DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

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FACILITY: AJAX METAL PROCESSING INC.	SRN / ID: B5830
LOCATION: 4651 BELLEVUE AVE, DETROIT	DISTRICT: Detroit
CITY: DETROIT	COUNTY: WAYNE
CONTACT: FRANK BORNO , PRESIDENT	ACTIVITY DATE: 11/22/2016
STAFF: Terseer Hemben COMPLIANCE STATUS: Non Complia	ance SOURCE CLASS: MAJOR

COMPLIANCE INSPECTION OF AJAX METAL PROCESSING INC., DETROIT

Terseer Hemben (AQD)

Personnel Present: Mr. Dave Krause (General Manager), Ms. Tina Sakalas (Executive Administrator)

Company:

Ajax Metal Processing Inc. (AMPI)

4651 Bellevue Avenue, Detroit, MI 48207

SRN: B5830; ROP # MI-ROP-B5830-2015a Date of Inspection: November 22, 2016

Facility Phone Number:

313-267-2100; ext 5012.; 313-267-2104 (Tina Sakalas)

BACKGROUND

The Ajax Metal Processing Inc. (AMPI) is a metal finishing facility located in Detroit, Wayne, County, Michigan. AMPI offers metal finishing services that include heat treating, plating, and application of locking and sealing materials onto metal fasteners, including nuts and bolts. The AMPI operation at Bellevue, Detroit is subject to the Michigan ROP program because the facility has a Potential to Emit (PTE) greater than 10 tons per year of HAP from the coating lines. Pursuant to NESHAP regulations, AMPI is considered a Major Source. The facility does not have a PTE more than 100 tpy of criteria pollutants. AMPI demonstrates compliance under the ROP No. MI-ROP-M5830-2015a.

The AMPI reports MAERS and is not subject to Acid Rain Program. The facility is a minor emitter of Green House Gas.

The AMPI has neither applicable Rule 281(h) sources nor applicable Rule 287(c) sources, so these exempt rules do not apply as a surface coating facility. However, AMPI operates under the ROP that contains applicable requirements for the facilities Rule 290 sources. Under this ROP, the emission units EUPHOS1, EUPHOS2, and EUWAX are identified as part of FGRULE290.

The AMPI incorporated FGBOILERMACT in the ROP requirements associated with 40 CFR Part 63, Subpart DDDDD. Hence the emission units (EUBOILER60HP, EUBOILER150HP, EUHARDENING1, EUHARDENING2, and EUENDO) which are exempt from Rule 201 were incorporated as emission units. The EUBOILER60HP and EUBOILER150HP are natural gas fired boilers that are exempt from PTI requirements pursuant to R 336.1282(2)(b)(i). EUHARDENING1 and EUHARDENING2 are natural gas fired hardening furnaces that are exempt pursuant to R 336.1282(a)(i). The EUENDO is an endothermic generator and is exempt per R 336.1285(2)(I)(iv).

Compliance Assurance Monitoring (CAM) is applicable to emission units that use control devices to achieve compliance with emission limitation or standard, and for which the emission unit has potential pre-control emissions more than 100% of the major source threshold amount (at a level considered to be major under the ROP Program) for the applicable pollutant. AMPI does not have any emission units with CAM requirements.

INSPECTION NARRATIVE

I arrived at the Ajax facility on November 22, 2016, at 1305 hours. The purpose of visit was to conduct an annual compliance inspection of the metal processing and coating operation. Temperature at the hour was 39 F with wind speed calm and humidity 46%. I was admitted into the facility conference room by Ms. Tina Sakalas. Mr. Dave Kruse joined us for a pre-inspection interview. We went over itemized agenda

I presented for the inspection. We discussed the records that MDEQ-AQD needed to see and requested copies of same from AMPI. The Company indicated most of the requested records were electronically filed. I gave time extension for the Company to provide those records. Records were hand delivered on December 15, 2016.

Mr. Krause walked with me through the plant for inspection of emission units. We inspected all the Emission Units listed in Renewable Operating Permit. We observed that Ajax Metal Processing maintained the use of permitted processes in running the metal finishing plant. We held a post-inspection interview in the plant. The records requested by AQD were submitted timely.

COMPLAINT/COMPLIANCE HISTORY:

Ajax Metal Processing Company has been operating in compliance since the last inspection.

OUTSTANDING LOV'S:

None

PROCESS DESCRIPTION:

The Ajax Metal Processing Company operates the following coating lines at the Bellevue Street, Detroit location. The process lines include Dip/Spin Paint line, Waste Water Treatment, Zinc Plating, Phosphate line, Chromate Plating, Heat Treatment furnace, Locking and Sealing, and Laboratory for quality control analysis. There are numerous plating tanks and solution-holding tanks, solid waste holding bins, and scrubbers associated with each process line. Ajax Metal Processing facility offers clean and coat services on metal parts for companies, such as Ford Motor Company, Fiat and Chrysler, and General Motors. The rendered services include applications of both 3M, and Loctite adhesives and sealants.

EQUIPMENT AND PROCESS CONTROLS:

Ajax Metal Processing Company provided updated process control equipment in the Scrubber system. The Company's information is filed in the records.

OPERATING SCHEDULE/PRODUCTION RATE:

Ajax Metal Processing Inc. operates full three shifts covering 24 hours, through 7 days per week, and 365 days of the year. The Company has 40 employees working at this facility.

APPLICABLE RULES Permit# MI-ROP-B5830-2015a CONDITIONS:

The AMPI operations were evaluated consistent with the ROP conditions. The following conditions were provided the basis:

SOURCE-WIDE

- 1. In compliance AMPI demonstrated the maximum VOC emissions from Source-Wide equipment were less than 30 tpy. based on a 12-month rolling time period as determined at the end of each calendar month from all metal parts coating lines operating per the requirements of R 336.1621(10)(b) at the stationary source. (R 336.1702(d)) [SC. I.1]. Records submitted by the AMPI covering the recent 2 years indicated the maximum Source-Wide VOC emission occurred at the end of the 12-month rolling monthly period of October 2016 and amounted to 26.2 tons per year [Exhibit Question 1, Pg. 1].
- 2. Noncompliance AMPI did not demonstrate the permittee determined the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Permittee determined the VOC content from manufacturer's formulation data and used results to determine compliance. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5)) [SC. V.1]. Permittee did not obtain a prior approval to use coating formulation data listing compositions by weight, percent, density as received or applied in Exhibit question for Question#2 to attain compliance [Pgs. 3, 4, and 5].
- 3. In compliance AMPI demonstrated the permittee completed all required calculations to attain compliance in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.702(d)) [VI.1]. Records submitted by AMPI stated required calculations to attain compliance were completed timely. Examination of format used for data compilation confirmed compliance with monitoring/recordkeeping per required calendar month [Exhibit Question# 1, Pg. 1].

- 4. In compliance AMPI demonstrated the permittee kept the following information on a calendar month basis for all metal parts coating lines operating per the requirements of R 336.1621(10)(b) at the Stationary Source [SC. V.2]:
 - a. Gallons or pounds of each VOC containing coating used and reclaimed [SC. VI.2a] Records submitted showed AMPI kept information on a calendar month in the format using gallons or pound of each VOC coating used and reclaimed [Exhibit Question# 4, Pg. 7].
 - b. VOC content, in pounds per gallon or pounds per pound, of each VOC containing coating used. [SC. VI.2b]. Records submitted showed AMPI used the required units of pounds per gallon in recording each VOC coating used [Exhibit 2, Pg. 3-5].
 - c. VOC emission calculations determining the monthly emission rate in tons per calendar month. [SC. VI.2c]. Records submitted by AMPI showed calculations determining the monthly emission rate in tons per month were recorded in the required format [Exhibit 4, Pg. 11].
 - d. VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from the coating of metal parts. [SC. VI.2d]. Records submitted by AMPI showed calculations determining the annual emission in tons per 12-month rolling time period were recorded according to the required format [Exhibit 4, Pg. 11]. Spot check of data listed in Exhibit Question#4 confirmed compliance with calculation format.
 - It was confirmed the permittee kept the records listed in items (a), (b), (c), and (d) using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee kept all records on file and made them available to the Department upon request. (R 336.1702(d))
- 5. In compliance AMPI did demonstrated the permittee did prompt reporting of deviations in Source-wide equipment operations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii)) [SC.VII.1]. Response from AMPI stated no deviations from the Source -wide operations occurred was confirmed in MACES report file [Response Summary Item# 5].
- 6. In compliance- AMPI demonstrated the permittee did Semiannual reporting of monitoring and deviations in Source-wide equipment operations pursuant to General Condition 23 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)) [SC. VII.2]. Response from AMPI stated that Semiannual reports were submitted timely [Response Summary item# 6]. AQD confirmed from the Semiannual reports submitted by AMPI as logged in MACES report.
- 7. In compliance AMPI demonstrated the permittee did submit Annual certification of compliance in Source-wide equipment operations pursuant to General Conditions 19 and 20 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c)) [SC. VII.3]. Response submitted by AMPI stated Annual reports were submitted timely [Response Summary item# 7]. AQD confirmed the submittal in MACES report.
- 8. Not applicable-AMPI did not need to demonstrate the exhaust gases from the stacks listed in the table below were discharged unobstructed vertically upwards to the ambient air unless otherwise noted [SC. VIII]: The ROP does not have stack conditions hence the condition is not applicable to the process.
- 9. In compliance AMPI stated a change was made to the process or equipment at this facility in the recent 2 years [Rule 201]. The change was effected under approved PTI# 47-16 that was incorporated into the ROP. AQD confirmed the change and approval [Response Summary item# 9].

FGLOCKSEAL

10. In compliance – AMPI demonstrated the maximum VOC emissions from FGLOCKSEAL did not

exceed 2000 lbs. month based on calendar month from each individual coating line and the purge and clean-up operations associated with the line (R 336.1225, R 336.1702(d) [SC. I.1]. Records submitted by AMPI covering the LOCKSEAL group indicated compliance in each month showing VOC emissions to be less than 2000 lbs. per month [Exhibit Question# 4, pg. 11 through 19].

- 11. In compliance AMPI demonstrated the maximum VOC emissions from the FGLOCKSEAL did not exceed 10.0 tpy based on a 12 month rolling time period as determined at the end of each calendar month from each individual coating line and the purge and clean-up operations associated with the line (R 336.1225, R 336.1702(d)) [SC. I.2]. Records submitted by AMPI covering LOCKSEAL group indicated maximum VOC emissions recorded in each 12-month rolling time period was less than 10 tons per month [Exhibit Quest# 4, Pg. 11 through 19]. A spot check calculation confirmed compliance.
- 12. In compliance AMPI stated that all recovered and reclaimed, recycled or disposed of coatings, paints, purge and cleanup solvents, etc. (materials) used in FGLOCKSEAL were processed in accordance with all applicable regulations (R 336.1224, R 336.1702(a)), [SC. III.1]. Response from AMPI stated waste coatings were stored in closed containers until disposed of. Reducers were stored in closed containers until reused. Reducers were not disposed [Response Summary item# 12].
- 13. In compliance- AMPI demonstrated all captured waste materials were stored in closed containers and disposed in an acceptable manner in compliance with all applicable rules and regulations were processed in accordance with applicable regulations. (R 336.224, R 336.1702(a)), [SC. III.1]. Response from AMPI stated all waste coatings were stored in closed containers and disposed. In addition, all reducers were stored in closed containers and reused. [Response summary item# 13].
- 14. In compliance AMPI demonstrated the permittee handled all VOC and /or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee kept containers covered at all times except when operator access was necessary. (R 336.1224, R 336.1702(a)) [SC. III.2]. Response from AMPI stated coatings and reducers are stored in closed containers. Staff examined closed containers with coatings and reducers were stored in accordance with applicable rules [Response Summary item# 14].
- 15. In compliance AMPI demonstrated the permittee handled all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners in a manner to minimize the generation of fugitive emissions. The permittee kept containers covered at all times except when operator access was necessary (R 336.1224, R 336.1225, R 336.1702(a)) [SC. III.3]. Response was same as in item# 14.
- 16. In compliance AMPI demonstrated permittee equipped and maintained each application portion of FGLOCKSEAL with HVLP applicator or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee kept test caps available for pressure testing (R 336.1702(d)) [SC. IV.1]. Response from AMPI stated the Dip Spin and Flow Coat coating lines are equivalent to HVLP. Staff examined the coating equipment and noticed the precision of automation [Response Summary item# 16].
- 17. Noncompliance AMPI demonstrated permittee determined the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, permittee determined the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values differed, permittee used the Method 24 results to determine compliance. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5)) [SC. V.1]. AMPI presented the data obtained from manufacturer's formulation without prior approval in place of Reference Test Method 24 to meet compliance as presented in Question# 2, pgs. 3, 4, and 5, to demonstrate compliance [Response Summary item# 17].
- 18. In compliance AMPI demonstrated the permittee completed all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition (R 336.1224, R 336.1225, R 336.1702) [SC. VI.1]. AMPI demonstrated compliance as presented in Question 1 [Exhibit Question 1, Pg. 1].

- 19. In compliance AMPI demonstrated permittee maintained current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data consisted of MSDS, Manufacturer's formulation data, or both deemed acceptable by the AQD District Supervisor. The permittee kept all records on file and made them available to the Department upon request (R 336.1224, R 336.1225, R 336.1702) [SC. VI.2]. Response from AMPI showed composition of each material, including weight percent of each component drawn from the Manufacturer's formulation data was kept and presented to AQD at request [Exhibit Question# 2].
- 20. In compliance AMPI demonstrated permittee kept the following information on calendar month basis for FGLOCKSEAL:
- a) Gallons (with water) of each coating, paint, purge and clean-up solvent, etc. (material) used and reclaimed (R 336.1702) [SC. VI.3a]. Permittee demonstrated compliance through recordkeeping in the required format as reported in Exhibit Question# 4 [Response Summary item# 20a].
- b) VOC content (with water) of each material as applied. (1702) [SC. VI.3b]. Permittee demonstrated compliance with the required format as presented in the Exhibit Question# 4 [Summary Response item# 20b].
- c) VOC content mass calculations determining the monthly emission rate in pounds per calendar month. (R 336.1702) [SC. VI.3c]. Permittee demonstrated compliance as presented in the format reported in Exhibit Question# 4 for VOC per coating line [Response Summary item# 20c].
- d) VOC mass emission calculations determining the annual emission rate in tons per 12 month-rolling time period as determined at the end of each calendar month. (R 336.1702) [SC. VI.3d]. Permittee demonstrated compliance with calculations determining the annual emission rate in tons per 12-month-rolling time period as determined at the end of each calendar month ia presented in the format reported in Exhibit Question # 4 for VOC emission per coating line [Response Summary item# 20d]. Spot check on data presented in Pg. 11 confirmed compliance.
- 21. In compliance AMPI demonstrated the permittee did prompt reporting of deviations in FGLOCKSEAL pursuant to General Conditions 21 and 22 of Part A (R 336.1213(3) (c) (ii)) [SC. VII.1]. AMPI submitted reports stating there were no deviations during the reporting period. Reports are on file in MACES [Response Summary item# 21].
- 22. In compliance AMPI demonstrated the permittee submitted Semiannual reporting of monitoring and deviations in FGLOCKSEAL pursuant to General Condition 23 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)) [SC. VII.2]. Records of timely submitted reports are on AQD files in MACES [Response Summary item # 22].
- 23. In compliance AMPI demonstrated the permittee submitted Annual certification of compliance in FGLOCKSEAL pursuant to General Conditions 19 and 20 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c)) [SC. VII.3]. Compliance is demonstrated as in Question 23 [Response Summary item# 23].
- 24. In compliance AMPI demonstrated within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUDISPSPIN2 portion of FGLOCKSEAL, permittee or the authorized agent pursuant to Rule 204, notified the AQD Detroit District Supervisor, in writing, of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUDIPSPIN2 portion of FGLOCKSEAL. (R 336.1201(7)(a)) [SC. VII.4]. AMPI submitted notification timely. Compliance demonstration is presented in Exhibit Question# 24, Pg. 21 [Response Summary item# 24].
- 25. Noncompliance AMPI did not demonstrate permittee did not discharge the exhaust gases from stacks in FGLOCKSEAL listed in the table below unobstructed vertically upwards to the ambient air

unless otherwise noted [SC. VIII.1]: Visual inspection observed there were rain caps on stacks. Response from AMPI stated rain caps were installed on DIPSPIN2 oven and application machine due to water infiltration. AMPI plans to contact the MDEQ-AQD permitting unit for modification to allow use of rain caps on stacks. Staff explained the negative impact of installing rain caps on stack discharge point and why the DEQ-AQD objected to the installation. The act was a violation of the SC. VIII.1 of the ROP. Violation notice will be issued to AMPI to correct the mal-construction [Response Question item# 25].

SVDIPSPIN2-01 Max.ID = 12", height = 30' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.1] – was equipped with a rain cap without approved permit to install.

SVDIPSPIN2-02: Oven Max.ID = 24", height = 30' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.2] - was equipped with a rain cap without approved permit to install.

SVLOCTITE1-01

Max.ID = 14",

height = 28' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.3]

SVLOCTITE1-02: Oven

Max. ID = 10", height = 28"

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.4]

SVLOCKTITE2-01 Max.ID =14", height = 28' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.5]

SVLOCKTITE2-02: Oven

Max.ID = 10", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.6]

SVLOCTITE3-01: Oven

Max.ID = 14", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.7]

SVWHEEL1-01

Max.ID = 12", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.8]

SVWHEEL1-02: Oven end Max.ID = 14", height = 28' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.9]

SVWHEEL1-03: Oven Middle Max.ID = 10", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.10]

SVWHEEL3-01

Max.ID = 14", Height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d) [SC.

VIII.11])

SVWHEEL3-02: Oven end Max.ID = 10", height = 28' (R 336.1225, 40 CFR 52.21(c) & (d) [SC. VIII.12])

SVWHEEL3-03: Oven middle Max.ID = 14", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.13]

SVWHEEL4: Oven Max.ID = 14", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.14]

SVDIPSPIN-01: Oven

Max.ID = 12", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.15]

SVDIPSPIN 02: Oven

Max.ID = 16", height = 28'

(R 336.1225, 40 CFR 52.21(c) & (d)) [SC.

VIII.16]

- 26. In compliance AMPI demonstrated the permittee complied with all applicable provisions of the NESHAPs, as specified in 40 CFR Part 63, Subpart A and Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products. (40 CFR Part 63, Subparts A and MMMM) [SC. IX.1]. AMPI demonstrated compliance with the rule as exhibited in records and format presented in Exhibit Question# 28, Pg. 25 [Response summary item# 26].
- 27. In compliance AMPI did not need to demonstrate the permittee replaced a coating on EUSOLVENS, EULOCTITE1, EULOCTITE2, EULOCTITE3, EUWHEEL1, EUWHEEL2, EUWHEEL3, EUWHEEL4, and EUDIPSPIN (excluding EUDIPSPIN2) without applying for a new general permit to install application, provided all of the general permit to install applicability criteria continued to be met after the coating change. (R 336.1201a(1)) [SC. IX.2]. AMPI stated no coatings had been changed; the general

permit condition did not require new permit application approval [Response Summary item# 27].

FGMACT

28. In compliance – AMPI demonstrated the maximum emission of Organic HAP from FGMACT did not exceed 2.6 lbs. per gal of coating solids based on a 12-month rolling time period from the existing – General Use Coating (40 CFR 63.3890(b)(1)) as determined at the end of each calendar month. [SC. I] [sic]. Compliance demonstration presented in Exhibit# 28, Pg. 25 showed the maximum emission of Organic HAP was 2.4 lbs. per gallon of coating solids and occurred at 12-month rolling calculation periods ending of October 2016 [Response Summary item# 28].

AMPI additionally demonstrated the permittee determined whether the organic HAP emission rate was equal to or less than the applicable emission limits in 40 CFR 63.3890 using at least one of the following three options, which are listed in 40 CFR 63.3891(a) through (c):

- a) Compliant material option-Not applicable
- b) Emission rate without add-on controls option-AMPI used this option to confirm the facility uses the emission rate without add on controls option for determining compliance with the Miscellaneous Metal Parts Maximum Achievable Control technology (MACT). AMPI presented calculations to demonstrate compliance in Exhibit Question# 28. The calculations showed compliance in VOC emission evaluation in EUDIPSPIN line presented in Exhibit Question 28, Pg. 11.
- c) Emission rate with add-on controls option; and...-Not applicable

Staff affirmed the permittee included all coatings, thinners, and/or other additives, and cleaning materials used when determining the emission rate. (40 CFR 63.3891) [SC. I.1]. Records submitted supported that the emission rate without add-on control met partial compliance with exceedances [Exhibit Question# 28].

- 30. In compliance AMPI demonstrated any coating operation(s) using the compliant material option or the emission rate without add-on controls option, were in compliance with the applicable emission limits in 40 CFR 63.3890 at all times. (40 CFR 63.3900(a)(1)). [SC. I.2]. Response was same as in Question# 29b, Pg. 25 [Response Summary item# 30].
- 31. In compliance AMPI demonstrated (If) the surface coating operation(s) met the applicability criteria of more than one of the subcategory emission limits specified in 40 CFR 63.3890(a) or (b), the permittee complied separately with each subcategory emission limit, or complied using one of the alternatives in 40 CFR 63.3890(c)(1) or (2). (40 CFR 63.3890(c)) [SC. I.3]. Response from AMPI stated Ajax complied with the General Use Category for existing sources in which the emission rate for HAP is limited to 2.6 lbs. HAP/gal solid per 12- month rolling time period. Staff checked calculations indicating compliance with condition in Exhibit Question 28, Pg. 25 and confirmed the AMPI's response.
- 32. Not applicable AMPI uses the emission rate without add-on control so did not need to demonstrate there was no organic HAP content in each Thinner and/or Additive determined according to 40 CFR 63.3941(a) based on continuous monitoring from each coating operation using compliant material option (40 CFR 63.3891(a)) [SC. II.1(sic)]. The condition is not applicable. Response Summary item# 32 confirmed the option.
- 33. Not applicable the response was same as in Question # 32. AMPI did not need to demonstrate there was no organic HAP content in each cleaning material determined according to 40 CFR 63.3941(a) based on continuous monitoring from each coating operation using compliant material option (40 CFR 63.3891(a)) [SC. II.2](sic). The condition does not apply.
- 34. In compliance AMPI demonstrated the permittee conducted an initial compliance demonstration for the initial compliance period according to the requirements in 40 CFR 63.3941, 40 CFR 63.3951, or 40 CFR 63.3961. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first of the month, then the compliance period extends through that

month plus the next 12 months. (40 CFR 63.3940, 40 CFR 63.3950, 40 CFR 63.3960) [SC. VI.1]. Staff confirmed notification of compliance was submitted accordingly on February 27, 2008 [Response Summary item# 34].

- 35. In compliance AMPI demonstrated the permittee kept all records required by 40 CFR 63.3930 in the format and timeframes outlined in 40 CFR 63.3931. (40 CFR 63.3942(d), 40 CFR 63.3952(d), 40 CFR 63.3963(j)) [SC. VI.2]. Records submitted by AMPI showed permittee complied with specified recordkeeping format and time frame accordingly [Exhibit Question# 28, Pg. 25]
- 36. In compliance AMPI demonstrated the permittee maintained, at a minimum, the following records for each compliance period:
- a) A copy of each notification and report that was submitted to comply with Subpart MMMM, and the documentation supporting each notification and report. (40 CFR 63.3930(a)) [SC. VI.3a]. Staff confirmed a copy of notification was submitted and is on file in MACES repot.
- b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density of each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. (40 CFR 63.3930(b)) [SC. VI.3b]. AMPI submitted the appropriate manufacturer's formulation information as listed in Exhibit Question# 2.
- c) A list of the coating operations on which each compliance option was used, and the beginning and ending dates and times for each compliance option used. (40 CFR 63.3930(c)(1)) [SC. VI.3c]. Response from AMPI stated Ajax Metal only uses one compliance option. All coating lines use the emission rate without add-on controls option.
- d) For the compliant materials option, the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.3941. (40 CFR 63.3930(c)(2)) [SC. VI.3d]. This condition does not apply because AMPI only uses the emission rate without add-on controls option [Response Summary item# 36d].
- e) For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or additives, and cleaning materials used each month using Equations 1, 1A through 1C and 2 of 40 CFR 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of 40 CFR 63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.3951. (40 CFR63.3930(c)(3)) [SC. VI.3e]. Response from AMPI supported the appropriate equation was applied, and the results were in compliance with limits as presented in Exhibit Question# 28 (as reflected under HAP Summary).
- f) The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the compliant material option was used for all coatings at the affected source, the permittee maintained purchase records for each material used rather than a record of the volume used. (40 CFR 63.3930(d)) [SC. VI.3f]. Response from AMPI showed compliance with the condition as demonstrated in Exhibit Question# 4 presenting the coating usage summary.
- g) The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period unless the material was tracked by weight. (40 CFR 63.3930(e)) [SC. VI.3g]. Response from AMPI supported compliance in parameters specified in the ROP condition as presented in Exhibit Question# 2 in detailed format [Response Summary item# 36g].
- h) The volume fraction of coating solids for each coating used during each compliance period as required in the 40 CFR 63.3930(f)) [SC. VI.3h]. Response from AMPI showed compliance with volume fraction of coating solids for each coating used was calculated and presented in appropriate format used in the manufacturer's formulation format [Exhibit Question# 2].

- i) For either the emission rate without add-on controls option or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. (40 CFR 63.3930(g)) [SC. VI. 3i]. Response from AMPI supported compliance with the emission rate reported accordingly in the specified format [Exhibit Question# 2].
- j) The information specified in 40 CFR 63.3930(h)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.3951(e)(4). (40 CFR 63.3930(h)) [SC. VI. 3j]. Response from AMPI supported compliance with the condition. AMPI stated no allowance was used for waste solvent. All purge clean-up and production solvents were re-used as process product additives [Response Summary# 36j].
- k) The date, time, and duration of each deviation. (40 CFR 63.3930(j)) [SC. VI.3k]. Response from AMPI stated no deviations requiring reporting occurred. [Response Summary item# 36k].
- 37. Not applicable AMPI uses the emission rate without add-on controls option, hence did not need to demonstrate for each coating used for the compliant coating option, the permittee maintained continuous compliance with the emission limit in 40 CFR 63.3890, for each compliance period, using Equation 2 of 40 CFR 63.3941. For each thinner and cleaning material used, the permittee determined continuous compliance according to 40 CFR 63.3941(a). (40 CFR 63.3942) [SC. VI. 4]. Response is supported in Response Summary item# 37].
- 38. In compliance AMPI demonstrated for any coating operation or group of coating operations using the emission rate without add-on controls option, the permittee maintained continuous compliance with the applicable organic HAP emission limit in 40 CFR 63.3890, for each compliance period, according to 40 CFR 63.3951(a) through (g). (40 CFR 63.3952) [SC. VI.5]. Response from AMPI showed any coating operation or group of coating operations using emission rate without add-on controls were in compliance with requirements of the MACT conditions as presented in Exhibit Question# 28. Spot checks on calculations confirmed compliance.
- 39. In compliance AMPI demonstrated permittee made prompt reporting of deviations in FGMACT pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii)) [SC. VII.1]. Response from AMPI stated no deviations occurred in FGMACT requiring prompt reporting [Response Summary item# 39].
- 40. In compliance AMPI demonstrated permittee made Semiannual reporting of monitoring and deviations in FGMACT pursuant to General Condition 23 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)). [SC. VII.2]. Response from AMPI stated Semiannual reports were timely submitted. AQD confirmed the submittal in MACES report.
- 41. In compliance AMPI demonstrated permittee made Annual certification of compliance in FGMACT pursuant to General Conditions 19 and 20 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c)) [SC. VII.3]. Response from AMPI stated Annual reports were timely submitted. AQD confirmed the submittal in MACES report.
- 42. Not applicable AMPI used emission rate without add-on controls option so did not need to demonstrate, for the compliant material option, if any coating used for any 12-month compliance period exceeded the applicable emission limit specified in 40 CFR 63.3890; or any thinner or cleaning material used contained any organic HAP, the permittee reported this as a deviation as specified in 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(5). (40 CFR 63.3942(b)) [SC. VII.4]. The condition was not applicable.
- 43. In compliance AMPI demonstrated, for the emission rate without add-on controls, if the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit specified in 40 CFR 63.3890, the permittee reported this as a deviation as specified in 40 CFR 63.3910(c)(6) and 40

- CFR 63.3920(a)(6). (40 CFR 63.3952(b)) [SC. VII.5]. Response from AMPI stated no deviations occurred that required reporting [Response Summary item# 43].
- 44. In compliance AMPI demonstrated permittee submitted the applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), an initial notification and a notification of compliance status as specified in 40 CFR 63.3910. (40 CFR Part 63, Subparts A and MMMM) [SC. VII.6]. Response from AMPI stated notifications were submitted timely [Response Summary item# 44]. AQD confirmed submittals were timely filed in MACES.
- 45. In compliance AMPI demonstrated the permittee submitted all semiannual compliance reports specified in 40 CFR 63.3920(a). Each semiannual compliance report identified which coating operation(s) used each compliance option, and if there were no deviations from the emission limitations in 40 CFR 63.3890, included a statement that the coating operations were in compliance. (40 CFR 63.3920, 40 CFR 63.3942(c), 40 CFR 63.3952(c), 40 CFR 63.3963(f)) [SC. VII.7]. Response from AMPI stated Semiannual reports were submitted timely. AQD confirmed the submittals were filed in MACES report.
- 46. Not applicable AMPI did not need to demonstrate the exhaust gases from the stacks listed in the table below were discharged unobstructed vertically upwards to the ambient air unless otherwise noted [SC. VIII.1]: The ROP has no stack condition requirements for the Flexible Group.
- 47. In compliance AMPI demonstrated the permittee complied with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products. (40 CFR Part 63, Subparts A and MMMM) [SC. IX.1]. Response from AMPI indicated all surface coating emission limits were complied with as reflected in the data presented in Exhibit Question# 28.

FGPLATINGLINES

- 48. Non-compliance AMPI failed in demonstrating the permittee did not operate any plating line in FGPLATINGLINES unless the associated packed bed scrubber for that plating line was installed, maintained and operated properly. Proper operation included but was not limited to performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the PM / MAP specified in SC III.2.2 (R 336.1224, R 336.1225, R 336.1910) [SC. III.1]. During the inspection, AQD observed the Scrubber in the EUPLATINGLINE12, Scrubber# 5 was operating without a flow meter on line. The meter was not installed. Staff informed AMPI the failure to operate a plating line without a properly installed flow meter constituted a violation of the ROP condition. Response from AMPI included the sample of records of operations representing data quality and format collected from operations of the scrubber [Exhibit Question# 48].
- 49. Noncompliance AMPI did not demonstrate the permittee submitted to the AQD District Supervisor, for review and approval, a preventative maintenance/malfunction abatement plan (PM/MAP) that had been updated to include the new identification for each emission unit in FGPLATINGLINES. After approval of the updated PM/MAP by the AQD District Supervisor, the permittee did not operate any plating line in FGPLATINGLINES unless the PM/MAP, or an alternate plan approved by the AQD District Supervisor, was implemented and maintained. The plan incorporated procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan included:
- a. Identification of the equipment, and if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair [SC. III.2a]. Response from AMPI stated the MAP submitted in 2012 is good since no incident has occurred that would require plan revision and upgrade. This inspection observed deviations from the MAP requirements in EUPLATING line 12, Scrubber # 5. A new MAP is required.
- b. Description of the items or conditions to be inspected and frequency of the inspections or repairs [SC. III.2b]. Response is same as in Question 49a.
- c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that

should have been monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures [SC. III.2c]. Response is same as in Question 49a.

- d. Identification of the major replacement parts that should have been maintained in inventory for quick replacement [SC. III.2d]. Response is same as in Question 49a.
- e. A description of the corrective procedures or operational changes that were taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits. If the plan failed to address or inadequately addressed an event that met the characteristics of a malfunction at the time the plan was initially developed, the owner or operator revised the plan within 45 days after such an event occurred and submitted the revised plan for approval to the AQD District Supervisor. Should the AQD determined the PM / MAP to be inadequate, the AQD District Supervisor requested modification of the plan to address those inadequacies. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912) [SC. III.e]. Response is same as in Question 49a.
- 50. In compliance AMPI demonstrated the parameters of the acid pickling tanks in FGPLATINGLINES did not exceed the limit listed in the following:

MAXIMUM CONCENTRATION OF HYDROCHLORIC ACID: 17% by weight hydrochloric acid (equivalent to 50% by volume of 20 degrees Baume (HCI) was evaluated from records kept onsite. Maximum HCI strength observed was 42.5% by volume of HCI. The composition was selected by AMPI operator, printed and presented in Exhibit Question# 50, Pg. 29.

MAXIMUM SURFACE AREA OF THE TANK: 39.1 square feet-The maximum surface area capacity observed that each of the EUPLATING lines consisted of one HCL and had maximum surface area less than 39.1 square feet, except for 1 that had surface area 39.1 square feet.

MAXIMUM TEMPERATURE OF THE SOLUTION: 120 F (R 336.1224, R336.1225) [SC. III.3]. The maximum temperature of the solution recorded in data base presented in Exhibit Question# 50 was 93.0F and compared less than 120.0 F limit. The temperature controller of the solution was set at 80 F for minimum, and 110 F for maximum to keep the operation temperature range within permitted limits [Exhibit Question 50, Pg. 29].

51. In compliance -AMPI demonstrated the permittee kept, in a satisfactory manner, the following monthly records for FGPLATINGLINES - on file at the facility and made them available to the Department upon request. (R 336.1225, R 336.1901, R 336.1910):

Written or electronic log of maximum monthly concentration of acid in the tank concentration may be expressed as percent by volume of degree Baume HCI [SC. VI.1]. Records submitted by AMPI showed the HCI concentration was recorded in percentage by volume of degree Baume for the 9 plating lines of FGPLATINGLINES [Exhibit Question# 50].

- a) Area of the acid tank in square feet [SC. VI.1a]. Records submitted by AMPI showed the acid tank surface area was recorded in square feet [Response Summary item# 51a].
- b) Temperature of the acid solution in the tank [SC. VI. 1b]. Records submitted by AMPI showed the temperature of acid solution was monitored and recorded in appropriate format [Exhibit Question#50].
- c) Written or electronic log of the hours of operation [SC. VI. 1c]. Records submitted by AMPI showed the hours of operation were logged for the 9 plating lines (EUPLATINGLINE1, EUPLATINGLINE3, EUPLATINGLINE4, EUPLATINGLINE7-EUPHOS1, EUPLATINGLINE8-EUPHOS2, EUPLATINGLINE11, EUPLATINGLINE12, EUPLATING-WAX) in the required format [Exhibit Question# 51, Page 31-34].
- d) Corrective action taken upon failure of all of the following:
- i) The fans drawing vacuum on the acid tank [SC. VI.1d(i)]. Response from AMPI stated no failures in the fans drawing vacuum occurred [Response summary item# 51d(i)].

- ii) The pumps circulating the scrubber water through the scrubber [SC. VI.1d(ii)]. Response submitted by AMPI stated no failures occurred with the pumps circulating scrubber water [Response Summary item# 51d(ii)].
- 52. In compliance AMPI demonstrated permittee did prompt reporting of deviations in FGPATINGLINES pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii)) [SC. VII.1]. Records submitted by AMPI stated no deviations occurred that required prompt reporting [Response Summary item# 52]. AQD confirmed the records are filed in MACES report.
- 53. In compliance AMPI demonstrated permittee made Semiannual reporting of monitoring and deviations in FGPLATINGLINES pursuant to General Condition 23 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)) [SC. VII.2]. Records filed in MACES confirmed the Semiannual report was timely filed [Response Summary item# 53].
- 54. In compliance AMPI demonstrated permittee made annual certification of compliance in FGPLATINGLINES pursuant to General Conditions 19 and 20 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213 (4)(c)). Records filed in MACES confirmed the Annual report was timely made [Response Summary item# 54].
- 55. In compliance AMPI demonstrated within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUPLATINGLINES11 and FGPLATINGLINES, the permittee or the authorized agent pursuant to Rule 204, notified the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification was considered to occur not later than commencement of that operation of EUPLATINGLINE11 portion of the FGPLATINGLINES (R 336.1201(7)(a)) [SC. VII.4]. Notification submitted by AMPI is presented in Exhibit Question# 24.
- 56. In compliance AMPI demonstrated exhaust gases from the FGPLATINGLINES stacks with corresponding specifications listed in the table below were discharged unobstructed vertically upwards to the ambient air unless otherwise noted [SC. VIII]:

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1. SVSCRUB6, ID = 21", height = 38' (R 336.1225, 40 CFR 52.21(c) & (d))[SC. VIII.1]
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2. SVSCRUB1, ID = 20", height = 39' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.2]

3. SVSCRUB3, ID = 20", height = 39' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.3]

4. SVSCRUB4, ID = 20", height = 39' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.4]

5. SVSCRUB11, ID = 20", height = 38' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.5]

6. SVSCRUB12, ID = 20", height = 39' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.6]

7. SVPLT1, ID = 38", height = 31' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.7]

8. SVPLT3, ID = 42", height = 30' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.8]

9. SVPLT4, ID = 46", height = 31' (R 336.122540 CFR 52.21(c) & (d)) [SC. VIII.9]

10. SVPLT11, ID = 42", height = 29' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.10]

11. SVPLT12, ID = 42", height = 29' (R 336.1225, 40 CFR 52.21(c) & (d)) [SC. VIII.11].

Visual inspection of the stacks informed the stacks discharged to the ambient as required. The stacks had no rain caps installed at the exit point of gases.

FGBOILERMACT

- 57. In compliance AMPI demonstrated the permittee only combusted gas subcategory 1 fuels. Gas 1 subcategory includes any boiler or process heater that burned only natural gas, refinery gas, or other gas 1 fuels as defined in 63.7575, with the exception of liquid fuels burned during gas curtailment and supply emergencies or for periodic testing (not to exceed 48 hours in a calendar year). (40 CFR 63.7575) [SC. II.1]. Visual inspection of the units confirmed only natural gas was used as fuel at the facility [Response Summary item# 57].
- 58. In compliance AMPI demonstrated the permittee performed a one-time energy assessment for each existing affected boiler in accordance with Table 3 of 40 CFR 63 Subpart DDDDD no later than January 31, 2016. (40 CFR 63.7510(e)) [SC. III.1]. Records submitted presented data acquired from the energy assessment performed in January 2016 [Exhibit Question# 58].
- 59. In compliance AMPI demonstrated the permittee performed an initial tune up of each affected boiler that was installed before June 4, 2010 in accordance with 40 CFR 63 Subpart DDDDD no later than January 31, 2016. (40 CFR 63.7510(f)). [SC. III.2]. Records submitted by AMPI confirmed the tune-up performance on the boilers was performed in December 2015. However, documentation was not adequately performed. AMPI corrected the deviation in March 2016 as explained as reported in Exhibit Question# 65(c) [Exhibit Question# 59; Exhibit Question 65(a)-(f)] for verification.
- 60. Not applicable- AMPI did not need to demonstrate new or reconstructed boilers installed on or after January 31, 2013 performed an initial tune up in accordance with 40 CFR 63 Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in §63.7540(a) following startup of the unit. Thereafter, the permittee completed the applicable annual, biennial, or 5-year tune-up as specified in Table 3 of 40 CFR 63 Subpart DDDDD. (40 CFR 63.7510(f), 63.7540(a)) [SC. III.3]. Response from AMPI stated no new or reconstruction of boilers took place at the facility [Response Summary item# 60].
- 61. In compliance AMPI stated that subsequent boiler tune-ups for existing boilers will be completed timely. The facility stated new and existing boilers or process heaters with continuous oxygen trim system or heat input capacity less than 5 million Btu per hour conducted a 5-year tune up of the boiler or process heater were required to undergo tune ups. Each 5-year tune up must be conducted no more than 61 months after the previous tune up. However, the tune up was not due (40 CFR 63.7500(e), 63.7515(d), 63.7540) [SC. III.4].
- 62. In compliance the response to this condition is same as in Question# 61. AMPI acknowledged the new and existing boilers or process heaters without continuous oxygen trim system and with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must conduct a biennial tune up of the boiler or process heater were required to undergo tune ups. Each biennial tune up must be conducted no more than 25 months after the previous tune up. The tune up was not due (40 CFR 63.7500(e), 63.7515(d), 63.7540) [SC. III.5].
- 63. In compliance the response to this condition is same as in Question# 62. AMPI acknowledged new and existing boilers or process heaters, including metal process furnaces, without continuous oxygen trim system and with heat input capacity greater than 10 million Btu per hour must conduct an annual tune up of the boiler or process heater were required to undergo tune ups. Each annual tune up was conducted no more than 13 months after the previous tune up. The tune up was not due (40 CFR 63.7500, 63.7515(d), 63.7540) [SC. III.6].
- 64. In compliance AMP demonstrated the permittee kept records of each notification and report submitted, and all supporting documentation for FGBOILERMACT, to comply with 40 CFR 63 Subparts A & DDDDD. (40 CFR 63.7555(a)(1)) [SC. VI.1] at the time of inspection. AQD confirmed the records of notification submitted in November of 2013 and those submitted in March of 2016 were on file.
- 65. In compliance AMPI demonstrated the permittee kept records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations of FGBOILERMACT as required in §63.10(b)(2)(viii). (40 CFR 63.7555(a)(2)) [SC. Vi.2]. Records submitted by AMPI confirmed records of performance tests, fuel analyses or other compliance demonstrations were kept in the required format [Exhibit Question# 65].

- 66. In compliance AMPI demonstrated for boilers and process heaters required to conduct an annual tune-up on FGBOILERMACT, the permittee maintained an annual report on-site and submitted, if requested the following information: (40 CFR 63.7540(a)(10))
- a) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [SC. VI.3a]. Records submitted confirmed compliance at before and after tune up loading [Exhibit Question# 59].
- b) A description of any corrective actions taken as a part of the tune-up; and [SC. VI.3b]. Requested records indicated there were no corrective actions to be taken as part of the tune-up [Exhibit Question# 59].
- c) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [SC. VI.3c]. Records submitted indicated the unit was physically capable by design of using only one type of fuel- only is natural gas can be used to fire up the unit [Exhibit Question# 59].
- 67. In-compliance AMPI submitted records that stated deviations occurred in documentation of CO2 and O2 in EUBOILER150HP, EUBOILER60HP, EUHARDENING1, EUHARDENING2 and EUENDO. These deviations were reported in FGBOILERMACT pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii)) [SC. VII.1].
- 68. In compliance AMPI demonstrated permittee did Semiannual reporting of monitoring and deviations in FGBOILERMACT pursuant to General Condition 23 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)) [SC. VII.2]. Records filed in MACES confirmed the response that AMPI timely submitted the Semiannual reporting. AMPI submitted records that stated deviations occurred in documentation of CO2 and O2 levels in EUBOILER150HP, EUBOILER60HP, EUHARDENING1, EUHARDENING2 and EUENDO (Exhibit question# 65, Pgs. (a)-(g)), AMPI also submitted the deviation occurred in the Semiannual 2016 report filed in MACES [Response Summary item# 68].
- 69. In compliance the response in this special condition was same as in Question# 68. AMPI demonstrated permittee did Annual certification of compliance in FGBOILERMACT pursuant to General Conditions 19 and 20 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c)) [SC. VII.3]. Associated deviations were reported.
- 70. In compliance AMPI demonstrated the permittee submitted a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler(s) and/ or process heater(s) and its energy use systems for FGBOILERMACT was completed within 60 days following completion of the tests. (40 CFR 63.7530(d)), [SC. VII.4]. AQD confirmed through MACES report the signed certification in notification was submitted on March 2016 [response Summary item# 71].
- 71. Not applicable AMPI did not need to demonstrate the exhaust gases from FGBOILERMACT stacks were discharged vertically unobstructed to the ambient [SC. VIII]: The condition did not apply because the ROP did not have stack requirements in the condition.
- 72. In compliance AMPI stated that subsequent tune-ups will be completed timely to demonstrate on and after January 31, 2016, the permittee complied with all applicable provisions of the federal National Emission Standards for Hazardous Air Pollutants in FGBOILERMACT as specified in 40 CFR Part 63 Subparts A and DDDDD. (40 CFR Part 63, Subparts A and DDDDD) [SC. IX.1]. AMPI is yet to do the tune-ups pending when the action is due [Response Summary item# 72].
- 73. In compliance –AMPI demonstrated the Gas 1 subcategory included any boiler or process heater in FGBOILERMACT that burned only natural gas, refinery gas, or other gas 1 fuels with the exception of

liquid fuels burned during gas curtailment and supply emergencies or for periodic testing did not exceed 48 hours in a calendar year. (40 CFR 63.7575) [SC. IX.2]. AQD verified that AMPI only uses natural gas for fuel.

74. In compliance - AMPI demonstrated metal process furnaces in FGBOILERMACT were a subcategory of process heaters, as defined in 40 CFR Part 63, Subpart DDDDD, which included natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces. (40 CFR 63.7575) [SC. IX.3]. Records submitted by AMPI verified the FGBOILERMACT were a subcategory of process heaters as defined in 40 CFR 63, Subpart 5D [Exhibit Question# 65].

FGRULE290

- 75. Not applicable AMPI did not need to demonstrate each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122 (f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants were not more than 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(i)) [SC. I.1]. The conditions do not apply in the permit because the units neither emit only noncarcinogenic volatile compounds, nor any contaminant listed in the Rule 122(f) is emitted from the AMPI process.
- 76. In compliance AMPI demonstrated emissions from each unit of the total uncontrolled or controlled emissions of air contaminants were not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below were met: (R 336.1290(a)(ii))
- a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions did not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A)) [SC. I.2a]. Data provided by AMPI showed neither noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds nor noncarcinogenic materials which are listed in Rule 122(f) emitted from the AMPI facility exceeded 1,000 or 500 pounds per month, respectively [Question 76, Pg.39].
- b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions did not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(B)) [SC. I.2b]. Data provided by AMPI showed no neither noncarcinogenic air contaminants, excluding nonorganic volatile organic compounds nor noncarcinogenic materials which are listed in Rule 122(f) stated in the condition emitted from the AMPI facility did not exceed 20 or 10 pounds per month, respectively.
- c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions did not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(C)) [SC. I.2c]. Data provided by AMPI showed that neither carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions did not exceed 20 or 10 pounds per month, respectively [Exhibit Question# 76, Pg. 39].
- d. The emission unit emitted HCI as an air contaminant, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. (R 336.1290(a)(ii)(D)) [SC. 1.2d]. The condition does not apply. There are no emission rates limits set in FGRule290. [Question# 76, Pg. 40].
- 77. Not applicable AMPI stated FGRULE290 does not have emissions particulate controls in the Renewable Operating Permit. Hence each emission unit that emits only noncarcinogenic particulate air

contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), had all of the following provisions met did not apply: (R 336.1290(a)(iii)).

- a. The particulate emissions were controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which did not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. (R 336.1290 (a)(iii)(A)) [SC. II.3a]. The condition is not applicable because the FG has no pollution control equipment requirements.
- b. The visible emissions from the emission unit were not more than 5 percent opacity in accordance with the methods contained in Rule 303. (R 336.1290(a)(iii)(B)) [SC. I.3b]. The response is same as in 77 (a). All emissions from the units were discharged in the manufacturing area.
- c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, was more than 2.0 micrograms per cubic meter. (R 336.1290(a)(iii)(C)) [SC. I.3c]. The response is same as in 77(a). The ITSL for HCI was listed as 20 micrograms per cubic meter.
- 78. In compliance AMPI did not need to demonstrate the provisions of Rule 290 applied to each emission unit that was operating pursuant to Rule 290. (R 336.1290) [SC. III.1]. The records provided by the AMPI for the last 2 years' support compliance with emissions limit for HCI in the EUPHOSPHATE1 and EUPHOSPAHTE2. HCI emissions were listed under Flexible Group that have no emission limits assigned in the ROP [Exhibit Question# 76, Pg. 39-40].
- 79. In compliance AMPI demonstrated the permittee maintained records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that was approved by the AQD District Supervisor in terms (R 336.1213(3)) [SC. VI.1]:
- a. Records identifying each air contaminant that was emitted. (R 336.1213(3)) [SC. VI.1a]. Records of HCl emissions as air contaminant were provided [Exhibit Question# 76, Pg. 39-40].
- b. Records identifying if each air contaminant was controlled or uncontrolled. (R 336.1213(3)) [SC. VI.1b]. Records submitted identified the HCI uncontrolled and controlled emissions using the 99% efficient scrubber where applicable [Exhibit Question# 76, Pg. 39-40].
- c. Records identifying if each air contaminant was either carcinogenic or non-carcinogenic. (R 336.1213 (3)) [SC. VI.1c]. Records submitted by AMPI showed the toxicity values of HCl identified under CAS number 7647010 evaluated on DEQ website met the condition requirements indicating the HCl is noncarcinogenic [Exhibit Question# 76, Pg. 39-40].
- d. Records identifying the ITSL and IRSL, if established, of each air contaminant that was being emitted under the provisions of Rules 290(a)(ii) and (iii). (R 336.1213(3)). [SC. VI.1d]. Records submitted identified the established ISTL and IRSL for the HCI emissions were kept in the required format [Exhibit Question# 76, Pg. 39-40]. The ITSL listed for HCI was 20 microgram/cubic meter, however the HCI had no IRSL value listed.
- e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate the actual emissions of the emission unit met the emission limits outlined in this table and Rule 290. (R 336.1213(3), R 336.1290(c)) [SC. VI.1e]. Records submitted by AMPI showed calculations on material use and identified contaminant (HCI) emission limits outlined in table and Rule 290 [Exhibit Question# 76, Pg. 39-40].
- 80. In compliance AMPI demonstrated the permittee maintained an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory included the following information (R 336.1213(3)):
- a. The permittee maintained a written description of each emission unit as it was maintained and operated throughout the life of the emission unit. (R 336.1290(b), R 336.1213(3)) [SC. VI.2a]. Records submitted by AMPI showed summary of each emission unit as it was maintained and operated on

consistent basis [Exhibit Question# 76, Pg. 39-40].

- b. For each emission unit that emitted noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee maintained a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. (R 336.1213(3)) [SC. VI.2b]. Records submitted by AMPI showed the use of scrubber as control device with 99% efficiency, hours of operation and compliance output [Exhibit Question# 76, Pg. 39-40].
- 81. Not applicable AMPI did not need to demonstrate for each emission unit that emits noncarcinogenic particulate air contaminants in FG290 pursuant to Rule 290(a)(iii), the permittee performed a monthly visible emission observation of each stack or vent during routine operating conditions. This observation needed not be performed using Method 9. The permittee kept a written record of the results of each observation. (R 336.1213(3)) [SC. VI.3]. The FG290 emission units have no stacks requirements since the emissions are discharged in the work area, hence the condition is not applicable.
- 82. In compliance- AMPI did not need to demonstrate permittee did prompt reporting of deviations in FG290 pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii)) [SC. VII.1]. Request records for the recent 2 years. AMPI stated no deviations occurred that required prompt reporting. AQD confirmed in MACES report that submitted report stated there were no deviations.
- 83. In compliance AMPI demonstrated permittee did Semiannual reporting of monitoring and deviations in FG290 pursuant to General Condition 23 of Part A. The report should have been postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i)) [SC. VII.2]. Reports filed in MACES showed Semiannual reports were submitted timely [Response Summary item# 83].
- 84. In compliance AMPI demonstrated permittee did Annual certification of compliance in FG290 pursuant to General Conditions 19 and 20 of Part A. The report was postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c)) [SC. VII.3]. Reports filed in MACES showed Annual reports were submitted timely [Response Summary item# 84].
- 85. Not applicable AMPI did not need to demonstrate the exhaust gases from FG290 were discharged vertically unobstructed through the stacks to the ambient air [SC. VIII]: The permit did not specify stack conditions.

Discussion: Regulatory Summary

- 40 CFR 63, Subpart ZZZZ- This rule applies to the EUCOGEN located at a major source of HAPs. The emission unit was installed in 1987, and dated before December 19, 2002. The engine is considered existing RICE pursuant to 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines the RICE MACT). However, EUCOGEN is not subject to the RICE MACT pursuant to 63.6590(b)(3)(iii) which states in parts: -
 - (3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

 iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15

hours per calendar year for the purposes specified in 63.6640(f)(2)(ii) and (iii).

The EUCOGEN rated at more than 500 brake HP is exempt from permitting under R 36.1282(b)(i) and R 336.1285(g).

Rule 201: The AMPI facility equipment were permitted under Rule 201 and all associated permit conditions were rolled into a ROP as Title V of Air Pollution Control Part 55 of the Natural resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) source.

40 CFR Part 63 (NESHAP): The AMPI met NESHAP requirements as specified in 40 CFR Part 63, Subpart A and MMMM and Subpart DDDDD for Surface Coating of Miscellaneous Metal Parts and Products, the

details of compliance requirements were addressed under FGBOILERMACT and FGLOCKLSEAL conditions.

Rule 225: The AMPI process met Air Toxics requirement via Rule 225(1). Hence compliance with Rule 225 was addressed under permit conditions laid out in FGPLATINGLINES.

40 CFR 63, Subpart WWWWWW: CHROMATELINES 1 & 2 located in the FGPLATINGLINES & CHROMATELINES were at a major source of HAPs, therefore the groups are not subject to 40 CFR 63.11504(a).

40 CFR 63, Subpart N: The CHROMATELINES 1 & 2 do not use electrodes or current control to deposit metals. Hence CHROMATELINES 1 & 2 are not subject to 40 CFR 63.340(c).

Rule 901: There has not been any citizen complaint regarding odors or other forms of nuisance such as opacity and particulate fallouts from the facility in recent years.

MAERS 2016 REPORT REVIEW:

The Ajax Metal Processing Inc. facility's 2016 MAERS was reviewed. The report indicated the overall emissions decreased from the previous year inventory. AMPI is in compliance with MAERS reporting requirements.

CONCLUSION

The inspection of Ajax Metal Processing Inc. facility identified 2 operational violations. The Company demonstrated high level compliance with permit recordkeeping condition requirements by reporting and filing deviation reports timely. The AMPI failed to observe two compliance conditions defined in the ROP# MI-ROP-B5830-2015a requirements. The information obtained during this inspection will be applied to assist AMPI to maintain future compliance with environmental pollution control needs. A violation notice will be issued to AMPI for corrections in use of rain caps on stacks and installation of meters on scrubbers as required in the ROP. In summary, the inspection determined the AMPI failed to wholly comply with the ROP conditions.

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