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month soybean processing limitation of 945,000 tons.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than distillate fuel oil or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1). of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:

Combined emissions from P006 and P034, of 21.6 lbs of particulate material (PM)/hr

The above limitation was established based on the following equation:

$$HER = (M_p \times E_f) \times (1 - C_e)$$

Where:

HER= Hourly emission rate, in pounds per hour;

M<sub>p</sub>= Maximum Process Rate, in tons of grain processed, (180 tons/hr);

E<sub>f</sub>= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

C<sub>e</sub>= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).



Applicable Compliance Method:

Compliance is based on the use and maintenance of the settling chamber and column plate along with the maximum throughput of this emissions unit is 180 tons per hour. Prior to the initiation of any modification of this emissions unit and/or change in control equipment that would cause an increase in the potential emissions from this emissions unit, the modifications would need to be review under appropriate air pollution permit review.

b. Emission Limitation:

Combined emissions from P006 and P034, of 56.7 tons of particulate material (PM)/ rolling 12-month period.

The above limitation was established based on the following equation:

$$\text{AER} = (\text{Mp} \times \text{Ef}) \times (1 - \text{Ce})$$

Where:

AER= Annual emission rate, in pounds per hour;

Mp= Maximum Annual Process Rate, in tons of grain processed, (945,000 tons/rolling 12-month period);

Ef= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

Ce= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the rolling 12-month 945,000 throughput limitation and the recordkeeping requirements in Section d)(2) of this permit.

c. Emission Limitation:

Combined emissions from P006 and P034, of 5.4 lbs of PM10/hr

The above limitation was established based on the following equation:

$$\text{HER} = [(\text{Mp} \times \text{Ef}) \times (1 - \text{Ce})] \times 25\%$$

Where:

HER= Hourly emission rate, in pounds per hour;

Mp= Maximum Process Rate, in tons of grain processed, (180 tons/hr);



Ef= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

Ce= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the use and maintenance of the settling chamber and column plate along with the maximum throughput of this emissions unit is 180 tons per hour. Prior to the initiation of any modification of this emissions unit and/or change in control equipment that would cause an increase in the potential emissions from this emissions unit, the modifications would need to be review under appropriate air pollution permit review.

d. Emission Limitation:

Combined emissions from P006 and P034, of 14.18 tons of PM10/ rolling 12-month period.

The above limitation was established based on the following equation:

$$\text{AER} = [(\text{Mp} \times \text{Ef}) \times (1 - \text{Ce})] \times 25\%$$

Where:

AER= Annual emission rate, in pounds per hour;

Mp= Maximum Annual Process Rate, in tons of grain processed, (945,000 tons/rolling 12-month period);

Ef= emission factor, in pounds of particulate emitted per ton of grain processed, (1.10 lbs per ton, from PTI calculations);

Ce= control efficiency, in percent reduced, (Column plate and settling chamber assumed 89.1% reduced).

Applicable Compliance Method:

Compliance is based on the rolling 12-month 945,000 throughput limitation and the recordkeeping requirements in Section d)(2) of this permit.

e. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(3).



f. Emission Limitation:

When combusting gaseous fuels and/or number two fuel oil, the particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

Compliance is assumed as long as only natural gas and/or number two fuel oil are employed as fuel in this emissions unit. Prior to employing alternative fuels, the permittee may need to process additional air pollution permits to address any changes in the allowable emissions. Compliance will also be assured through the record keeping and reporting requirements under sections d)(3) and e)(3), of this permit.

g. Usage Restriction:

945,000 tons of soybeans/rolling, 12-month summation

Applicable Compliance Method:

The record keeping requirements established in section d)(2) of this permit shall be used to determine compliance with the usage restriction above.

g) Miscellaneous Requirements

(1) None.



**23. P903, TRUCK RECEIVING**

**Operations, Property and/or Equipment Description:**

Soybean truck dump controlled by baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	Hourly particulate emissions (PE) shall not exceed 11.31 pounds.
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)c., below.
c.	OAC rule 3745-31-05(D) (In order to avoid the requirement of PSD)	The PE emissions from this emissions unit shall not exceed 4.5 tons per rolling 12 month period.
d.	40 CFR, Part 60, Subpart DD	Visible PE from fugitive dust shall not exceed 5% opacity.  Visible PE from the stack shall not exceed 0% opacity.
e.	OAC rule 3745-17-08(B)	The use of Reasonably Available Control Measures.  See section b)(2)a., below.
f.	OAC rule 3745-17-07(A) & (B)	The visible particulate emissions (PE) limitation specified by this rule is less stringent than the visible PE limitation established pursuant to 40 CFR, part 60, Subpart DD.
g.	OAC rule 3745-17-11(B) (based on Figure II curve P-1)	Hourly PE shall not exceed 24.6 pounds per hour.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible particulate emissions from this



emissions unit. Such reasonably available control measures shall include an enclosure of the truck receiving facility with the captured emissions vented to a baghouse.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

- c. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

- d. The hourly particulate emission limitation of 11.31 pounds, including fugitives, from this emissions unit is established to reflect the potential emissions from this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.

c) **Operational Restrictions**

- (1) This emissions unit shall be equipped with the following:

- a. Use of a three-sided enclosure on both receiving stations;
- b. Total enclosure on the transferring/conveying system; and
- c. The use of a baghouse filters system.

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

- (3) The amount of material processed through this emissions unit shall not exceed 945,000 tons per rolling 12 month period.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall record and maintain the following monthly information on the operation of this emissions unit:



- a. the amount of material processed, in tons; and
  - b. the total material processed combined rolling, 12-month summation, in tons, (the sum of: the total amount of material processed for the current month ("a") plus the total amount of VOC emissions for ("a") in the 11 previous calendar months).
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse 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 the baghouse on a daily basis.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of recording the pressure drop across the baghouse associated with this emissions unit from daily to weekly recordings if for 2 full quarters records indicate no pressure drop deviations occurred.

The permittee shall revert to daily pressure drop recordings if any pressure drop deviations occur.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from fugitive dust and/or the baghouse stack for 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. The cause of the visible emissions;
  - c. The total duration of any visible emission incident;
  - d. Any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

- e. The permittee shall revert to daily readings if any visible emissions are observed.
- f. For the purpose of this monitoring, the daily checks for visible particulate emissions are not required to be conducted in accordance with Method 9 of 40 CFR, Part 60, Appendix A..

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:



- a. The amount of material processed exceeds 945,000 tons per rolling 12 month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:

- a. Identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit; and
- b. Describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):

- a. Each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- b. An identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
- c. An identification of each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. An identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.

These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitation in Section b (1). of these terms and conditions shall be determined in accordance with the following method:



a. Emission Limitation

11.31 lbs PE/hr.

The above limitation is based on the following equation:

$$HER = Ce + Fe$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

Ce = Controlled emissions, in pounds per hour,

$$Ce = (Er \times Af \times 60 \text{ min/hr}) / 7000$$

Where:

Er = Emission rate from Baghouse, in grains per dry standard cubic feet (dscf), (0.004, from Cargill's calculation sheet); and

Af = Air flow from baghouse, in dscf, (14,750, from Cargill's calculation sheet).

Fe = Fugitive emissions, in pounds per hour,

$$Fe = (Tp \times Ef) \times (1 - Cp)$$

Where:

Tp = Throughput in tons of material processed per hour;

Ef = Emission factor, in pounds of PE emitted per ton of material processed (0.18, worst case from straight truck loadout); and

Cp = Capture efficiency of enclosure and hooding, in percent captured (95% or 0.95, from Cargill's calculation sheet).

Applicable Compliance Method

Compliance shall be assumed based on the maximum process of 1,200 tons per hour and the use of capture and control equipment.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

b. Emission Limitation

24.6 lbs PE/hr.



Effective Date: To be entered upon final issuance

The above limitation is based on the following equation:

$$(A) = 0.439 \times (U)^{0.7493}$$

Where:

A = Allowable Mass Rate of Emissions, in lbs/hr; and

U = Uncontrolled Mass Rate of emissions, in lbs/hr, (216 lbs/hr\*).

$$U = T_p \times E_f$$

Where:

T<sub>p</sub> = throughput, in tons of grain processed per hour, (1,200 tons, from application); and

E<sub>f</sub> = emission factor, in lbs of PE/ton processed, (0.18, worst case from the use of straight trucks).

#### Applicable Compliance Method

Compliance shall be assumed based on the maximum process of 1,200 tons per hour and the use of capture and control equipment. Please note that the hourly rate in section f)(1)a., is more stringent and is based on exist State SIP, which requires BAT determinations for emissions units with “controlled” emission below 10 tons per year. However, the limit under f)(1)a. will become void once and if the 2006 State Sip is approved by the Federal EPA.

If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

#### c. Emission Limitation

4.5 tons PE per rolling 12 month period.

The above limitation is based on the following equation:

$$AER = A_{ce} + A_{fe}$$

Where:

AER = Annual Emission Rate, in tons per rolling 12 month period;

A<sub>ce</sub>\* = Annual controlled emissions, in tons per rolling 12 month period,

$$A_{ce} = [C_e \times (A_{tp} / H_{tp})] / 2000$$

Where:

C<sub>e</sub> = Hour Controlled emission rate, in pounds per hour; and



**Effective Date:** To be entered upon final issuance

Atp = Annual material throughput, in tons, (945,000 ton limitation);

Htp = Hourly material throughput, in tons, (1,200).

\* Based on assumption that controlled emissions are proportional to throughput rather than specific hourly operational rate.

Afe = Fugitive emissions, in pounds per hour,

$$Afe = [(Atp \times Ef) \times (1 - Cp)] / 2000$$

Where:

Atp = Annual material throughput, in tons, (945,000 ton limitation);

Ef = Emission factor, in pounds of PE emitted per ton of material processed (0.18, worst case from straight truck loadout); and

Cp = Capture efficiency of enclosure and hooding, in percent captured (95% or 0.95, from Cargill's calculation sheet).

#### Applicable Compliance Method

Compliance shall be assumed based on the maximum process of 945,000 tons per rolling 12 month period and the use of capture and control equipment.

d. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 0% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

e. Emission Limitation:

Visible PE shall not exceed 5% opacity, from truck unload.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

- (1) None.



**24. P904, RAIL RECEIVING**

**Operations, Property and/or Equipment Description:**

RAIL RECEIVING

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-206)	Visible PE from fugitive dust shall not exceed 5% opacity.  Visible PE from the stack shall not exceed 0% opacity.  The requirements of this rule are equivalent to the requirements specified by OAC rules 3745-17-07, 3745-17-08(B) and 40 CFR, Part 60, Subpart DD.
b.	OAC rule 3745-17-07(A)	The visible particulate emissions (PE) limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR, part 60, Subpart DD.
c.	OAC rule 3745-17-07(B)	The visible particulate emissions (PE) limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR, part 60, Subpart DD.
d.	OAC rule 3745-17-08(B)	See section b)(2)a, below.
e.	OAC rule 3745-17-11(B)	PE shall not exceed 3.38 pounds per hour.
f.	40 CFR, Part 60, Subpart DD	The requirements of this rule are equivalent to the requirements specified by OAC rule 3745-31-05(A)(3).



(2) Additional Terms and Conditions

- a. The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible particulate emissions from this emissions unit. Such reasonably available control measures shall include an enclosure of the truck receiving facility with the captured emissions vented to a baghouse.

c) Operational Restrictions

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from fugitive dust and/or the baghouse stack for 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. the cause of the visible emissions;
- c. the total duration of any visible emission incident; and
- d. any corrective actions taken to eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

For the purpose of this monitoring, the daily checks for visible particulate emissions are not required to be conducted in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse 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 the baghouse on a daily basis.



Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of recording the pressure drop across the baghouse associated with this emissions unit from daily to weekly recordings if for 2 full quarters records indicate no pressure drop deviations occurred.

The permittee shall revert to daily pressure drop recordings if any pressure drop deviations occur.

e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (2) The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following method:
  - a. Emission Limitation:  
  
Visible PE shall not exceed 0% opacity from the stack.  
  
Applicable Compliance Method:  
  
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
  - b. Emission Limitation:  
  
Visible PE shall not exceed 5% opacity from fugitive dust.  
  
Applicable Compliance Method:  
  
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.



c. Emission Limitation:

3.38 lbs PE per hour

Applicable Compliance Method:

To determine the actual worst-case emission rate for PE, the following equation may be used:

$$E = 0.15^* \times U \times [1 - (CE \times RE)]$$

Where:

E = PE rate, in pounds per hour;

U = maximum process throughput weight of 112.5 tons;

CE = capture efficiency of 95% (based upon manufacturer data); and

RE = removal efficiency of 99.9% (based upon manufacturer data).

\* The uncontrolled emission factor for meal loadout is 0.15 lb PE/ton of meal (based upon "Compilation of Air Pollutant Emission Factors," AP-42, Table 9.11.1-1, revised 11/95).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

g) Miscellaneous Requirements

(1) None.



**25. T002, HEXANE TANK #85**

**Operations, Property and/or Equipment Description:**

HEXANE TANK #85, UNDERGROUND HEXANE STORAGE - EMISSIONS INCLUDED IN P018

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-05816)	1.63 tons/year of volatile organic compounds (VOC)
b.	OAC rule 3745-21-09(L)	Exempt, see section b)(2)a.
c.	40 CFR Part 60, Subpart Kb	Exempt, see section b)(2)b.
d.	40 CFR Part 63, Subpart GGGG	The HAP loss from the vegetable oil production process at this facility shall not exceed 0.2 gallon per ton of soybean processed.

(2) Additional Terms and Conditions

a. In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

b. In accordance with 40 CFR 60.110b(d)8, this storage tank is not applicable to 40 CFR Subpart Kb because the tank is vessel subject to subpart GGGG of 40 CFR 63.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) Since this emissions unit is limited based on the entire vegetable oil production process which includes a number of other emissions units at this facility, record keeping will be maintained under the requirements of emissions unit P018.

e) Reporting Requirements

- (1) Since this emissions unit is limited based on the entire vegetable oil production process which includes a number of other emissions units at this facility, compliance reporting will be covered under the requirements of emissions unit P018.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

1.63 tons/year of VOC

Applicable Compliance Method:

The above limitation was established in PTI 05-05816, which was issued on March 31, 1993, and reflects the maximum potential. Prior to the initiation of any modification of this emissions unit and/or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

g) Miscellaneous Requirements

- (1) None.



**26. T003, HEXANE TANK #86**

**Operations, Property and/or Equipment Description:**

HEXANE TANK #86 - EMISSIONS INCLUDED IN P018

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-05816)	1.63 tons/year of volatile organic compounds (VOC)
b.	OAC rule 3745-21-09(L)	Exempt, see section b)(2)a.
c.	40 CFR Part 60, Subpart Kb	Exempt, see section b)(2)b.
d.	40 CFR Part 63, Subpart GGGG	The HAP loss from the vegetable oil production process at this facility shall not exceed 0.2 gallon per ton of soybean processed.

(2) Additional Terms and Conditions

a. In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

b. In accordance with 40 CFR 60.110b(d)8, this storage tank is not applicable to 40 CFR Subpart Kb because the tank is vessel subject to subpart GGGG of 40 CFR 63.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Since this emissions unit is limited based on the entire vegetable oil production process which includes a number of other emissions units at this facility, record keeping will be maintained under the requirements of emissions unit P018.



e) Reporting Requirements

- (1) Since this emissions unit is limited based on the entire vegetable oil production process which includes a number of other emissions units at this facility, compliance reporting will be covered under the requirements of emissions unit P018.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

1.63 tons/year of VOC

Applicable Compliance Method:

The above limitation was established in PTI 05-05816, which was issued on March 31, 1993, and reflects the maximum potential. Prior to the initiation of any modification of this emissions unit and/or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.

g) Miscellaneous Requirements

- (1) None.



**27. Emissions Unit Group -Meal Loadout Operations: P901,P902,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P901	Meal truck loading, equipped with enclosure and a baghouse
P902	Meal and white flake rail loading controlled by baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 05-00230) <sup>1</sup> .	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 50 tons per month.  Combined hourly particulate emissions (PE) from emissions unit P901 and P902 shall not exceed 0.90 pounds per hour.
b.	OAC rule 3745-31-05(D) (to avoid PSD requirements) <sup>1</sup> .	The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 shall not exceed 340 tons per rolling 12 month period.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation specified by OAC rule 3745-31-05(A)(3).

<sup>1</sup> Overall facility-wide VOC/OC emissions is from PTI 05-07365 that was a synthetic minor to avoid PSD requirements and was issued final on August 16, 1995. This emissions unit was included in the limitations in order to allow for the modifications without triggering PSD and BACT requirements.



- (2) Additional Terms and Conditions
  - a. The combined hourly particulate limitation of 0.9 pounds from these emissions units is established to reflect the combined potential emissions from these emissions units. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with this limitation.
- c) Operational Restrictions
  - (1) This emissions unit shall be equipped with an enclosure and filter system.
  - (2) The pressure drop across the baghouse shall be maintained within the range established by the permittee within 60 days of commencement of operation of the source. The pressure drop range will be established based on manufacturer recommendations and good engineering practices.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall record and maintain the following monthly information on the liquid organic material added to the "soybean oil-soybean flake separation process"<sup>1</sup>.
    - a. the company name and identification number for each liquid organic material "added"<sup>2</sup>;
    - b. the amount of each liquid organic material added, in gallons;
    - c. the volatile organic compound (VOC) content of each liquid organic materials added, in pounds of VOC per gallon;
    - d. the amount of VOC emissions from the added liquid organic materials, tons per month, (the sum of: [(*b* x *c*)/2000]); and
    - e. the total combined rolling, 12-month summation VOC emissions, in tons, (the sum of: the total amount of VOC emissions for the current month ("*d*") plus the total amount of VOC emissions for ("*d*") in the 11 previous calendar months).
  1. The "soybean oil-soybean flake separation process" is made up of the following emissions units P015, P016, P018, P030, P032, P033, P901, and P902. These emissions units are assumed to be the location of liquid organic material (hexane) loss from the process of separating the soybean oil and the soybean flake.
  2. The "added" liquid organic material is the amount of additional liquid organic material that the permittee will need to add to the process to make-up for the amount lost in the operation. This does not reflect the actual usage seen much of the liquid organic material is recovered and recycled back into the process.
- (2) 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 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 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 minimize or eliminate the visible emissions.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of visual observations from daily to weekly readings for this emissions unit if for 2 full quarters the facility's visual observations indicate no visible emissions.

The permittee shall revert to daily readings if any visible emissions are observed.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal 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 frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-77-07(A)(3)]

- (3) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse 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 the baghouse on a daily basis.

Notwithstanding the frequency of the monitoring requirements specified in this section, the permittee may reduce the frequency of recording the pressure drop across the baghouse associated with this emissions unit from daily to weekly recordings if for 2 full quarters records indicate no pressure drop deviations occurred.

The permittee shall revert to daily pressure drop recordings if any pressure drop deviations occur.



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 50 tons per month; and
  - b. The combined VOC emissions from emissions units P015, P016, P018, P030, P032, P033, P901, and P902 exceed 340 tons per rolling 12 month period.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following information concerning the operation of the baghouse during the operation of the emissions unit(s):
  - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - b. an identification of each incident of deviation described in section "(3)a." (above) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in section "(3)a." where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in section "(3)a." where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations/excursions occurred during a calendar quarter, the report shall so state that no deviations occurred during the reporting period.



These quarterly reports shall be submitted by February 15, May 15, and August 15 and November 15 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the coal shipments received during the previous calendar quarters.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

50 ton of VOC per month from emissions units P015, P016, P018, P030, P032, P033, P901, and P902, combined.

Applicable Compliance Method:

Compliance is based on the monthly records and monitor as required in Section d) of this permit. These emissions reflect the amount of liquid organic material (hexane) that is lost during the process of separating the soybean oil from the soybean flake. The limit is a set maximum monthly rate that would reflect the worst case situation and was defined as part of the BAT determination in PTI 05-07365.

b. Emission Limitation:

340 tons VOC per rolling, 12-month summation

(for emissions units P015, P016, P018, P030, P032, P033, P901 and P902, combined).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements established in section in d) of the terms and conditions of this permit.

c. Emission Limitation:

0.9 lbs of particulate emissions (PE)/hr, combined from P901 and P902

Applicable Compliance Method:

The above limitation was established in PTI 05-00230, which was issued on October 13, 1988, and reflects the maximum potential. Prior to the initiation of any modification of this emissions unit and/or its control system that would cause an increase in the potential emissions, the modifications would need to be review under appropriate air pollution permit review.



If required, compliance with the PE limitation shall be determined in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

Visible PE from the stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.