



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

3/18/2015

Certified Mail

Thomas Bottorf
Titanium Metals Corporation
100 Titanium Way
P.O. Box 309
Toronto, OH 43964-0309

Facility ID: 0641180064
Permit Number: P0089765
County: Jefferson

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, The Herald Star. 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 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, Southeast District Office
2195 Front Street
Logan, OH 43138

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, Southeast District Office at (740)385-8501.

Sincerely,

Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-SEDO; Pennsylvania; West Virginia

PUBLIC NOTICE
3/18/2015 Issuance of Draft Air Pollution Title V Permit

Titanium Metals Corporation
100 Titanium Way, P.O. Box 309
Toronto, OH 43964-0309
Jefferson County

FACILITY DESC.: Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding

PERMIT #: P0089765

PERMIT TYPE: Renewal

PERMIT DESC: Title V renewal permit for a titanium processing facility, including titanium shaping, grinding/sawing, pickling and heating furnaces. .

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: Kristin Parrish, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501



Statement of Basis
 Titanium Metals Corporation
 Permit Number: P0089765
 Facility ID: 0641180064

Statement of Basis For Air Pollution Title V Permit

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|---|--|
| Facility ID: | 0641180064 |
| Facility Name: | Titanium Metals Corporation |
| Facility Description: | Titanium processing. |
| Facility Address: | 100 Titanium Way, Toronto, OH 43964-0309 |
| Permit #: | P0089765, Renewal |
| <p>This facility is subject to Title V because it is major for:</p> <p> <input type="checkbox"/> Lead <input type="checkbox"/> Sulfur Dioxide <input type="checkbox"/> Carbon Monoxide <input 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 <input checked="" type="checkbox"/> Hydrofluoric Acid (HF) </p> | |

A. Standard Terms and Conditions

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| 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) | P039: Ch. 31 PTI P0105313, issued 6/2/2011 – allows unit to produce longer titanium sheets; Admin. Mod. PTI P0117610, issued 10/28/2014 – updated BAT format. |
| 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- | N/A |



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| 08(C)(3) | |
| 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) | <p><u>B009</u>: added detailed citation of NSPS Dc applicability, removed 17-08 emissions limit b/c no fugitives,</p> <p><u>P003, P037, P041, P050, P057</u>: corrected 17-11 lb/hr PE stack limit based on corrected max. hrly. production rate.</p> <p><u>P020, P021, P046, P047 and P051</u>: removed 18-06 emissions limit b/c not applicable, NG fuel only.</p> <p><u>P054, P056, P057, P067</u>: corrected EU name.</p> <p><u>P054, P056, P058, P901, P902, P903</u>: updated 17-11 lb/hr PE stack limit based on stack test results.</p> <p><u>EU P077</u>: Admin. Mod. PTI P0116290, issued 3/5/2014 – added short term (lb/hr) BAT limits not incorporated into original PTI.</p> <p><u>EU P093</u>: PTI, issued 12/3/2012 - new EU; Admin. Mod. PTI P0117610, issued 10/28/2014 – updated BAT format.</p> <p><u>EU P904</u>: PTI 06-08385, issued 6/12/2008 – new EU.</p> |
| 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 | |
| B.1 | 77-07(C) | N | List of facility-wide terms and conditions which are enforceable under state law only. |
| B.2 | N | 40 CFR 60 Subpart Dc | List of EUs subject to the NSPS. |
| B.3 | N | 40 CFR | List of insignificant EUs with applicable requirements. |



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| | | Part 77 | |
| B.4 | 3745-15-05 | N | List of de minimis EUs. |

C. Emissions Unit Terms and Conditions

| Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement Misc = miscellaneous requirements | | | | | | | | | | | | | |
|--|--|--------------|-----------------|----|----|---|-----|---|----|----|----|------|--|
| EU(s) | Limitation | Basis | | ND | OR | M | ENF | R | Rp | ET | St | Misc | Comments |
| | | SIP (3745-) | Other (BAT/Fed) | | | | | | | | | | |
| B009 | 0.12 lb/hr, 0.05 TPY SO ₂ , 2.34 lbs/hr, 9.23 TPY NO _x , 1.72 lbs/hr, 6.79 TPY CO, 0.113 lb/hr, 0.445 TPY VOC, 0.0039 lb/hr, 0.154 TPY PE, 5% opacity, 6 min avrg. | N | Y | Y | Y | M | N | Y | Y | N | N | N | Basis: OAC rule 3745-31-05(A)(3); BAT PTI 06-91602, issued 10/30/03 ET: Limitations based on PTE with maximum annual NG usage of 160,130,000 cubic ft. ND: not subject to 18-06 b/c NG fuel only OR: NG fuel only M,R: daily record of quantity and type if other fuel burned, monthly record of NG consumption, annual record of rolling 12-mo. NG summation Rp: 30 day deviation if other fuel burned, quarterly deviation exceedances of rolling 12-mo. NG summation, annual report of emissions totals for previous calendar year |
| B009 | None | N | Y | N | N | Y | N | Y | Y | N | N | N | Basis: 40 CFR 60, Subparts A and Dc ET: this unit is not subject to emissions limitations, monitoring and emissions testing b/c NG only fuel M,R: fuel supplier certification, fuel records and records retention reqs. Rp: notification of construction commencement and |



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| P003 | Stack VE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | Y | Y | N | Y | Y | N | N | N | ET: Parametric monitoring sufficient to demonstrate compliance OR: control equipment required M,R: baghouse pressure drop monitor and allowable range, weekly record of baghouse pressure drop Rp: quarterly deviations of baghouse pressure drop range |
| P003 | 8.56 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | Y | Y | N | N | OR: control equipment required M,R: baghouse pressure drop monitor and allowable range, weekly record of baghouse pressure drop Rp: quarterly deviations of baghouse pressure drop range ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration |
| P003 | Fugitive PE 20% opacity, 3 min avrg. | 17-07(B)(1) | N | N | Y | Y | N | Y | Y | Y | N | N | ET: RACM, weekly VE checks sufficient to demonstrate compliance OR: baghouse capture sufficient to reduce/eliminate fugitives M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P003 | RACM | 17-08(B) | N | N | Y | Y | N | Y | Y | Y | N | N | ET: RACM, weekly VE checks sufficient to demonstrate compliance OR: control capture sufficient to reduce/eliminate fugitives M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P004 | Fugitive PE 20% opacity, 3 min avrg. | 17-07(B)(1) | | N | N | Y | N | Y | Y | N | N | N | ET: RACM, weekly VE checks sufficient to demonstrate compliance M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P004 | Stack PE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | N | Y | N | Y | Y | N | N | N | ET: weekly VE checks sufficient to demonstrate compliance M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P004 | RACM | 17-08(B) | N | N | N | Y | N | Y | Y | N | N | N | ET: RACM, weekly VE checks sufficient to |



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|--------------------------------------|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | demonstrate compliance M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P004 | 10 lbs/hr PE uncontrolled | 17-11(B)(1) | N | N | N | N | N | N | N | N | N | N | N | M,R,Rp,ET: Actual uncontrolled emissions are less than 10 lbs/hr so Figure II of 17-11 doesn't apply and the limitation pursuant to Table I of 17-11 is >10 lbs/hr, so limit established to ensure Figure II doesn't apply. |
| P008 | Stack PE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | N | Y | N | Y | Y | N | N | N | N | ET: weekly VE checks sufficient to demonstrate compliance M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P008 | 6.52 lbs/hr PE | 17-11(B)(1) | N | N | N | N | N | N | N | N | N | N | N | M,R,Rp,ET: actual emissions based on EF (0.1 lb/Ton, AP 42, Table 12.5-1) and max. production rate (2 TPH) demonstrate hourly emissions (0.2 lb/hr) are well below limit |
| P020 P021 P046 P047 P051 | None | 17-07(A)(1) | N | Y | N | N | N | N | N | N | N | N | N | ND: exempt from 17-07 VE stack limit b/c no applicable limitation M,R,Rp,ET: no requirements due to no applicable limitation |
| P020 P021 P046 P047 P051 | None | 17-11(B)(1) | N | Y | Y | Y | N | Y | Y | N | N | N | N | ET: no applicable emissions limitation to demonstrate compliance with ND: exempt from 17-11 lb/hr stack limit b/c no applicable limitation OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P020 P021 P046 P047 P051 | None | 18-06(E)(2) | N | Y | Y | Y | N | Y | Y | N | N | N | N | ET: no applicable emissions limitation to demonstrate compliance with ND: exempt from 17-11 lb/hr stack limit b/c no applicable limitation OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P037 | Stack PE | 17-07(A)(1) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: scrubber maintenance and cleaning and weekly |



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| P041 P050 | 20% opacity, 6 min avrg. | | | | | | | | | | | | | VE checks sufficient to demonstrate compliance OR: follow scrubber manuf. recommended maint. at recommended intervals, clean internals and mist eliminators at intervals sufficient to prevent buildup/fouling M,R: scrubber inspection, maint. and repair log, weekly VE checks Rp: semi-annual rpts. of VEs observed and corrective actions |
| P037 | 9.98 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | N | N | N | N | N | Rp,ET: scrubber maintenance and cleaning sufficient to demonstrate compliance OR: follow scrubber manuf. recommended maint. at recommended intervals, clean internals and mist eliminators at intervals sufficient to prevent buildup/fouling M,R: scrubber inspection, maint. and repair log |
| P039 | Stack PE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | N | Y | N | Y | Y | Y | N | N | N | ET: weekly VE checks sufficient to demonstrate compliance M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P039 | 0.38 TPM, PE, rolling 12-mos. | N | Y | N | N | N | N | N | N | N | N | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01 and OAC rule 3745-31-05(A)(3)(a)(ii), as effect. 12/01/06, BAT Ad.Mod. P0117610, issued 10/28/2014 (updated BAT format) based on 3,185 TPY standard titanium sheets, 2,760 TPY long alloy titanium sheets, and 100 TPY beta alloy titanium sheets (Ch. 31 Mod. P0105313 issued 6/2/2011); limit N/A if SIP approved M,R,Rp,ET: no requirements because emissions limit based on maximum production allowable at synthetic minor limit |
| P039 | 41.7 lbs/hr NO _x | N | Y | N | N | Y | N | Y | Y | Y | N | N | N | Basis: ORC 3704.03(T) and OAC 3745-31-05(A)(3), BAT PTI P0105313, issued 6/2/2011 (voluntary short term limit in lieu of capture/control eff.); superseded by Ad. Mod. P0117610, issued 10/28/2014 OR: follow scrubber manuf. recommended maint. at recommended intervals, clean internals and mist eliminators at intervals sufficient to prevent buildup/fouling M,R: pressure drop, water flow, pH and H ₂ O ₂ injection rate monitors, allowable ranges, daily |



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| | | | | | | | | | | | | | pressure drop, water flow, pH and H ₂ O ₂ usage and capture and control and monitoring equipment operating times records, and deviation and corrective action records Rp: quarterly deviations of scrubber parameters, prompt investigations and/or corrective actions |
| P039 | 52.12 TPY NO _x , rolling 12-mos | N | Y | N | Y | Y | N | Y | Y | Y | N | N | <p>Basis: OAC rule 3745-31-05(D), Synthetic minor to avoid PSD; limitations based on 3,185 TPY standard titanium sheets, 2,760 TPY long alloy titanium sheets, and 100 TPY beta alloy titanium sheets; required per PTI P0105313, issued 6/2/2011; superseded by Ad. Mod. P0117610, issued 10/28/2014</p> <p>ET: compliance demonstrated with record keeping OR: NO_x emissions calculations based on emission factors for standard alloy, standard alloy long and beta alloy sheets M,R: weekly production and H₂O₂ injection rate records and monthly production records Rp: quarterly deviations of 12-mos. rolling limit</p> |
| P039 | 1.95 lbs/hr PE | 17-11(B)(1) | N | N | N | N | N | N | N | N | N | N | M,R,Rp,ET: actual emissions based on EF (3.23 lb/Ton, submitted in App. A0040405) and max. production rate (0.38 TPH) demonstrate hourly emissions (1.23 lb/hr) are below limit |
| P041 | 15.82 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | N | N | N | N | <p>Rp,ET: scrubber maintenance and cleaning sufficient to demonstrate compliance OR: follow scrubber manuf. recommended maint. at recommended intervals, clean internals and mist eliminators at intervals sufficient to prevent buildup/fouling M,R: scrubber inspection, maint. and repair log</p> |
| P050 | 15.67 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | N | N | N | N | <p>Rp,ET: scrubber maintenance and cleaning sufficient to demonstrate compliance OR: follow scrubber manuf. recommended maint. at recommended intervals, clean internals and mist eliminators at intervals sufficient to prevent buildup/fouling M,R: scrubber inspection, maint. and repair log</p> |
| P054 P056 | Stack PE 20% | 17-07(A)(1) | N | N | N | Y | N | Y | Y | N | N | N | ET: baghouse pressure drop monitor and weekly VE checks sufficient to demonstrate compliance |



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| P057 P058 P059 P060 P067 | opacity, 6 min avrg. | | | | | | | | | | | | | M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions |
| P054 P056 P057 P058 P059 P060 P067 | Fugitive PE 20% opacity, 3 min avrg. | 17-07(B)(1) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: weekly VE checks sufficient to demonstrate compliance OR: baghouse capture sufficient to reduce/eliminate fugitives M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P054 P056 P057 P058 P059 P060 P067 | RACM | 17-08(B) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: RACM, weekly VE checks sufficient to demonstrate compliance OR: baghouse capture sufficient to reduce/eliminate fugitives M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P054 | 10 lbs/hr PE uncontrolled | 17-11(B)(1) | N | N | Y | N | N | N | N | N | N | N | N | ET: Actual uncontrolled emissions are less than 10 lbs/hr so Figure II of 17-11 doesn't apply and the limitation pursuant to Table I of 17-11 is >10 lbs/hr, so limit established to ensure Figure II doesn't apply. OR: capture and control sufficient to reduce/eliminate fugitives M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions ET: No ongoing testing requirements per Eng. 16 non major emissions unit. |
| P054 | 0.05 gr/dscf, 4.07 TPY Stack PE | N | OAC rule 3745-31-05(A)(3) | N | N | Y | N | Y | Y | N | N | N | N | Basis: BAT PTI 17-403, issued 4/23/86 M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: No ongoing testing requirements per Eng. 16 non major emissions unit. |
| P056 | 7.37 lbs/hr PE | 17-11(B)(1) | N | N | N | Y | N | Y | Y | Y | N | N | N | M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log |



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| | | | | | | | | | | | | | | Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration |
| P057 | 6.52 lbs/hr PE | 17-11(B)(1) | N | N | N | Y | N | Y | Y | Y | N | N | M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration | |
| P058 | 10 lbs/hr PE uncontrolled | 17-11(B)(1) | N | N | N | Y | N | Y | Y | N | N | N | M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: No ongoing testing requirements per Eng. 16 non major emissions unit. | |
| P059 P060 | 0.029 gr/dscf, 4.28 lbs/hr PE | N | Y | N | N | Y | N | Y | Y | Y | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 10/30/01, BAT PTI 17-516, issued 10/29/87 M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration | |
| P067 | 0.069 lbs/hr, 3.0 TPY PE | N | Y | N | N | Y | N | Y | Y | Y | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01, BAT PTI 17-1585, issued 10/29/97 M,R: baghouse pressure drop monitor and allowable range, weekly VE checks, VE observation log Rp: quarterly deviations of baghouse pressure drop range, semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration | |
| P069 P070 P071 P072 | None | 17-07(A)(1) | N | Y | N | N | N | N | N | N | N | N | ND: exempt from 17-07 VE stack limit b/c no applicable limitation M,R,Rp,ET: no requirements due to no applicable limitation | |



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| P073 P074 | | | | | | | | | | | | | |
| P069 P070 P071 P072 P073 P074 | None | 17-11(B)(1) | N | Y | Y | Y | N | Y | Y | N | N | N | ET: no applicable emissions limitation to demonstrate compliance with ND: exempt from 17-11 lb/hr stack limit b/c no applicable limitation OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P069 P070 P071 P072 P073 P074 | 0.47 lb/hr and 0.2 TPY PE, 0.016 lb/hr and 0.0016 TPY SO ₂ , 0.135 lb/hr and 0.59 TPY VOC, 1.22 lbs/hr and 5.37 TPY NO _x , 2.06 lb/hr and 9.01 TPY CO, Stack PE 5 percent opacity 6 min avrg.; Combined emissions from P069-P074: 0.37 TPY PE, 0.12 TPY SO ₂ , 1.06 TPY VOC, 9.66 TPY NO _x , 16.23 TPY CO | N | Y | N | Y | Y | N | Y | Y | N | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01, BAT PTI 06-91602, issued 10/30/03 ET: Limitations based on PTE with combined maximum annual NG usage of 382,718,000 cubic ft. OR: NG fuel only M,R: daily record of quantity and type if other fuel burned, monthly record of NG consumption, annual record of rolling 12-mo. NG summation Rp: 30 day deviation if other fuel burned, quarterly deviation of exceedances of rolling 12-mo. NG summation, annual report of emissions totals for previous calendar year, annual report of criteria pollutant total emissions for P069-74 comb. |



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| P069 P070 P071 P072 P073 P074 | Combined emissions from P069-P074: 0.37 TPY PE, 0.12 TPY SO ₂ , 1.06 TPY VOC, 9.66 TPY NO _x , 16.23 TPY CO | N | Y | N | Y | Y | N | Y | Y | N | N | N | Basis: OAC rule 3745-31—05(D), PTI 06-91602, issued 10/30/03 ET: Limitations based on PTE with combined maximum annual NG usage of 382,718,000 cubic ft. OR: NG fuel only M,R: daily record of quantity and type if other fuel burned, monthly record of NG consumption, annual record of rolling 12-mo. NG summation Rp: 30 day deviation if other fuel burned, quarterly deviation of exceedances of rolling 12-mo. NG summation, annual report of emissions totals for previous calendar year, annual report of criteria pollutant total emissions for P069-74 comb. |
| P077 | 0.015 lb/hr SO ₂ , 1.21 lbs/hr NO _x , 2.04 lbs/hr CO, 0.13 lb/hr VOC, 0.18 lb/hr PM/PM ₁₀ | N | Y | N | Y | Y | N | Y | Y | N | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01 (all pollutants), OAC rule 3745-31-05(A)(3)(b), as effect. 12/01/06 for SO ₂ , CO, VOC and PM/PM ₁₀ (limits N/A if SIP approved) and OAC rule 3745-31-05(C), as effect. 11/30/01 for NO _x , BAT PTI P0116290, issued 3/5/14 (installed 5/22/08), ET: Limitations based on maximum hourly NG consumption and use of low NO _x burner. OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P077 | 0.03 TPY, rolling 12-mos SO ₂ , 2.13 TPY, rolling 12-mos NO _x , 3.57 TPY, rolling 12-mos CO, 0.23 TPY, rolling 12-mos VOC, 0.32 TPY, rolling 12-mos PM/PM ₁₀ | N | Y | N | Y | Y | N | Y | Y | Y | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01, BAT PTI P0116290, issued 3/5/14 (installed 5/22/08), Synthetic minor to limit overall emissions to save for potential future projects ET: Limitations based on PTE with maximum annual NG uage of 85,050,000 cubic feet and use of low NO _x burner. OR: NG fuel only M,R: daily record of quantity and type if other fuel burned, monthly record of NG consumption, annual record of rolling 12-mo. NG summation Rp: 30 day deviation if other fuel burned, quarterly deviation of exceedances of rolling 12-mo. NG summation |
| P077 | None | 17-07(A)(1) | N | Y | N | N | N | N | N | N | N | N | ND: exempt from 17-07 VE stack limit b/c no |



| | | | | | | | | | | | | | |
|------|--|-------------|---|---|---|---|---|---|---|---|---|---|--|
| | | | | | | | | | | | | | applicable limitation M,R,Rp,ET: no requirements due to no applicable limitation |
| P077 | None | 17-11(B)(1) | N | Y | Y | Y | N | Y | Y | N | N | N | ET: no applicable emissions limitation to demonstrate compliance with ND: exempt from 17-11 lb/hr stack limit b/c no applicable limitation OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P077 | None | 18-06(E)(2) | N | Y | Y | Y | N | Y | Y | N | N | N | ET: no applicable emissions limitation to demonstrate compliance with ND: exempt from 17-11 lb/hr stack limit b/c no applicable limitation OR: NG fuel only M,R: daily record of quantity and type if other fuel burned Rp: 30 day deviation if other fuel burned |
| P093 | install dust collector designed to meet 0.030 gr/dscf PE, 0.13 TPM VOC | N | Y | N | Y | Y | N | Y | Y | N | N | N | Basis: OAC rule 3745-31-05(A)(3), as effect. 11/30/01 (both pollutants), OAC rule 3745-31-05(C), as effect. 12/01/06 for PE and OAC rule 3745-31-05(A)(3)(b), as effect. 12/01/06 for VOC (limit N/A if SIP approved), BAT PTI P0117610, issued 10/28/2014 ET: VOC limit based on max. hrly. production and solvent usage, dust collector manuf. specs. sufficient to demonstrate compliance with PE limit OR: dust collector required, maintained according to manuf. spec., repaired expeditiously M,R: weekly VE checks, VE observation log, dust collector manuf. documents, periodic and annual comprehensive inspections, inspection records, records when dust collector not in operation or not operated according to manuf. specs. Rp: semi-annual rpts. of VEs observed and corrective actions, 30 day deviation if dust collector not in operation or not operated according to manuf. specs. |
| P093 | Stack PE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | Y | Y | N | Y | Y | N | N | N | ET: weekly VE checks and dust collector maintenance sufficient to demonstrate compliance OR: dust collector required, maintained according to manuf. spec., repaired expeditiously |



| | | | | | | | | | | | | | |
|----------------------|---|-------------|---|---|---|---|---|---|---|---|---|---|--|
| P901 P902 P903 | RACM | 17-08(B) | N | N | Y | Y | N | Y | Y | N | N | N | ET: weekly VE checks, RACM, baghouse dust handling requirements sufficient to demonstrate compliance OR: baghouse dust handling requirements, control equipment required M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions |
| P902 | 10 lbs/hr PE uncontrolled | 17-11(B)(1) | N | Y | Y | Y | N | Y | Y | N | N | N | ET: weekly VE checks, RACM, baghouse dust handling requirements sufficient to demonstrate compliance; actual uncontrolled emissions are less than 10 lbs/hr so Figure II of 17-11 doesn't apply and the limitation pursuant to Table I of 17-11 is >10 lbs/hr, so limit established to ensure Figure II doesn't apply. OR: control equipment required M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions ET: No ongoing testing requirements per Eng. 16 non major emissions unit. |
| P903 | 2.95 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | Y | Y | N | N | OR: control equipment required M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration |
| P903 | 0.030 gr/dscf PE | N | Y | N | Y | Y | N | Y | Y | Y | N | N | Basis: OAC rule 3745-31-05(A)(3), BAT PTI 17-283, issued 9/26/84 OR: control equipment required M,R: weekly VE checks, VE observation log Rp: semi-annual rpts. of VEs observed and corrective actions ET: PE w/in 3 mos. of permit issuance and 6 mos. of expiration |
| P904 | 7.01 TPY, rolling 12-mos PM ₁₀ , 9.08 TPY, rolling 12- | N | Y | N | Y | Y | N | Y | Y | N | N | N | Basis: OAC rule 3745-31-05(C), synthetic minor to avoid PSD and voluntary restriction to avoid BAT PTI 06-08385, issued 6/12/2008 ET: RACM, weekly VE checks and production limitation sufficient to demonstrate compliance |



| | | | | | | | | | | | | | | |
|------|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|--|
| | mos. PM total (stack and fugitive) | | | | | | | | | | | | | OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, 12-mos. production limitation |
| P904 | Stack PE 20% opacity, 6 min avrg. | 17-07(A)(1) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: weekly VE checks and production limitation sufficient to demonstrate compliance OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, 12-mos. production limitation |
| P904 | Fugitive PE 20% opacity, 3 min avrg. | 17-08(B)(1) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: RACM, weekly VE checks and production limitation sufficient to demonstrate compliance OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, 12-mos. production limitation |
| P904 | RACM | 17-08(B) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: RACM, weekly VE checks and production limitation sufficient to demonstrate compliance OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, 12-mos. production limitation |
| P904 | 0.030 gr/dscf PE | 17-08(B)(3) | N | N | Y | Y | N | Y | Y | N | N | N | N | ET: weekly VE checks and production limitation sufficient to demonstrate compliance OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, |



Statement of Basis
 Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064

| | | | | | | | | | | | | | |
|------|-------------------|-------------|---|---|---|---|---|---|---|---|---|---|--|
| | | | | | | | | | | | | | 12-mos. production limitation |
| P904 | 15.0 lbs/hr PE | 17-11(B)(1) | N | N | Y | Y | N | Y | Y | N | N | N | ET: weekly VE checks and production limitation sufficient to demonstrate compliance OR: control equipment required M,R: weekly VE checks and VE observation log, monthly production records, rolling, 12-mos. production records Rp: semi-annual rpts. of VEs observed and corrective actions, quarterly deviations of rolling, 12-mos. production limitation |



DRAFT

Division of Air Pollution Control
Title V Permit
for
Titanium Metals Corporation

| | |
|----------------|-----------------------------------|
| Facility ID: | 0641180064 |
| Permit Number: | P0089765 |
| Permit Type: | Renewal |
| Issued: | 3/18/2015 |
| Effective: | To be entered upon final issuance |
| Expiration: | To be entered upon final issuance |



Division of Air Pollution Control
Title V Permit
for
Titanium Metals Corporation

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Draft Title V Permit
Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0641180064
Facility Description: Titanium processing.
Application Number(s): A0021047, A0037374, A0043776, A0048340, A0050002, A0050262
Permit Number: P0089765
Permit Description: Title V renewal permit for a titanium processing facility, including titanium shaping, grinding/sawing, pickling and heating furnaces. .
Permit Type: Renewal
Issue Date: 3/18/2015
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0089764

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

Titanium Metals Corporation
100 Titanium Way
P.O. Box 309
Toronto, OH 43964-0309

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

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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, Southeast 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 and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Draft Title V Permit
Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064
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 For State-Only Requirements
 - (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
 - (5) Standard Term and Condition A. 30.

(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 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 submitted scheduled maintenancerequests, 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 submitted promptly to the Ohio EPA DAPC, Southeast District Office. Except as provided below, the written reports shall be submitted 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 to the Ohio EPA DAPC, Southeast District Office 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Southeast District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with 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 Ohio EPA DAPC, Southeast District Office 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 Ohio EPA DAPC, Southeast District Office) 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 on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - 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 Ohio EPA DAPC, Southeast District Office 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 Ohio EPA DAPC, Southeast District Office 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 Federal Register 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 is subject to 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.

Unless otherwise exempted, no emissions unit identified in this permit that has been 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 operating 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 Ohio EPA DAPC, Southeast District Office.
- 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 Ohio EPA DAPC, Southeast District Office. 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 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 For State-Only Requirements

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 Ohio EPA DAPC, Southeast District Office 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 Ohio EPA DAPC, Southeast District Office 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 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 potential 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
Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064

Effective Date: To be entered upon final issuance

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Southeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



Draft Title V Permit
Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064
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 emissions units contained in this permit are subject to 40 CFR Part 60, Subpart Dc: B009. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office or local air agency.

3. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a permit-to-install for that emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-by-rule, permit-to-install or in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21:

| EU ID | Operations, Property and/or Equipment Description |
|--------------|--|
| B010 | 9.9 MMBtu/hr Natural Gas-fired Boiler |
| P022 | Ingot Heat Furnace No. 2 |
| P023 | Ingot Heat Furnace No. 3 |
| P024 | Ingot Heat Furnace No. 4 |
| P028 | 4.8 MMBtu/hr Pack Line Oven and Weld |
| P029 | 5.4 MMBtu/hr Hot Mill Roughing Furnace |
| P030 | Two 6.0 MMBtu/hr Car Bottom Furnaces |
| P044 | 6.6 MMBtu/hr Hot Mill Finishing Furnace |
| P094 | CA2 Emergency Generator (PBR11038) |
| P095 | Batch Pickle Emergency Generator (PBR11038) |

4. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

| EU ID | Operations, Property and/or Equipment Description |
|--------------|--|
| F001 | Paved Roads and Parking Areas |
| F002 | Continuous Vacuum Anneal Line |
| F004 | Gag Press |
| F006 | Billet Peelers (2) |
| F007 | GFM Torch |
| F008 | Lab Etch Room |
| F010 | Roll Lathe |
| F011 | Amada Band Saw 1 |
| F012 | Amada Band Saw 2 |
| F013 | Amada Band Saw 3 |
| F014 | Lathes (2) |
| F015 | Hand Grinding |
| F016 | Cutoff Saws (2) |
| F017 | Pangborn Blast Booth (Lab Area) |
| F018 | Cutoff Saw Booth |



| EU ID | Operations, Property and/or Equipment Description |
|--------------|--|
| F019 | Hand Grinders |
| F020 | Machine Shop Weld Area |
| K002 | Ingot Coating |
| P019 | Z-Mill |
| P061 | Billet Polisher |
| P062 | Reheat Furnace No. 11 |
| P063 | Reheat Furnace No. 12 |
| P092 | Rubber Grinding |
| T001 | Bulk Hydraulic Oil Storage Tank |
| T005 | Hydrofluoric Acid Tank (Coil) |
| T006 | Hydrofluoric Acid Tank (Plate) |
| T007 | Titanium Fluoride Solution Storage Tank No. 1 (Coil) |
| T008 | Titanium Fluoride Solution Storage Tank No. 2 (Plate) |
| T009 | Z-Mill Oil Storage Tank |
| T010 | Z-Mill Used Oil Storage Tank |
| T014 | Oil Reclaim Tanks |
| T015 | Nitric Acid Storage Tank No. 1 |
| T016 | Nitric Acid Storage Tank No. 2 |
| T017 | Aboveground Gasoline Storage Tank |
| T018 | Aboveground Diesel Tank (Forge Shop) |
| T019 | Titanium Fluoride Solution Storage Tank No. 3 |
| T020 | Hydrofluoric Acid Storage Tank No. 3 |
| T021 | Nitric Acid Storage Tank No. 3 |



Draft Title V Permit
Titanium Metals Corporation
Permit Number: P0089765
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C. Emissions Unit Terms and Conditions



1. B009, No. 4 Package Boiler

Operations, Property and/or Equipment Description:

20.92 MMBtu/hr natural gas-fired No. 4 package boiler with a maximum annual natural gas usage of 160,130,000 cubic feet.

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 06-91602, issued 10/30/2003) | Sulfur dioxide (SO ₂) emissions shall not exceed 0.012 lb/hr and 0.05 TPY. Nitrogen oxides (NO _x) emissions shall not exceed 2.34 lbs/hr and 9.23 TPY. Carbon monoxide (CO) emissions shall not exceed 1.72 lbs/hr and 6.79 TPY. Volatile organic compound (VOC) emissions shall not exceed 0.113 lb/hr and 0.445 TPY. Particulate emissions (PE) shall not exceed 0.039 lb/hr and 0.154 TPY. Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average. See b)(2)a. through d. below. |
| b. | OAC rule 3745-17-07(A) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| c. | OAC rule 3745-17-10(B) | The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant |



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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|--|---|
| | | to OAC rule 3745-31-05(A)(3). |
| d. | 40 CFR Part 60, Subparts A and Dc (40 CFR 60.1-19 and 60.40c-60.48c) [In accordance with 40 CFR 60.40c(a), this emissions unit is a steam generating unit that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than 10 MMBtu/hr and will commence construction after June 9, 1989.] | See d)(1) and e)(2) below. |

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of “process weight” and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.
- b. The annual emissions limitations of 0.05 TPY of SO₂, 9.23 TPY of NO_x, 6.79 TPY of CO, 0.445 TPY of VOC and 0.154 TPY of PE reflect the potentials to emit for this emissions unit, so there are no recordkeeping and/or reporting requirements to ensure compliance with these limits.
- c. Annual natural gas usage shall not exceed 160,130,000 cubic feet (ft³).
- d. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-08 and 3745-17-10(B).

c) Operational Restrictions

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

[Authority Citation: OAC rule 3745-77-01(C)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the following applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart Dc, including the following sections:

| | |
|-------------------------|---|
| 60.48c(f)(4)(i-iii) | fuel supplier certification information for other fuels |
| 60.48c(g)(1),(2) or (3) | fuel records |



| | |
|-----------|-------------------|
| 60.48c(i) | records retention |
|-----------|-------------------|

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

[Authority Citation: OAC rule 3745-77-01(C)(1)]

- (3) The permittee shall collect and record the total quantity of natural gas used in emissions unit B009 during each month, in thousands of cubic feet.

- (4) The permittee shall collect and record during each month, the updated rolling, 12-month summation for the total natural gas usage in emissions unit B009.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) The permittee shall comply with the following applicable reporting requirements under 40 CFR Part 60, Subpart Dc, including the following sections:

| | |
|-----------------------------|---|
| 60.48c(a)(1-4),(j) and 60.7 | notification of construction commencement and startup and report submission |
|-----------------------------|---|

- (3) 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 Citation: OAC rule 3745-77-01(C)(1)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage.

- (5) The permittee shall submit annual reports that specify the total NO_x, SO₂, CO, VOC and PE emissions from emissions unit B009, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]



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. Emissions Limitations:

SO₂ emissions shall not exceed 0.012 lb/hr and 0.05 TPY.

Applicable Compliance Methods:

Compliance with the lb/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 0.6 lb/mm³scf by the heat content of the natural gas (1020 Btu/scf) and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (0.012 lb/hr) by the maximum annual hours of operation (8,760 hours) by the annual capacity factor of 90%, and then dividing by 2,000 lbs/ton.

b. Emissions Limitations:

NO_x emissions shall not exceed 2.34 lbs/hr and 9.23 TPY.

Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the manufacturer's emission factor of 115.29 lbs/mm³scf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lbs/hr emissions limitation (2.34 lbs/hr) by the maximum annual hours of operation (8,760) by the annual capacity factor of 90%, and then dividing by 2,000 lbs/ton.

c. Emissions Limitations:

Carbon monoxide (CO) emissions shall not exceed 1.72 lb/hr and 6.79 TPY.



Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-1 (7/98) emission factor of 84 lbs/mm scf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lbs/hr emissions limitation (1.72 lb/hr) by the maximum annual hours of operation (8,760) by the annual capacity factor of 90%, and then dividing by 2,000 lbs/ton.

d. Emissions Limitations:

VOC emissions shall not exceed 0.113 lb/hr and 0.445 TPY.

Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 5.5 lbs/mm scf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lbs/hr emissions limitation (0.113 lb/hr) by the maximum annual hours of operation (8,760) by the annual capacity factor of 90%, and then dividing by 2,000 lbs/ton.

e. Emissions Limitations:

PE shall not exceed 0.039 lb/hr and 0.154 TPY.

Applicable Compliance Methods:

Compliance with the lb/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 1.9 lb/mm scf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance



for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lbs/hr emissions limitation (0.039 lb/hr) by the maximum annual hours of operation (8,760) by the annual capacity factor of 90%, and then dividing by 2,000 lbs/ton.

f. Emission Limitation:

Visible PE from any stack associated with this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

g) Miscellaneous Requirements

(1) None.



2. P003, No. 1 Grinder

Operations, Property and/or Equipment Description:

3 TPH Fixed-hood Midwest Grinder controlled by five-module baghouse (including baghouse dust collection and material handling).

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 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| d. | OAC rule 3745-17-11(B)(1) | Stack particulate emissions shall not exceed 8.56 lbs/hr. See b)(2)c. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.



- c. The allowable mass rate of emissions of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 8.56 lbs/hr. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 8.56 lbs/hr, the permittee shall comply with the more stringent limitation.

c) Operational Restrictions

- (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building

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

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range.
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
- (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b)



describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- b. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- c. Emissions Limitation:

Stack particulate emissions shall not exceed 8.56lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration



- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:
 - for 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.
- d. 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.
- e. 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).
- f. 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.
- g. 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.

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

- g) Miscellaneous Requirements
 - (1) None.



3. P004, Burn Shed and Torches

Operations, Property and/or Equipment Description:

10 TPH Burn Shed and Carriage-driven/Hand Burning Torches.

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. below. |
| d. | OAC rule 3745-17-11(B)(1) | Uncontrolled PE shall not exceed 10.0 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The permittee shall properly maintain the existing partial enclosure to minimize or eliminate visible emissions of fugitive dust.

b. The uncontrolled mass rate of particulate emissions (U) from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emissions limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the particulate emissions are limited to 10 lbs/hr.



c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly 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 location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 visible emission 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.

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 visible emission 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

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

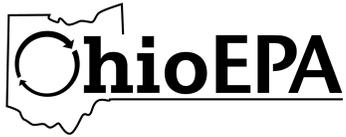
e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:
Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
 - Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9.



b. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Uncontrolled PE shall not exceed 10.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the AP-42, Table 12.5-1 (10/86) emission factor of 0.05 lb/ton of metal processed by the maximum hourly production rate of P004 (4.11 TPH).

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



4. P008, Tysaman Saws

Operations, Property and/or Equipment Description:

2 TPH Double Abrasive Saws controlled by wet fume suppression (water spray).

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 3745-17-07(A)(1) | StackPE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| b. | OAC rule 3745-17-11(B)(1) | PE shall not exceed 6.52 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. This unit shall not be operated without the use of wet fume suppression.

b. The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 6.52 lbs/hr. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 6.52 lbs/hour, the permittee shall comply with the more stringent limitation.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly 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 location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.



Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

b. Emissions Limitation:

PE shall not exceed 6.52lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the AP-42, Table 12.5-1 (10/86) emission factor of 0.1 lb/ton of metal processed by the maximum hourly production rate of P008 (2 TPH).

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



5. P020, Ingot Heat Furnace No. 31

Operations, Property and/or Equipment Description:

18 MMBtu/hr Natural gas-fired Ingot Heating Furnace No. 31

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 3745-17-07(A)(1) | See b)(2)a. below. |
| b. | OAC rule 3745-17-11(B)(1) | See b)(2)b. below. |
| c. | OAC rule 3745-18-06(E)(2) | See b)(2)c. below. |

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

b. Since the raw materials introduced into this emissions unit do not contribute to particulate emissions and the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

c. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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 Citation: OAC rule 3745-77-07(C)(1)]

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. None.

g) Miscellaneous Requirements

- (1) None.



6. P021, Ingot Heat Furnace No. 1

Operations, Property and/or Equipment Description:

14.35MMBtu/hr Natural gas-fired Ingot Heating Furnace No. 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 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 3745-17-07(A)(1) | See b)(2)a. below. |
| b. | OAC rule 3745-17-11(B)(1) | See b)(2)b. below. |
| c. | OAC rule 3745-18-06(E)(2) | See b)(2)c. below. |

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

b. Since the raw materials introduced into this emissions unit do not contribute to particulate emissions and the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

c. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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 Citation: OAC rule 3745-77-07(C)(1)]

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. None.

g) Miscellaneous Requirements

- (1) None.



7. P037, Coil Pickle Line

Operations, Property and/or Equipment Description:

3.77 TPH Coil Pickle Line (including welder) controlled by a venturi scrubber.

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-11(B)(1) | PE shall not exceed 9.98 lbs/hr. |

(2) Additional Terms and Conditions

a. The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 9.98 lbs/hr. If emissions testing conducted on this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 9.98 lbs/hr, the permittee shall comply with the more stringent limitation.

b. This unit shall not operate without the associated scrubber.

c) Operational Restrictions

(1) The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

(2) The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

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



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections c)(1) and c)(2) above.
- (2) The permittee shall perform weekly 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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



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. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

b. Emissions Limitation:

PE shall not exceed 9.98 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those permissible by the visible PE limit specified in section b)(1)a.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

g) Miscellaneous Requirements

(1) None.



8. P039, Sheet (Hand) Pickler

Operations, Property and/or Equipment Description:

0.38 TPH sheet pickler controlled by a wet scrubber (100% capture efficiency and 25% control efficiency for NO_x) and hydrogen peroxide (H₂O₂) injection (25% control efficiency for NO_x) with an overall control efficiency of 43.75%. Ch. 31 Modification P0105313, issued 6/2/2011, allows the unit to produce longer alloy sheets of titanium. The maximum production rate for standard alloy standard titanium sheets is 3,185 tons/year, 2,760 tons/year for long alloy titanium sheets, and a production restriction of 100 tons/year for beta alloy titanium sheets.

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) g)(1)

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. | ORC 3704.03(T) and OAC 3745-31-05(A)(3) (Admin. Mod. PTI P0117610, issued 10/28/2014) | Nitrogen oxide (NO _x) emissions shall not exceed 41.7 lbs/hr. See b)(1)c. and d. below. |
| b. | OAC 3745-31-05(D) (Synthetic minor to avoid PSD) | NO _x emissions shall not exceed 52.12 tons per rolling, 12-month period. See c)(1) below. |
| c. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Particulate matter (PM) emissions shall not exceed 0.38 tons per month (TPM), averaged over a rolling, twelve-month period. See b)(2)a. below. |
| d. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/2006 | See b)(2)b. below. |
| e. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from the wet scrubber shall not exceed 20% opacity, as a six-minute average, except as provided by the rule. |
| f. | OAC rule 3745-17-11(B)(1) (Table 1) | PE shall not exceed 1.95 lbs/hr. |



(2) Additional Terms and Conditions

- a. 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 pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements 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.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM emissions from this air contaminant source since the uncontrolled potential to emit for PM is less than 10 TPY.
- c. At all times the emissions unit is in operation, the emissions from this emissions unit shall be vented to the wet scrubber and H₂O₂ injection shall be employed.
- d. The permittee has requested a voluntary lb/hr NO_x limitation as stringent as BAT in place of a percent overall control limitation due to the difficulty in establishing testing requirements to demonstrate compliance with an overall control limitation.

c) Operational Restrictions

- (1) The amount of titanium metal pickled shall not cause NO_x emissions to exceed 52.12 tons per rolling, 12-month period based on the following equations:
 - a. NO_x from standard alloy titanium sheet

(tons of standard alloy standard titanium pickled during the rolling, 12-month period x 27.60 lbs/ton*) / 2,000 lbs/ton

*emission factor for standard alloy titanium sheets (based on 10/2002 stack test with 15% safety factor, and reduction of 25% for addition of H₂O₂)
 - b. NO_x from standard alloy long titanium sheet

(tons of standard alloy long titanium pickled during the rolling, 12-month period x 33.73 lbs/ton*) / 2,000 lbs/ton

*emission factor for standard alloy long titanium sheets (based on 10/2002 stack test with 15% safety factor, and reduction of 25% for addition of H₂O₂, and adjusted to long sheets)



b. NOx from beta alloy titanium sheet

(tons of beta alloy titanium pickled during the rolling, 12-month period x 111.23 lbs/ton* / 2,000 lbs/ton

*emission factor for beta alloy titanium sheets (based on 10/2002 stack test with 15% safety factor, reduction of 25% for addition of H₂O₂, and scaled up for higher NOx generation in beta alloy)

d. Total NOx

NOx emissions from standard alloy titanium sheets + NOx emissions from standard alloy long titanium sheets + NOx emissions from beta alloy sheets ≤ 52.12 tons NOx per rolling, 12-month period

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit. The emissions of NOx from this emissions unit shall not exceed 52.12 tons per year, based upon a rolling, 12-month summation of the emissions.

- (2) The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.
- (3) The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly 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.

- (2) The permittee shall maintain monthly records for the following information:
 - a. the total amount of standard alloy standard titanium pickled, in tons;
 - b. the total amount of standard alloy long titanium pickled, in tons;
 - c. the total amount of beta alloy titanium pickled, in tons;
 - d. NO_x emissions from standard alloy standard titanium sheets (calculated per c)(1)a.), in tons;
 - e. NO_x emissions from standard alloy long titanium sheets (calculated per c)(1)b.), in tons;
 - f. NO_x emissions from beta alloy titanium sheets (calculated per c)(1)c.), in tons;
 - g. total NO_x emissions (a + b + c); and
 - h. rolling 12-month total NO_x emissions
- (3) The permittee shall collect and record the following information each day:
 - a. the pressure drop across the scrubber, in inches of water column;
 - b. the scrubber water flow rate, in gallons per minute;
 - c. the scrubber water pH;
 - d. the H₂O₂ usage, in gallons; and
 - e. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
- (4) The permittee shall collect and record the following information each week:
 - a. the total amount of titanium pickled, in tons; and
 - b. the average weekly H₂O₂ injection rate, i.e. the summation of (3)d. for the week divided by (4)a.



- (5) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than 2 inches of water column.
- (6) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 200 gallons per minute.
- (7) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pH of the scrubber liquid, that shall be maintained in order to demonstrate compliance, shall not be less than 5.
- (8) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable H₂O₂ injection rate that shall be maintained in order to demonstrate compliance shall not be less than 9.54 gallons per ton, based on a weekly average.
- (9) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water column), the scrubber liquid flow rate (in gallons per minute), the scrubber liquid pH, and the H₂O₂ injection rate (in gallons, total addition per day) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's pH and flow rate 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), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) 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 control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) 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 the 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, flow rate, and pH 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.

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are 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 range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable NO_x emission rate for this/these 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month emission limitation for NO_x;
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.



The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, the liquid pH, or H₂O₂ injection rate was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
 - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in "a" or "b" 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.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) The permittee shall submit semiannual written reports that identify:
- a. all weeks 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.



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. Emissions Limitation:

Nitrogen oxides (NOx) emissions shall not exceed 41.7 lbs/hr.

Applicable Compliance Method:

The emissions limitation was established based on the worst case operating scenario of beta alloy titanium sheets:

(Max operating rate in ton/hr (0.375 tons/hr))(the emissions factor provided in permittee application No. A0040405 (111.23 lbs/ton) = 41.7 lbs/hr

Nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

NOx emissions shall not exceed 52.12 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limit shall be based on the record keeping in d)(2) and the calculations in c)(1).

c. Emissions Limitation:

PM emissions shall not 0.38 tons per month (TPM), averaged over a rolling, twelve-month period.

Applicable Compliance Method:

The emissions limitation was established based on the worst case operating scenario of standard alloy long titanium sheets:

(Max operating rate in ton/hr (0.33 tons/hr))(the emissions factor provided in permittee application No. A0040405 (3.23 lbs/ton) = 1.05 lbs/hr

Annual PM = (1.05 lb/hr * 8,760 hr/year) / 2,000 lbs/ton = 4.60 TPY

4.6 TPY / 12 months per year = 0.38 TPM

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



- d. Emissions Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- e. Emissions Limitation:
PE shall not exceed 1.95 lbs/hr.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office, and the procedures specified in OAC rule 3745-17-03(B)(10).

- (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 3 months of completion of the modification to emissions unit P039.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO_x, in lbs/hr.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

for NO_x, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. 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.
- e. 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).



- f. 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.
 - g. 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.
- g) **Miscellaneous Requirements**
- (1) Modeling to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.



9. P041, Plate Pickler

Operations, Property and/or Equipment Description:

7.5 TPH Plate Pickler controlled by wet scrubber.

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-11(B)(1) | PE shall not exceed 15.82 lbs/hr. |

(2) Additional Terms and Conditions

a. The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 15.82 lbs/hr. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 15.82 lbs/hr, the permittee shall comply with the more stringent limitation.

b. This unit shall not operate without the associated scrubber.

c) Operational Restrictions

(1) The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

(2) The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

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



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections c)(1) and c)(2) above.
- (2) The permittee shall perform weekly 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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



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. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

b. Emissions Limitation:

PE shall not exceed 15.82 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those permissible by the visible PE limit specified in section b)(1)a.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

g) Miscellaneous Requirements

(1) None.



10. P046, Ingot Heat Furnace No. 32

Operations, Property and/or Equipment Description:

18 MMBtu/hr Natural gas-fired Ingot Heating Furnace No. 32

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 3745-17-07(A)(1) | See b)(2)a. below. |
| b. | OAC rule 3745-17-11(B)(1) | See b)(2)b. below. |
| c. | OAC rule 3745-18-06(E)(2) | See b)(2)c. below. |

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

b. Since the raw materials introduced into this emissions unit do not contribute to particulate emissions and the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

c. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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 Citation: OAC rule 3745-77-07(C)(1)]

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. None.

g) Miscellaneous Requirements

- (1) None.



11. P047, Ingot Heat Furnace No. 33

Operations, Property and/or Equipment Description:

18 MMBtu/hr Natural gas-fired Ingot Heating Furnace No. 33

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 3745-17-07(A)(1) | See b)(2)a. below. |
| b. | OAC rule 3745-17-11(B)(1) | See b)(2)b. below. |
| c. | OAC rule 3745-18-06(E)(2) | See b)(2)c. below. |

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

b. Since the raw materials introduced into this emissions unit do not contribute to particulate emissions and the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

c. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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 Citation: OAC rule 3745-77-07(C)(1)]

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. None.

g) Miscellaneous Requirements

- (1) None.



12. P050, Descale Pickle Line

Operations, Property and/or Equipment Description:

7.4 TPH Descale Pickle Line controlled by a venturi scrubber.

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-11(B)(1) | PE shall not exceed 15.67 lbs/hr. |

(2) Additional Terms and Conditions

a. The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 15.67 lbs/hr. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 15.67 lbs/hr, the permittee shall comply with the more stringent limitation.

b. This unit shall not operate without the associated scrubber.

c) Operational Restrictions

(1) The permittee shall follow the manufacturer's recommended maintenance, at the recommended intervals, on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to the exhaust system, scrubber fans, and motors associated with those pumps and fans.

(2) The scrubber internals and mist eliminators shall be cleaned at intervals sufficient to prevent buildup of solids or other fouling.

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



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain a log documenting inspections, repairs, and maintenance as described in sections c)(1) and c)(2) above.
- (2) The permittee shall perform weekly 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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



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. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

b. Emissions Limitation:

PE shall not exceed 15.67 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing may be requested at opacity levels less than those permissible by the visible PE limit specified in section b)(1)a.

[Authority Citation: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

g) Miscellaneous Requirements

(1) None.



13. P051, Ingot Heat Furnace No. 34

Operations, Property and/or Equipment Description:

15.72 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 34.

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 3745-17-07(A)(1) | See b)(2)a. below. |
| b. | OAC rule 3745-17-11(B)(1) | See b)(2)b. below. |
| c. | OAC rule 3745-18-06(E)(2) | See b)(2)c. below. |

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because there is no applicable PE limitation in OAC rule 3745-17-11.

b. Since the raw materials introduced into this emissions unit do not contribute to particulate emissions and the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no particulate emission limitation imposed by this applicable requirement.

c. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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 Citation: OAC rule 3745-77-07(C)(1)]

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. None.

g) Miscellaneous Requirements

- (1) None.



14. P054, No. 8 Grinder

Operations, Property and/or Equipment Description:

2.5 TPH Fixed-hood Midwest Grinder controlled by five-module baghouse (including baghouse dust collection and material handling).

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 17-403, issued 4/23/86) | Stack PE shall not exceed 0.05 gr/dscf and 4.07 TPY. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B), 3745-17-08(B) and 3745-17-11(B). |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| e. | OAC rule 3745-17-11(B)(1) | Uncontrolled PE shall not exceed 10.0 lbs/hr. See b)(2)c. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.



- b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.
 - c. The uncontrolled mass rate of particulate emissions (U) from this emissions unit is less than 10 lbs/hr based on emissions testing that occurred on 5/18/2007. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emissions limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the uncontrolled particulate emissions are limited to 10 lbs/hr.
- c) Operational Restrictions
- (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

[Authority Citation: OAC rule 3745-77-07(A)(1)]
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range.
 - (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
 - (2) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;



- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 visible emission 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.

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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



e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitations:
Stack PE shall not exceed 0.05 gr/dscf and 4.07 TPY.

Applicable Compliance Methods:

Compliance with the gr/dscf emissions limitation shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

Compliance with the TPY emissions limitation shall be demonstrated by multiplying the tested hourly PE emission rate, in lbs/hr, by the annual hours of operation of this emissions unit, and then dividing by 2000 lbs/ton.

- b. Emissions Limitation:
Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.



Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

d. Emissions Limitation:

Uncontrolled PE shall not exceed 10.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by the following one-time calculation:

U = uncontrolled mass rate of particulate emissions
65% = dust collection capture efficiency
93.4% = baghouse control efficiency
0.15 lb/hr = 5/18/2007 stack test results for EU P054

$$0.15 \text{ lb/hr} = (1 - 93.4\%)(65\% * U)$$
$$U = 3.50 \text{ lbs/hr}$$

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



15. P056, No. 3 Grinder

Operations, Property and/or Equipment Description:

4.5 TPH Fixed-hood Midwest Grinder controlled by five-module baghouse (including baghouse dust collection and material handling).

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. below. |
| d. | OAC rule 3745-17-11(B)(1) | Stack PE shall not exceed 7.37 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The allowable mass rate of emission of particulate matter was based on Figure II of OAC rule 3745-17-11 and was determined to be 7.37lbs/hr. The uncontrolled mass rate of particulate emissions (U) was calculated to be 51.56 lbs/hr based on emissions testing conducted on October 7, 2002, and the capture and control efficiency of the control equipment.

c. The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the



baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected material.

c) Operational Restrictions

- (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 0.5 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to section A.V.2 indicates complying emission rates at such new range
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
- (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate



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

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

b. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Stack PE shall not exceed 7.37 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration



- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:
 - for 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.
- d. 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.
- e. A PE test consisting of Method 5 of 40 CFR, Part 60, Appendix A, shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for purposes of applying Figure II of OAC rule 3745-17-11.
- 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.

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

- g) Miscellaneous Requirements
 - (1) None.



16. P057, No. 5 Grinder

Operations, Property and/or Equipment Description:

2 TPH Fixed-hood Midwest Grinder controlled by five-module baghouse (including baghouse dust collection and material handling).

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 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. below. |
| d. | OAC rule 3745-17-11(B)(1) (Figure II) | Stack PE shall not exceed 6.52 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The allowable mass rate of emission of particulate matter was based on Table I of OAC rule 3745-17-11 and was determined to be 6.52lbs/hr. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II is more stringent than 6.52lbs/hour, the permittee shall comply with the more stringent limitation.

c. The permittee shall employ and properly maintain the lids and connecting piping or other comparable equivalent control measures on the receiving bins under the



baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate visible emissions of fugitive dust during the handling of the collected material.

c) Operational Restrictions

- (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 0.5 to 9 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to section A.V.2 indicates complying emission rates at such new range.
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
- (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 visible emission 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

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate



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

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

b. Emissions Limitation:

Fugitive visible PE shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Stack PE shall not exceed 6.52 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration



- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:
 - for 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.
- d. 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.
- e. A PE test consisting of Method 5 of 40 CFR, Part 60, Appendix A, shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for purposes of applying Figure II of OAC rule 3745-17-11.
- 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.

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

- g) Miscellaneous Requirements
 - (1) None.



17. P058, Tysaman Grinder No. 7

Operations, Property and/or Equipment Description:

2 TPH Tysaman Grinder No. 7 controlled by five-module baghouse(including fugitive emissions from baghouse dust collection and material handling)

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 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| d. | OAC rule 3745-17-11(B)(1) | Uncontrolled PE shall not exceed 10.0 lbs/hr. See b)(2)c. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.



- c. The uncontrolled mass rate of particulate emissions (U) from this emissions unit is less than 10 lbs/hr based on emissions testing that occurred on 5/18/2007 and the capture and control efficiency of the control equipment. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emissions limitation is greater than 10 lbs/hr. Therefore, to ensure that Figure II will not be applicable, the uncontrolled particulate emissions are limited to 10 lbs/hr.

c) Operational Restrictions

- (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building

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

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range.
- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
- (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.



- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- b. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- c. Emissions Limitation:

Uncontrolled PE shall not exceed 10.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by the following one-time calculation:

U = uncontrolled mass rate of particulate emissions
65% = dust collection capture efficiency
93.4% = baghouse control efficiency
0.15 lb/hr = 5/18/2007 stack test results for EU P054

$$0.15 \text{ lb/hr} = (1 - 93.4\%)(65\% * U)$$
$$U = 3.50 \text{ lbs/hr}$$



Draft Title V Permit
Titanium Metals Corporation
Permit Number: P0089765
Facility ID: 0641180064

Effective Date: To be entered upon final issuance

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



18. P059, Fox Grinder No. 1

Operations, Property and/or Equipment Description:

1.52 TPH Fox Grinder No. 1 controlled by five-module baghouse (including fugitive emissions from baghouse dust collection and material handling).

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), as effective 11/30/01 (PTI 17-516, issued 10/29/87) | Stack PE shall not exceed 0.029 gr/dscf and 4.28 lbs/hr. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B), 3745-17-08(B) and 3745-17-11(B). |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| e. | OAC rule 3745-17-11(B)(1) | This emissions limitation is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.



- b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

- c) Operational Restrictions
 - (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building

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

- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range.
 - (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
 - (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b)



describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitations:

Stack PE shall not exceed 0.029 gr/dscf and 4.28 lbs/hr.

Applicable Compliance Methods:

Compliance with the gr/dscf and lb/hr emissions limitation shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

b. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:



- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:
 - for 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.
- d. 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.
- e. 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).
- f. 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.
- g. 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.

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

- g) Miscellaneous Requirements
 - (1) None.



19. P060, Fox Grinder No. 2

Operations, Property and/or Equipment Description:

1.52 TPH Fox Grinder No. 2 controlled by five-module baghouse (including fugitive emissions from baghouse dust collection and material handling).

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), as effective 11/30/01 (PTI 17-516, issued 10/29/87) | Stack PE shall not exceed 0.029 gr/dscf and 4.28 lbs/hr. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B), 3745-17-08(B) and 3745-17-11(B). |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| e. | OAC rule 3745-17-11(B)(1) | This emissions limitation is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.



- b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.
- c) Operational Restrictions
 - (1) PE from this emissions unit shall be captured and vented to the baghouse at a rate sufficient to minimize or eliminate fugitive emissions inside the building

[Authority Citation: OAC rule 3745-77-07(A)(1)]
- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range
 - (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.
 - (3) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b)



describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitations:

Stack PE shall not exceed 0.029 gr/dscf and 4.28 lbs/hr.

Applicable Compliance Methods:

Compliance with the gr/dscf and lb/hr emissions limitation shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

b. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:



- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

for 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.
- d. 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.
- e. 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).
- f. 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.
- g. 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.

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

- g) Miscellaneous Requirements
 - (1) None.



20. P067, Midwest Grinder No. 10

Operations, Property and/or Equipment Description:

3 TPH Midwest Grinder No. 10 with fixed hard wheel and movable table surface controlled by a three-module baghouse (including baghouse dust collection and material handling).

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), as effective 11/30/01 (PTI 17-1585, issued 10/29/97) | Stack PE shall not exceed 0.69 lb/hr and 3.0 TPY. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and (B), 3745-17-08(B) and 3745-17-11(B). |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| e. | OAC rule 3745-17-11(B)(1) | This emissions limitation is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to the dust collection system and baghouse.



- b. The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.

- c) Operational Restrictions
 - (1) The permittee shall maintain the PE collection system for this emission unit in order to minimize or eliminate fugitive emissions from escaping the collection point.

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

- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as provided in the following sentence, the pressure drop across the baghouse or each individual module, whichever is applicable, shall be maintained within the range of 2 to 10 inches of water column while the emissions unit is in operation. This allowable operating parameter may be exceeded while the control equipment is in cleaning mode. A new pressure drop range shall be permissible if stack testing pursuant to f)(2) indicates complying emission rates at such new range.

 - (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse (or individual modules, whichever is applicable) while the emissions unit is in operation. The monitoring equipment shall be 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 weekly basis while the baghouse is in standard, non-cleaning mode.

 - (2) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b)



describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

- (4) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitations:
Stack PE shall not exceed 0.69 lb/hr and 3.0 TPY.

Applicable Compliance Methods:

Compliance with the lb/hr emissions limitation shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

Compliance with the TPY emissions limitation shall be demonstrated by multiplying the tested hourly PE emission rate, in lbs/hr, by the annual hours of operation of this emissions unit, and then dividing by 2000 lbs/ton.

- b. Emissions Limitation:
Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

- c. Emissions Limitation:
Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]



- (2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:
 - for 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.
 - d. 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.
 - e. 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).
 - f. 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.
 - g. 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.

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

g) Miscellaneous Requirements

- (1) None.



21. P069 – P074, Ingot Heating Furnace Nos. 1 - 6

Operations, Property and/or Equipment Description:

| EU ID | Operations, Property and/or Equipment Description |
|--------------|--|
| P069 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 1 with low NO _x burner and combined rolling, 12-mos. NG usage limitation of 382,718,000 ft. ³ for P069-P074. |
| P070 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 2 with low NO _x burner and combined rolling, 12-mos. NG usage limitation of 382,718,000 ft. ³ for P069-P074. |
| P071 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 3 with low NO _x burner and combined rolling, 12-mos. NG usage of limitation 382,718,000 ft. ³ for P069-P074. |
| P072 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 4 with low NO _x burner and combined rolling, 12-mos. NG usage of limitation 382,718,000 ft. ³ for P069-P074. |
| P073 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 5 with low NO _x burner and combined rolling, 12-mos. NG usage of limitation 382,718,000 ft. ³ for P069-P074. |
| P074 | 25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No. 6 with low NO _x burner and combined rolling, 12-mos. NG usage of limitation 382,718,000 ft. ³ for P069-P074. |

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), as effective 11/30/01. (PTI 06-91602, issued 10/30/2003) | PE shall not exceed 0.047 lb/hr and 0.20 TPY. SO ₂ emissions shall not exceed 0.016 lb/hr and 0.07 TPY. VOC emissions shall not exceed 0.135 lb/hr and 0.59 TPY. NO _x emissions shall not exceed 1.22 lbs/hr and 5.37 TPY. CO emissions shall not exceed 2.06 lbs/hr and 9.01 TPY. |



Effective Date: To be entered upon final issuance

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| | | <p>Stack visible PE shall not exceed 5% opacity, as a 6-minute average.</p> <p><u>P069-74 Combined Limitations:</u> PE shall not exceed 0.37 TPY.</p> <p>SO₂ emissions shall not exceed 0.12 TPY.</p> <p>VOC emissions shall not exceed 1.06 TPY.</p> <p>NO_x emissions shall not exceed 9.66 TPY.</p> <p>CO emissions shall not exceed 16.23 TPY.</p> <p>See b)(2)a. below.</p> |
| b. | <p>OAC 3745-31-05(D) (Synthetic Minor to Avoid Major Modification Status) (PTI 06-91602, issued 10/30/2003)</p> | <p>PE from P069-74, combined, shall not exceed 0.37 TPY, as a rolling, 12-month, summation.</p> <p>SO₂ emissions from P069-74, combined, shall not exceed 0.12 TPY, as a rolling, 12-month summation.</p> <p>VOC emissions from P069-74, combined, shall not exceed 1.06 TPY, as a rolling, 12-month summation.</p> <p>NO_x emissions from P069-74, combined, shall not exceed 9.66 TPY, as a rolling, 12-month summation.</p> <p>CO emissions from P069-74, combined, shall not exceed 16.23 TPY, as a rolling, 12-month summation.</p> <p>See b)(2)b. below.</p> |
| c. | <p>OAC rule 3745-17-07(A)(1)</p> | <p>See b)(2)c. below.</p> |
| d. | <p>OAC rule 3745-17-08</p> | <p>This emissions limitation is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> |
| e. | <p>OAC rule 3745-17-11(B)(1)</p> | <p>See b)(2)d. below.</p> |
| f. | <p>OAC rule 3745-18-06(E)(2)</p> | <p>This emissions limitation is less stringent than the emissions limitation established</p> |



| | | |
|--|-------------------------------|---|
| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
| | | pursuant to OAC rule 3745-31-05(A)(3). |

(2) Additional Terms and Conditions

- a. The emissions limitations identified in b)(1) are based on the maximum annual hours of operation and, therefore, no hourly usage recordkeeping is required.
- b. Permit-to-Install (PTI) 06-91602 and Permit to Operate P0089765 for this air contaminant source take into account the following voluntary restrictions (including the use of any air pollution control equipment), as proposed by the permittee, to ensure the increase in annual NO_x emissions do not constitute a major modification:
 - i. The annual natural gas usage for emissions units P069 through P074, combined, shall not exceed 382,718 thousand cubic feet per year, as a rolling, 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the natural gas usage, upon issuance of this permit.
 - ii. This emissions unit shall only be operated with a low NO_x burner.
- c. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because there is no applicable PE limitation in OAC rule 3745-17-11.
- d. Since the raw materials introduced into this emissions unit do not contribute to PE, and since the gaseous fuel is exempt pursuant to OAC rule 3745-17-11(A)(4), there is no PE limitation imposed by this applicable requirement.

c) Operational Restrictions

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

[Authority Citation: OAC rule 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, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority Citation: OAC rule 3745-77-01(C)(1)]

- (2) The permittee shall collect and record the following information each month for emissions units P069 through P074, combined:

- a. The total volume of natural gas employed, in thousands of cubic feet; and



- b. The total volume of natural gas employed, as a rolling, 12-month summation, in thousands of cubic feet.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) 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 Citation: OAC rule 3745-77-01(C)(1)]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for natural gas usage for emissions units P069 through P074, combined.

- (4) The permittee shall submit annual reports that specify the total NO_x, SO₂, CO, VOC and PE emissions from emissions units P069 through P074, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

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. Emissions Limitations:
PE shall not exceed 0.047 lb/hr and 0.20 TPY.

Applicable Compliance Methods:

Compliance with the lb/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 1.9lbs/mm³scf by the heat content of the natural gas (1020 Btu/scf) and then multiplying by the maximum heat input of P069-74 (25 MMBtu/hr).

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (0.047lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs/ton.



b. Emissions Limitations:

SO₂ emissions shall not exceed 0.016 lb/hr and 0.07 TPY.

Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 0.6lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of B009 (20.92 MMBtu/hr).

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (0.016lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs/ton.

c. Emissions Limitations:

VOC emissions shall not exceed 0.135lb/hr and 0.59 TPY.

Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-2 (7/98) emission factor of 5.5lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of P069-74 (25MMBtu/hr).

If required, VOC emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760), and then dividing by 2,000 lbs/ton.

d. Emissions Limitations:

NO_x emissions shall not exceed 1.22 lbs/hr and 5.37 TPY.

Applicable Compliance Methods:

Compliance with the lbs/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-1 (7/98) emission factor of 50lbs/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of P069-74 (25MMBtu/hr).

If required, NO_x emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60



"Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (1.22lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs/ton.

e. Emissions Limitations:

CO emissions shall not exceed 2.06 lbs/hr and 9.01 TPY.

Applicable Compliance Methods:

Compliance with the lb/hr emissions limitation shall be determined by dividing the AP-42, Table 1.4-1 (7/98) emission factor of 84 lb/mmscf by the heat content of the natural gas (1020 Btu/scf), and then multiplying by the maximum heat input of P069-74 (25MMBtu/hr).

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual emissions limitation shall be determined by multiplying the lb/hr emissions limitation (2.06lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs/ton.

f. Emissions Limitations:

PE from P069-74, combined, shall not exceed 0.37 TPY, as a rolling, 12- month, summation.

Applicable Compliance Method:

The TPY emissions limitation was developed by multiplying the lb/hr limitation (0.047 lb/hr) by the maximum annual hours of operation (8,760), by the annual capacity factor of 30%, by 6 furnaces, and then dividing by 2,000 lbs/ton.

g. Emissions Limitations:

SO₂ emissions from P069-74, combined, shall not exceed 0.12 TPY, as a rolling, 12-month summation.

Applicable Compliance Method:

The TPY emissions limitation was developed by multiplying the lb/hr limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760), by the annual capacity factor of 30%, by 6 furnaces, and then dividing by 2,000 lbs/ton.

h. Emissions Limitations:

VOC emissions from P069-74, combined, shall not exceed 1.06 TPY, as a rolling, 12-month summation.



Applicable Compliance Method:

The TPY emissions limitation was developed by multiplying the lb/hr limitation (0.135 lb/hr) by the maximum annual hours of operation (8,760), by the annual capacity factor of 30%, by 6 furnaces, and then dividing by 2,000 lbs/ton.

i. Emissions Limitations:

NO_x emissions from P069-74, combined, shall not exceed 9.66 TPY, as a rolling, 12-month summation.

Applicable Compliance Method:

The TPY emissions limitation was developed by multiplying the lb/hr limitation (1.22 lbs/hr) by the maximum annual hours of operation (8,760), by the annual capacity factor of 30%, by 6 furnaces, and then dividing by 2,000 lbs/ton.

j. Emissions Limitations:

CO emissions from P069-74, combined, shall not exceed 16.24 TPY, as a rolling, 12-month summation.

Applicable Compliance Method:

The TPY emissions limitation was developed by multiplying the lb/hr limitation (2.06 lbs/hr) by the maximum annual hours of operation (8,760), by the annual capacity factor of 30%, by 6 furnaces, and then dividing by 2,000 lbs/ton

k. Emissions Limitations:

Stack visible PE shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

[Authority Citation: OAC rule 3745-77-01(C)(1) and PTI 06-91602]

g) Miscellaneous Requirements

(1) None.



22. P077, Ingot Heat Furnace No. 7

Operations, Property and/or Equipment Description:

25 MMBtu/hr Natural Gas-fired Ingot Heating Furnace No.7 controlled by a low NO_x burner with a maximum annual natural gas usage of 85,050,000 cubic feet, installed 5/22/2008.

- 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 |
|----|---|---|
| | OAC rule 3745-31-05(A)(3), as effective 11/30/01 (Admin. Mod. PTI P0116290, issued 3/5/14) | SO ₂ emissions shall not exceed 0.015 lb/hr. NO _x emissions shall not exceed 1.21 lb/hr. CO emissions shall not exceed 2.04 lbs/hr. VOC emissions shall not exceed 0.13 lb/hr. PM/PM ₁₀ emissions shall not exceed 0.18 lb/hr. See b)(2)a. below. |
| a. | OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 | See b)(2)b. below. |
| b. | OAC rule 3745-31-05(C), as effective 11/30/01 | See b)(2)c. below. |
| c. | OAC rule 3745-31-05(D) (Synthetic Minor to limit overall emissions to save for potential future projects) | SO ₂ emissions shall not exceed 0.03 TPY, as a rolling, 12-month summation. NO _x emissions shall not exceed 2.13 TPY, as a rolling, 12-month summation. CO emissions shall not exceed 3.57 TPY, |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|--|
| | | as a rolling, 12-month summation. VOC emissions shall not exceed 0.23 TPY, as a rolling, 12-month summation. PM/PM10 emissions shall not exceed 0.32 TPY, as a rolling 12-month summation. |
| d. | OAC rule 3745-17-07 | See b)(2)d. below. |
| e. | OAC rule 3745-17-11 | See b)(2)e. below. |
| f. | OAC rule 3745-18-06 | See b)(2)f. below. |

(2) Additional Terms and Conditions

- a. 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 *pollutant 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 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.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂, CO, VOC and PM/PM₁₀ emissions from this air contaminant source since the uncontrolled potentials to emit for SO₂, CO, VOC and PM/PM₁₀ are less than 10 TPY.

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP.

Permit to Operate P0089765 for this air contaminant source takes into account the following voluntary restrictions (including the use of any air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for Particulate Emissions.

- i. Natural gas usage shall not exceed 85,050,000 cubic feet per year.
- ii. This emissions unit shall only be operated with a low NO_x burner.



- d. This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-017-07(A), pursuant to OAC rule 17-07(A)(3)(h), because it is not subject to OAC rule 3745-17-11.
 - e. This emissions unit is exempt from Figure II of OAC rule 3745-17-11, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), because the uncontrolled mass rate of emissions is less than 10 pounds per hour and from Table I of OAC rule 3745-17-11 because the process weight, as defined in OAC rule 3745-17-01(B)(17), is equal to zero.
 - f. This emissions unit is exempt from OAC rule 3745-18-06 pursuant to OAC rule 3745-18-01(B)(14) because natural gas is excluded from the definition of "process weight" and pursuant to OAC rule 3745-18-06(A) because natural gas is the only fuel burned.
- c) Operational Restrictions
- (1) The permittee shall only burn natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
 - a. The total quantity of natural gas used in emissions unit P077; and
 - b. The rolling, 12-month summation of the monthly natural gas usage, in cubic feet (ft³).
 - (2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit deviation (excursion) reports which identify the following exceedances:
 - a. the rolling, 12-month natural gas usage limitation
 - (3) 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.



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. Emissions Limitations:

SO₂ emissions shall not exceed 0.015 lb/hr and 0.03 TPY, based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with lb/hr emissions limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 0.6 lb/MMCF by the maximum hourly natural gas fuel usage (0.02427 MMCF/hr).

Compliance with the rolling, 12-month emission limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 0.6lb/MMCF by the total fuel usage as recorded in Section d)(1)b. during each rolling, 12-month period and dividing by 2000 lbs/ton.

b. Emissions Limitations:

NO_x emissions shall not exceed 1.21 lb/hr and 2.13 TPY, based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with lb/hr emissions limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) low NO_x burner emission factor of 50lb/MMCF by the maximum hourly natural gas fuel usage (0.02427 MMCF/hr).

Compliance with the rolling, 12-month emission limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 50 lb/MMCF by the total fuel usage as recorded in Section d)(1)b. during each rolling, 12-month period and dividing by 2000 lbs/ton.

c. Emissions Limitations:

CO emissions shall not exceed 2.04 lbs/hr and 3.57 TPY, based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with lb/hr emissions limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 84lb/MMCF by the maximum hourly natural gas fuel usage (0.02427 MMCF/hr).

Compliance with the rolling, 12-month emission limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 84lb/MMCF by the total fuel usage as recorded in Section d)(1)b. during each rolling, 12-month period and dividing by 2000 lbs/ton.



- d. Emissions Limitations:
VOC emissions shall not exceed 0.13 lb/hr and 0.23 TPY, based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with lb/hr emissions limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 5.5lb/MMCF by the maximum hourly natural gas fuel usage (0.02427 MMCF/hr).

Compliance with the rolling, 12-month emission limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 5.5lb/MMCF by the total fuel usage as recorded in Section d)(1)b. during each rolling, 12-month period and dividing by 2000 lbs/ton.

- e. Emission Limitation:
PM/PM10 emissions shall not exceed 0.18 lb/hr and 0.32 TPY, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with lb/hr emissions limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 7.6lb/MMCF by the maximum hourly natural gas fuel usage (0.02427 MMCF/hr).

Compliance with the rolling, 12-month emission limitation shall be demonstrated by multiplying the AP-42 Table 1.4-2 (7/98) emission factor of 7.6lb/MMCF by the total fuel usage as recorded in Section d)(1)b. during each rolling, 12-month period and dividing by 2000 lbs/ton.

- f. Emission Limitation:
SO₂ emissions shall not exceed 62.6 lbs/hr.

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation shall be determined based on the following equation:

$$AER = 30 P^{0.67}$$

Where:

P= Maximum process weight rate in tons per hour (3 TPH)

AER= Allowable emission rate of SO₂ (62.6 lbs/hr).

If required, SO₂ emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



Draft Title V Permit

Titanium Metals Corporation

Permit Number: P0089765

Facility ID: 0641180064

Effective Date: To be entered upon final issuance

g) Miscellaneous Requirements

(1) None.



23. P093, Abrasive Saw with Coolant

Operations, Property and/or Equipment Description:

3.5 TPH Abrasive Saw with Water/Coolant injection controlled by a Rotoclone Dust Collector, installed 7/22/2013.

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), as effective 11/30/01 (Admin. Mod. PTI P0117610, issued 10/28/2014) | Install a dust collector that is designed to emit, at maximum, 0.030 grains per dry standard cubic feet (gr/dscf) of particulate emissions (PE). Volatile organic compounds (VOC) emissions shall not exceed 0.13 TPM, averaged over a rolling, twelve-month period. See b)(2)a. below. |
| b. | OAC rule 3745-31-05(C), as effective 12/01/06 | See b)(2)b. below. |
| c. | OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 | See b)(2)c. below. |
| d. | OAC rule 3745-17-07(A)(1) | Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average. |
| e. | OAC rule 3745-17-11(B)(1) (Table I) | PE shall not exceed 9.49 pounds per hour (lbs/hr). |

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by 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 revision to 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 OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit to Install (PTI) P0110524 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. This emissions unit shall not operate without the associated rotoclone dust collector.
- ii. 100% of PE from sawing activities shall be collected and exhausted to the rotoclone dust collector. There shall be no fugitive PE associated with this source.
- iii. 7.9 TPY limit for PE

- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than 10 tons/yr.

c) **Operational Restrictions**

- (1) The permittee shall install and operate a dust collector for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dust collector in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (2) In the event the dust collector is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

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

- (1) The permittee shall perform weekly 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.

- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dust collector, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the dust collector to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dust collector while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (5) The permittee shall document each inspection (periodic and annual) of the dust collection system and shall maintain the following information:



- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request

- (6) The permittee shall maintain records that document any time periods when the dust collector was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dust collector was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to Ohio EPA's Southeast 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 any daily record showing that the dust collector was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation. Each report shall be submitted within 30 days after the deviation occurs.
- 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. Design Efficiency Standard:
Install a dust collector that is designed to emit, at maximum, 0.030 grains per dry standard cubic feet (gr/dscf) of particulate emissions (PE).



Applicable Compliance Method:

Compliance is demonstrated by the manufacturer's guaranteed specifications for the dust collector control efficiency of 98% and maximum outlet grain loading of 0.03 gr/dscf.

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

Volatile organic compounds (VOC) emissions shall not exceed 0.13 TPM, averaged over a rolling, twelve-month period.

Applicable Compliance Method:

Compliance with the TPM emissions limitation is demonstrated by multiplying the percentage of VOC-containing coolant in the total coolant mixture (5% or 0.05) by the coolant mixture usage rate (2 gal/hr) by the VOC content of the VOC-containing coolant (0.70 lbs/gal) by the safety factor of 5 and then multiplying by 8760 hours per year and then dividing by 2000 pounds per ton and 12 months per year.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emissions Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

d. Emissions Limitation:

PE shall not exceed 9.49 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

- (1) None.



24. P901, Blast Room

Operations, Property and/or Equipment Description:

10 TPH Blast Room Shot Blaster controlled by a baghouse (including baghouse dust collection and material handling).

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 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. below. |
| d. | OAC rule 3745-17-11(B)(1) | Stack PE shall not exceed 5.69lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The allowable mass rate of emission of particulate matter was based on Figure II of OAC rule 3745-17-11 and was determined to be 5.69lbs/hr. The uncontrolled mass rate of particulate emissions (U) was calculated to be 34.51 lbs/hr based on emissions testing conducted on May 17, 2007, and the capture and control efficiency of the control equipment.



c) Operational Restrictions

- (1) The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.
- (2) All PE from the blast room shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

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

d) Monitoring and/or Recordkeeping Requirements.

- (1) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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



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. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

b. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Stack PE shall not exceed 5.69 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.

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

for 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.



- d. 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.
- e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.
- 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.

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

g) Miscellaneous Requirements

- (1) None.



25. P902, Descale Pickle Line Shot Blaster

Operations, Property and/or Equipment Description:

7.4 TPH Descale Pickle Line Shot Blaster controlled by a baghouse (including baghouse dust collection and material handling).

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 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| b. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| c. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| d. | OAC rule 3745-17-11(B)(1) | Uncontrolled PE shall not exceed 10.0 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The uncontrolled mass rate of particulate emissions (U) from this emissions unit is less than 10 lbs/hr based on emissions testing that occurred on May 21, 2007, and the capture and control efficiency of the control equipment. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable particulate emissions limitation is greater than 10 lbs/hr. Therefore, to



ensure that Figure II will not be applicable, the uncontrolled particulate emissions are limited to 10 lbs/hr.

c) Operational Restrictions

- (1) The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.
- (2) All PE from the blast room shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

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

d) Monitoring and/or Recordkeeping Requirements.

- (1) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted



in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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



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. Emissions Limitation:

Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

b. Emissions Limitation:

Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

c. Emissions Limitation:

Uncontrolled PE shall not exceed 10.0 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by the following one-time calculation:

U = uncontrolled mass rate of particulate emissions

95% = dust collection capture efficiency

98.8% = baghouse control efficiency

0.067 lb/hr = 5/21/2007 stack test results for EU P901

$$0.067 \text{ lb/hr} = (1 - 98.8\%)(95\% * U)$$

$$U = 5.88 \text{ lbs/hr}$$

If required, compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None



26. P903, Pangborn Sandblast Machine

Operations, Property and/or Equipment Description:

6.67 TPH Pangborn Sandblast Machine controlled by a baghouse (including baghouse dust collection and material handling).

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 17-283, issued 9/26/84) | PE shall not exceed 0.030 gr/dscf. |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average. |
| d. | OAC rule 3745-17-08(B) | Reasonably available control measures to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. below. |
| e. | OAC rule 3745-17-11(B)(1) | Stack PE shall not exceed 2.95 lbs/hr. See b)(2)b. below. |

(2) Additional Terms and Conditions

a. The emissions from this unit shall be vented to a dust collection system and baghouse.

b. The allowable mass rate of emission of particulate matter was based on Figure II of OAC rule 3745-17-11 and was determined to be 2.95lbs/hr. The uncontrolled mass rate of particulate emissions (U) was calculated to be 14.74 lbs/hr based on emissions testing conducted on May 14, 2007, and the capture and control efficiency of the control equipment.



c) Operational Restrictions

- (1) The permittee shall employ and properly maintain the lids and connecting piping or other equivalent control measures on the receiving bins under the baghouse hoppers, and the collected dust shall be treated with a dust suppressant in sufficient quantities to minimize or eliminate any visible emissions of fugitive dust during the handling of the collected material.
- (2) All PE from the blast room shall be vented to the baghouse. Fugitive emissions are allowed only from the collection point and from the handling of baghouse dust.

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

d) Monitoring and/or Recordkeeping Requirements.

- (1) The permittee shall perform weekly 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to 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 visible emission 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.

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive 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 visible emission 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.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to Ohio EPA's Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

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. Emissions Limitation:
PE shall not exceed 0.030 gr/dscf.
- Applicable Compliance Method:
PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.
- b. Emissions Limitation:
Stack visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
- Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9.
- c. Emissions Limitation:
Fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.
- Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9.
- d. Emissions Limitation:
Stack PE shall not exceed 2.95 lbs/hr.
- Applicable Compliance Method:
Compliance shall be demonstrated based upon the emissions testing methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(10).

[Authority Citation: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 3 months after permit issuance and within 6 months prior to permit expiration
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE rate.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

for 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.

- d. 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.
- e. A PE test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Method 5 of 40 CFR, Part 60, Appendix A shall be employed.
- 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.

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

g) Miscellaneous Requirements

- (1) None.



27. P904, Rotoblast

Operations, Property and/or Equipment Description:

10 TPH Plate Shotblasting Unit controlled by a baghouse (including baghouse dust collection and material handling) with a maximum annual titanium production of 30,000 TPY.

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(C) (Synthetic minor to avoid PSD and voluntary restriction to avoid BAT) | PM emissions shall not exceed 9.08 TPY, as a rolling, 12-month summation. PM ₁₀ emissions shall not exceed 7.01 TPY, as a rolling, 12-month summation. See b)(2)a. below. |
| b. | OAC rule 3745-17-07(A)(1) | Stack visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by the rule. |
| c. | OAC rule 3745-17-07(B)(1) | Fugitive visible PE shall not exceed 20% opacity, as a three-minute average. |
| d. | OAC rule 3745-17-08(B) | The permittee shall implement reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b. through d. below. |
| e. | OAC rule 3745-17-08(B)(3) | The control equipment shall achieve an outlet emission rate of not greater than 0.03 grains of PE per dry standard cubic foot of exhaust gases (gr/dscf) or no visible particulate emissions from the exhaust stack, whichever is less stringent. |
| f. | OAC rule 3745-17-11(B)(1) (Figure II) | PE shall not exceed 15.0 lbs/hr. |



(2) Additional Terms and Conditions

a. PTI 06-08385 and TV PTO P0089765 for this air contaminant source takes into account the following voluntary restrictions, whenever this air contaminant source is in operation, with a minimum control efficiency of 99% and a minimum capture efficiency of 99% as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. This emissions unit shall only operate while being controlled by a baghouse, with a minimum capture and control efficiency of 99%, that achieves an outlet emission rate of 0.01 gr/dscf.

ii. Annual plate production shall not exceed 30,000 tons.

b. The material handling operations that are covered by this permit and subject to the requirements of OAC rule 3745-17-08(B) are listed below:

i. Plate shotblasting unit.

c. The permittee shall employ reasonably available control measures for the above-identified material handling operation for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| <u>material handling operation(s)</u> | <u>control measure(s)</u> |
|---------------------------------------|------------------------------|
| shot blasting unit | enclosures, vent to baghouse |

Nothing in this paragraph shall prohibit the permittee from employing additional control measures to ensure compliance.

d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

(1) The permittee shall not operate this emissions unit without the associated baghouse.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:



- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to 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 weekly 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.

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

- a. throughput, in tons, for each month; and
- b. the rolling, 12-month summation of monthly throughputs, in tons.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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,
- b. all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and
- c. describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions.

These reports shall be submitted to the Ohio EPA, Southeast 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 which identify the following exceedances:

a. the rolling, 12-month throughput limitation.

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. Emissions Limitation:

PM emissions shall not exceed 9.08 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limit shall be based upon the following equations:

PM TPY (stack) = Grain loading (0.01 gr/dscf) X (lb/7000 gr) X Flow rate (18,000 scfm) X (60 min/hour) X (ton/2000 lbs) X (8760 hours/year)= 6.76TPY

PM TPY (fugitive) = Actual rolling, 12-month throughput (maximum of 30,000 TPY) X PM emission factor(15.5 lbs/ton) X (1- Capture Efficiency of 99%) X (1 ton/2000 lbs)= 2.33TPY

Total emissions (stack + fugitive) = 6.76 TPY + 2.33 TPY = 9.08 TPY

If required, PE shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

PM₁₀ emissions shall not exceed 7.01 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limit shall be based upon the following equations:

PM₁₀ TPY (stack) = Grain loading(0.01 gr/dscf) X (lb/7000 gr) X Flow rate (18,000 scfm) X (60 min/hour) X (ton/2000 lbs) X (8760 hours/year)= 6.76TPY

PM₁₀ TPY (fugitive) = Actual rolling, 12-month throughput (maximum of 30,000 TPY) X PM10 emission factor (1.70 lbs/ton)



$$X (1 - \text{Capture Efficiency of } 99\%) X (1 \text{ ton}/2000 \text{ lbs}) = 0.26 \text{ TPY}$$

Total emissions (stack + fugitive) = 6.76 TPY + 0.26 TPY = 7.01 TPY

If required, PE shall be determined according to test Method 201, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emissions Limitation:

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

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

d. Emissions Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9, with the modifications found in OAC rule 3745-17-03(B)(3)(a) and (b).

e. Emissions Limitation:

The control equipment shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and/or Method 22 (no visible particulate emissions limitation) and the procedures specified in OAC rule 3745-17-03(B)(10) and/or OAC rule 3745-17-03(B)(4).

f. Emissions Limitation:

Particulate emissions (PE) shall not exceed 15.0 pounds per hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.



Draft Title V Permit

Titanium Metals Corporation

Permit Number: P0089765

Facility ID: 0641180064

Effective Date: To be entered upon final issuance

g) Miscellaneous Requirements

(1) None.