



Michigan Department Of Environmental Quality
Air Quality Division

State Registration Number

RO Permit Number

A7809

RENEWABLE OPERATING PERMIT

199600132d

IS HEREBY ISSUED TO

**UNITED STATES STEEL CORPORATION, GREAT LAKES WORKS
COKE, IRON AND STEEL MANUFACTURING OPERATIONS**

SRN: A7809

LOCATED AT

1 QUALITY DRIVE
ECORSE, Michigan 48229

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006,
October 11, 2006, March 6, 2007

Expiration Date: March 1, 2010

This permit is issued in accordance with and subject to Part 5506(3) of Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994. Pursuant to Air Pollution Control Rule 336.1210(1), this permit constitutes the permittee's authority to operate the major stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the major stationary source and all emission unit/process groups listed in the permit are subject to all applicable future or amended rules and regulations pursuant to P.A. 451 and the Clean Air Act.

This permit does not relieve the permittee from the responsibility to obtain the necessary permits to install pursuant to Air Pollution Control Rule 336.1201 for new or modified process or process equipment. In addition, issuance of this Renewable Operating Permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Order Number SIP No.27-1993 issued on November 2, 1994 between the MDEQ and the permittee, Consent Order Number No.8-1988 issued on August 11, 1988 between the MDEQ and the permittee, Consent Order Number No.0035-97 entered on June 29, 1999 between the WCAQMD and the permittee, Consent Order Number No.90-2 entered on January 1, 1991 between the WCAQMD the permittee, Consent Order Number No.96-10 entered on December 15, 1996 between the WCAQMD and the permittee, Consent Order Number No.94-10 entered on January 1, 1991 between the WCAQMD and the permittee.

United States Steel, Great Lakes Works, A7809; and Edward C. Levy Company Plant 3, B4364 are considered to meet the criteria under Rule 336.1119(r) as single stationary source but were issued a separate ROP through negotiations.

Michigan Department of Environmental Quality

Lynn Fiedler, Permit Section Supervisor

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**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 1

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A-1. General Requirements

For the purpose of this Renewable Operating (RO) Permit, the permittee is defined as any person who owns or operates an emission unit/process group at a stationary source for which a RO Permit has been issued. This permit is issued to United States Steel Great Lakes Works, hereinafter the permittee for this RO Permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO Permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO Permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(1)(a) or (b) unless otherwise specified in this RO Permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part):
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
6. A change in ownership or operational control of a stationary source covered by a RO Permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b) Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
8. The permittee shall comply with all conditions of this RO Permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO Permit. All terms and conditions of this RO Permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions of the CAA. Any terms and conditions based on applicable requirements, which are designated as "state only", are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO Permit. (R 336.1213(1)(b))
10. This RO Permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO Permit or to determine compliance with this RO Permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO Permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a) Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c) Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d) As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO Permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO Permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO Permit. (R 336.1210(7))
16. For modifications to this RO Permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(9))
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216)
18. A RO Permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a) If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - b) If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))
 - c) If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d) If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))

20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- The date, location, time, and method of sampling or measurements.
 - The dates analyses of the samples were performed.
 - The company or entity that performed the analyses of the samples.
 - The analytical techniques or methods used.
 - The results of the analyses.
 - The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are

being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A Responsible Official shall certify to the appropriate District Office of the AQD and the EPA that the stationary source is and has been in compliance with all terms and conditions contained in the RO Permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO Permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO Permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
 - a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO Permit shall alter or affect any of the following:
 - a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
 - b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))

- c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
 - d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:
- a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
 - b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
 - c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
 - e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
33. Expiration of this RO Permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO Permit, but the department fails to take final action before the end of the permit term, the existing RO Permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Sub-part B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
- a) June 21, 1999,
 - b) Three years after the date on which a regulated substance is first listed under 68.130, or
 - c) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

Emission Trading

40. The use of Emission Reduction Credits for purposes of compliance with emission standards or limitations contained in this permit is allowed, provided that such use is in compliance with Michigan's Part 12 Emission Averaging and Emission Reduction Credit Trading rules (R 336.2201-R 336.2218). Any changes consistent with these rules do not require a revision to this RO Permit. Until such time as Michigan's Part 12 rules are approved and adopted by U.S. EPA as part of the Michigan State Implementation Plan, the use of this rule by the stationary source will be at its own risk relative to Federal enforcement actions. ((R 336.1215(2)(b), R 336.2204(7), R 336.2211(3)) *

B-1. Source-Wide Requirements

The table in Part B outlines the source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. The permittee is subject to these requirements for the stationary source in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

The stationary source shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in the following table as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the table. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the stationary source, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE B-1
SOURCE-WIDE REQUIREMENTS

I. DESIGN PARAMETERS

A. Pollution Control Equipment	Fugitive Dust Control Plan incorporated in SIP Consent Order No. 27-1993				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					

II. MATERIAL USAGE/EMISSION LIMITS

A. Material	Maximum Usage Rate	
NA	NA	
B. Pollutants	Maximum Emission Limit	
Opacity of fugitive dust emissions from sources other than storage piles.	20%	(R324.5524(2))
Opacity of fugitive dust emissions from storage piles.	5%	(R324.5524(2))

III. COMPLIANCE EVALUATION

Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

A. MONITORING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A

1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA
2. Process Monitoring System and Recordkeeping	The permittee shall keep daily records of the information required by Appendix 1-4, Section a (A-D) in a format consistent with SIP 27-1993, Revised 9/9/94 and SIP 28-1993, Revised 9/9/94. The permittee shall keep the record on file for a period of at least two years, and make the records available to AQD upon written or verbal request. (APC 324.5524), (Consent Order SIP 27-1993 Revised 9/9/94, Exhibit A, Addendum), (Consent Order SIP 28-1993 Revised 9/9/94, Exhibit A, Addendum), (R 336.1213(3))
3. Other Monitoring and/or Recordkeeping	

B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A

1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) Semiannual reporting of deviations pursuant to Condition 23 of Part A.
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TABLE B-1
SOURCE-WIDE REQUIREMENTS

	<p>Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>4. Quarterly report shall be submitted by the permittee to AQD identifying each day in which emission limit, operational requirement, or recording requirement, as specified in Exhibits A or B of SIP No. 27-1993 (Revised 9/9/94) and Exhibits A of SIP No. 28-1993 (Revised 9/9/94), was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. (Consent Order SIP 27-1993, Revised 9/9/94, Paragraph 11), (Consent Order SIP 28-1993, Revised 9/9/94, Paragraph 11)</p>
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V. OPERATIONAL PARAMETERS

The permittee shall implement and maintain the approved Fugitive Dust Control Plan as specified and incorporated under Consent Order SIP No. 27-1993 Revised 9/9/94 and Consent Order SIP No. 28-1993 Revised 9/9/94.
(APC 324.5524, Consent Order SIP 27-1993 Revised 9/9/94, Consent Order SIP 28-1993 Revised 9/9/94)

VI. OTHER REQUIREMENTS

1. If the permittee is subject to 40 CFR 61, Subpart M, National Emission Standard for Asbestos, and conducts demolition or renovation activities, the permittee shall comply with the requirements of 40 CFR 61.145.
(40 CFR 61.145)
2. If the permittee is subject to 40 CFR 61, Subpart M, National Emission Standard for Asbestos, and conducts waste disposal for demolition or renovation activities, the permittee shall comply with the requirements of 40 CFR 61.150.
(40 CFR 61.150)
3. The permittee shall comply with all the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities.
(40CFR Part 63, Subpart FFFFF)

* This requirement is state enforceable only.

C-1. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGBHZ3-1-BOILER	No. 1 boiler at No. 3 Boiler House Zug Island.	1/1/1988	Natural Gas Fuel only	SVBHZI-3-1	E-01.01
EGBHZ3-2-BOILER	No. 2 boiler at No. 3 Boiler House Zug Island.	1/1/1988	Natural Gas Fuel only	SVBHZI-3-2	E-01.02
EGBHZI3-1-BOILER, EGBHZI3-2-BOILER	Boilers 1-2 at Boiler House No. 3 at Zug Island	1/1/1988	N/A	SVBHZI-3-1, SVBHZI-3-2	FG-01.01
EGBHZI1-1-BOILER, EGBHZI1-2-BOILER, EGBHZI1-3-BOILER, EGBHZI1-4-BOILER, EGBHZI1-5-BOILER; EGBHZI2-1-BOILER, EGBHZI2-2-BOILER, EGBHZI2-3-BOILER, EGBHZI2-4-BOILER, EGBHZI2-5-BOILER	Boilers 1-5 at Boiler House No. 1, and Boilers 1-5 at Boiler House No. 2 at Zug Island	1/1/1937 1/1/1938	N/A	SVBHZI-1-1, SVBHZI-1-2, SVBHZI-1-3, SVBHZI-1-4, SVBHZI-1-5, SVBHZI-2-1, SVBHZI-2-2, SVBHZI-2-3, SVBHZI-2-4, SVBHZI-2-5	FG-01.02
EGBHMP-1-8, EGBHMP-1-9	Boiler Nos. 8 and 9 at the No. 1 Boiler House at the Main Plant	1/1/1969	N/A	SVBOILER-1-8-MP, SVBOILER-1-9-MP,	FG-01.03
EGBURNOUT-OVEN-1, EGBURNOUT-OVEN-2	Burnout Ovens No. 1 & 2	4-29-1985 / 7-17-2003	N/A	N/A	FG-01.04
EGARGON-STIR	No. 1 Argon Stir Station	7-1-1977 / 5-12-1997	Baghouse	SVARGN-BAGHSE	E-01.03
EGLMF-OPERATIONS	Ladle Metallurgy Operations comprising of electric arc reheating process, No.2 argon stir station, alloy addition station, LMF and No.2 argon stir station baghouse	1-1-1983 / 7-23-1993	Baghouse	NA	E-01.04
EGVDG-OPERATIONS	Vacuum De-gassing Operations comprising of baghouse, cool-tower, gas-flare, oxygen-ops, pickup points A, B, & C, and degas-ops. Points #35 and #41 through #44 are identified as pickup A. Points #4 through #16, #47 and #48 are identified as pickup B.	4-25-1989 / 6-12-95	Baghouse	SVVDG-DGAS-FLARE	E-01.05

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
	Points #29 and #30 are identified as pickup C.				
EGVDG-DGAS-BLR	Vacuum De-gassing Operation, Package Water Tube Steam Boiler – Main Plant.	4-27-1989	Natural gas Fuel only	SVVDG-DGAS-BLR	E-01.06
EGKISH-WETTING	Levy Company: Kish wetting station	1-1-1990 / 7-18-2003	Water/wetting system	NA	E-01.07
EG5-PICKLE-LINE	No. 5 Pickle line and Operations, including: pickle line, welder, scrubber and dust collector.	12-10-1993	Scrubber and Baghouse	SVPIC-SCRUBBER SVPIC-DUST-CLCTR	E-01.08
EGEGL-OPERATIONS	Electro galvanizing line operations, consisting of: 1) pre-treatment scrubber 2) EGL line 3) post-treatment scrubber	1-1-1985 / 2-7-2002	Scrubber	SVEGL-POST-SCRBR SVEGL-PRE-SCRBR	E-01.09
EGREACTOR1 - 10	Electro galvanizing line ion reactor and fume scrubber operations, consisting of: 1) 10 Ion Reactors 2) 1 Fume Scrubber System	1-1-1985	Scrubber	SVEGL-FUME-SCRBR	F-01.08
EGEGL-STO-TANKS	Electro galvanizing line storage tanks, including: 1) 3 EGL Solution storage and recirculation tanks 2) Exhaust system 3) Mist eliminator	6-1-1988	Mist Eliminator	SVEGL-MIST-ELIM	E-01.10
EGCON-GALV-LINE	Continuous galvanizing operations consisting of the following: 1. Continuous galvanizing line, 2. Continuous galvanizing line annealing furnace, 3. Continuous galvanizing line selective catalytic reduction unit with exhaust gas NOx and oxygen analyzers, 4. Continuous galvanizing line oiler, and 5. Continuous galvanizing line pre-cleaner mist scrubber	6-1-1998 / 8-16-2006	Scrubber	SVCONGALVSCRBR SVCONGALVFNCE	E-01.11
EGBLAST-FCE-A	“A” Blast Furnace consisting of the following groups of devices: 1) Blast furnace proper 2) Group of 3 stoves 3) Cast house emission control system with baghouse 4) Dust collector 5) Slag pit 6) BFG flare 7) Clean gas	6-5-1955 / 11-19-1988	Baghouse	SVDRTY-BLDR-FCEA SVCLN-BLDR-FCEA SVBFA-STOVE SVBFA-FLARE SVBFA-BAGHSE	E-01.12

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
	bleeder 8) Dirty gas bleeder				
EGBLAST-FCE-B	<p>“B” Blast Furnace consisting of the following groups of devices:</p> <p>1) Blast furnace proper 2) Group of 4 stoves 3) Cast house emission control system with baghouse 4) Dust catcher 5) Slag pit 6) Clean gas bleeder 8) Dirty gas bleeder</p>	12-1-1941 / 9-24-1986 / 12-7-2002	Baghouse	SVDRTY-BLDR-FCEB SVCLN-BLDR-FCEB SVBFB-STOVE SVBFB-BAGHSE	E-01.13
EGBLAST-FCE-D	<p>“D” Blast Furnace consisting of the following groups of devices:</p> <p>1) Blast furnace proper 2) Group of 3 stoves 3) Cast house emission control system with baghouse 4) Dust catcher 5) Slag pit 6) BFG flare 7) Clean gas bleeder 8) Dirty gas bleeder</p>	9-22-1952 / 10-19-1993	Baghouse	SVDRTY-BLDR-FCED SVCLN-BLDR-FCED SVBFD-STOVE SVBFD-FLARE SVBFD-BAGHSE	E-01.14
EGBF-COOLING-TWR	Blast furnace cooling tower	9-25-1986	NA	NA	E-01.15
EG2BOP-HMT	<p>No. 2 Basic Oxygen Process - Hot Metal Transfer and Desulfurization Operations, including:</p> <p>Hot metal transfer operations, Two desulfurization/slag skimming operations, #2 BOP Shop - #2 Baghouse serving the above operations (The baghouse is connected to the fume collection system and includes: two desulfurization / slag skimming operations, one hot metal transfer hood), and Baghouse flow monitoring device</p>	5-1-1995	Baghouse	SVBOP-2-BGHSE	E-01.16, F-01.07
EG2BOF-CHARGING	<p>Basic Oxygen Furnace – Charging emission unit group includes the following processes and process equipment:</p> <p>1. Loading scrap bundles into Number 25 and Number 26 Furnaces.</p>	8-1-1983	Baghouse	NA	E-01.17

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
	2. Transfer of hot metal from the hot metal ladles into the Number 25 and Number 26 Furnaces. 3. Three sided enclosures and integral secondary fume hoods for fumes generated during the above charging operations referred to as "secondary emissions) Charging operation "secondary emissions" are captured by the secondary emission control system baghouse (the BOP No. 1 Baghouse).				
EG2BOF-VESSELS	Basic Oxygen Furnace Vessels, Including: 1. Two main Basic Oxygen Process Vessels (BOP Vessels) (Basic Oxygen Furnace No. 25 and Basic Oxygen Furnace No. 26) 2. Primary emission control system including an electrostatic precipitator and ancillary equipment. 3. Primary emission control system opacity monitor.	10-01-1968	Electrostatic Precipitator	SVBOF-ESP SV26-VES-EMER-DR SV25-VES-EMER-DR	E-01.18, F-01.07
EG2BOPFURNCE#25, EG2BOPFURNCE#26	Tapping Operations include tapping from the #25 and #26 Furnaces. Each furnace has a waste heat boiler hood that collects fumes generated during the oxygen blow, slagging and tapping operations.	4-30-1979	NA	NA	FG-01.11
EG2BOP-FLUX-SYS	The Flux System Operations include the flux (Lime) material handling and ancillary equipment	10-16-1970	NA	NA	E-01.20, F-01.07
EGSLAG-PITA, EGSLAG-PITB, EGSLAG-PITD	Slag pits for blast furnaces A, B, and D		NA	NA	F-01.06

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGMAINPLANT-FUG-DUST, EG80MILL-FUG-DUST	Fugitive dust control plan for miscellaneous sources at the Main Plant and 80" mill locations	NA	NA	NA	F-01.09
EGZUGISLAND-FUG-DUST	Fugitive dust control plan for miscellaneous sources at the Zug Island Facility.	NA	NA	NA	F-01.10
EG80MILLFURNCS	80" hot strip mill including five natural gas and coke oven gas-fired steel slab reheat ovens.	9-01-1961	NA	SV80MILLFCE-01 SV80MILLFCE-02 SV80MILLFCE-03 SV80MILLFCE-04 SV80MILLFCE-05	F-01.09
EGCOLDCLEANERS / EGPARTWASHERS	Any new cold solvent cleaner placed into operation after 7/1/1979 that is exempt from the requirements of R336.1201 pursuant to R336.1281(h) and R336.1285(r)(9iv)	7/1/1979 - Present	NA	NA	F-01.12

D-1. Flexible Groupings Summary Table

Flexible Grouping ID	Emission Unit/Process Groups Included in Flexible Grouping	Requirement Table No.
FGBHZI-3-BLRHSE	EGBHZI3-1-BOILER, EGBHZI3-2-BOILER,	F-01.01
FGBHZI-1&2BLRHSE	EGBHZI1-1-BOILER, EGBHZI1-2-BOILER, EGBHZI1-3-BOILER, EGBHZI1-4-BOILER, EGBHZI1-5-BOILER, EGBHZI2-1-BOILER, EGBHZI2-2-BOILER, EGBHZI2-3-BOILER, EGBHZI2-4-BOILER, EGBHZI2-5-BOILER	F-01.02
FGBHMP-8&9-BLRS	EGBHMP-1-8, EGBHMP-1-9	F-01.03
FGBURNOUT-OVENS	EGBURNOUT-OVEN-1, EGBURNOUT-OVEN-2	F-01.04
FGBLASTFCE-A,B&D	EGBLAST-FCE-A, EGBLAST-FCE-B, EGBLAST-FCE-D	F-01.05
FGSLAG-PITS	EGSLAG-PITA, EGSLAG-PITB, EGSLAG-PITD	F-01.06
FG2BOP-SHOP	EG2BOP-HMT, EG2BOF-VESSELS, EG2BOF-CHARGING, EG2BOF-TAPPING, EG2BOF-FLUX-SYS	F-01.07
FGREACTORS-EGL-OPS	EGREACTOR 1, EGREACTOR 2, EGREACTOR 3, EGREACTOR 4, EGREACTOR 5, EGREACTOR 6, EGREACTOR 7, EGREACTOR 8, EGREACTOR 9, EGREACTOR 10	F-01.08
FGMAINPLANT-FUG-DUST	EGMAINPLANT-FUG-DUST, EG80MILL-FUG-DUST	F-01.09
FGZUGISLAND-FUG-DUST	EGZUGISLAND-FUG-DUST	F-01.10
FG2BOF-TAPPING	EG2BOPFURNCE#25, EG2BOPFURNCE#26	F-01.11
FGCOLDCLEANERS	EGCOLDCLEANERS / EGPARTSWASHERS	F-01.12

E-1. Emission Unit/Process Group Requirements

The tables in Part E outline the applicable requirements for each emission unit/process group listed in the Emission Unit/Process Group Summary Table. The permittee is subject to the requirements for each emission unit/process group in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each emission unit/process group shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables E-01.01 through E-01.20 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the emission unit/process group, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE E-01.01 BOILER No.1 at No.3 BOILER HOUSE ZUG ISLAND OPERATION EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP		EGBHZI3-1-BOILER			
Flexible Grouping ID		FGBHZI-3-BLRHSE			
I. DESIGN PARAMETERS					
A. Pollution Control Equipment		NA			
B. Stack/Vent Parameters		Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.			
Stack/Vent ID	a. Minimum Height (feet)	b. Minimum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVBHZI-3-1	50	52	NA	NA	R336.1201(3)
C. Other Design Parameters					
1. NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Natural gas		201,500 cubic feet per hour (R336.1201(3))			
B. Pollutant		Maximum Emission Limit			
1. Nitrogen Oxide expressed as NO2		40.3 pounds per hour (R336.1201(3))			
2. Carbon Monoxide		8.06 pounds per hour (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make available to AQD upon request: <ol style="list-style-type: none"> 1. Total monthly natural gas consumption. 2. Total quantity of natural gas consumed per year based on a 12-month rolling time period determined at the end of each calendar month. 3. NOx and CO emissions based on calculation using fuel usage record and established emission factors shall be done and recorded monthly <p style="text-align: right;">R336.1213(3)</p>			
3. Other Monitoring and/or Recordkeeping		NA			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Parameter to be Tested/Recorded		NA			
2. Method/Analysis		NA			
3. Frequency and Schedule of Testing/Recordkeeping		NA			

**TABLE E-01.01 BOILER No.1 at No.3 BOILER HOUSE ZUG ISLAND OPERATION
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. R336.1213(4)(c) <p style="text-align: right;">See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

NA

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

TABLE E-01.02 BOILER No.2 at No.3 BOILER HOUSE ZUG ISLAND OPERATION EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP		EGBHZI3-2-BOILER			
Flexible Grouping ID		FGBHZI-3-BLRHSE			
I. DESIGN PARAMETERS					
A. Pollution Control Equipment		NA			
B. Stack/Vent Parameters		Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.			
Stack/Vent ID	a. Minimum Height (feet)	b. Minimum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVBHZI-3-2	60	52	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Natural gas		236,600 cubic feet per hour (R336.1201(3))			
B. Pollutant		Maximum Emission Limit			
1. Nitrogen Oxide expressed as NO2		47.32 pounds per hour (R336.1201(3))			
2. Carbon Monoxide		9.46 pounds per hour (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make it available to AQD upon request: 1. Total monthly natural gas consumption. 2. Total quantity of natural gas consumed per year based on a 12-month rolling time period determined at the end of each calendar month. 3. NOx and CO emissions based on calculation using fuel usage record and established emission factors shall be done and recorded monthly R336.1213(3))			
3. Other Monitoring and/or Recordkeeping		NA			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded		NA			
2. Method/Analysis		NA			
3. Frequency and Schedule of Testing/Recordkeeping		NA			
IV. REPORTING					

**TABLE E-01.02 BOILER No.2 at No.3 BOILER HOUSE ZUG ISLAND OPERATION
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

NA

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

TABLE E-01.03 No.1 ARGON STIR STATION					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP		EGARGON-STIR			
Flexible Grouping ID		N/A			
I. DESIGN PARAMETERS					
A. Pollution Control Equipment		Baghouse			
B. Stack/Vent Parameters		Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.			
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVARGN-BAGHSE	173	42	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
N/A		N/A			
B. Pollutant		Maximum Emission Limit			
1. Particulate		1. 0.02 grains per dry standard cubic foot of exhaust gas. 2. 0.543 pounds per heat. (SIP No. 27-1993, Exhibit B, Paragraph 4), (R336.1201(3))			
2. Total filterable particulate matter		1. 1.4 pounds per hour 2. 3.04 tons per year (R336.1201(3))			
3. Opacity		10% (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make it available to AQD upon request: 1. Pressure drop across baghouse filters recorded daily. A pressure drop between 1 and 8 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. 2. Total number of heats per year based on a 12-month rolling time period determined at the end of each calendar month. R336.1213(3)			
3. Other Monitoring and/or Recordkeeping		The permittee shall perform a certified Method 9 visible emission observation for a minimum of one hour of the argon stir station baghouse stack at least twice a year during heating activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))			
B. TESTING/RECORDKEEPING (R 336.1213(3))					

TABLE E-01.03 No.1 ARGON STIR STATION EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	1. Particulate 2. Total filterable particulate matter <p style="text-align: right;">(R336.1213(3))</p>
2. Method/Analysis	1. Reference Method 17 or other approved method <p style="text-align: right;">R336.1213(3)</p>
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct a particulate and total filterable particulate matter emission test once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. <p style="text-align: right;">(R336.1213(3))</p>
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. <p style="text-align: right;">(R336.1213(3)(c)(ii))</p> 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. <p style="text-align: right;">(R336.1213(3)(c)(i))</p> 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. <p style="text-align: right;">(R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
V. OPERATIONAL PARAMETERS	
1. The maximum number of heats shall not exceed 13,505 heats per year. <p style="text-align: right;">(SIP No. 27-1993, Exhibit B, Paragraph 4), (R336.1201(3))</p> 2. The permittee shall not operate the argon stirring station unless the baghouse dust collector is installed and operating properly. <p style="text-align: right;">(R336.1201(3))</p>	
VI. OTHER REQUIREMENTS	
The permittee shall implement and maintain the Malfunction Abatement Plan (MAPs) for the No. 1 Argon Stirring Baggouse developed pursuant to Consent Order WCAQMD 0096-10. The MAPs can be revised as appropriate, and alternate formats or revisions to the approved MAPs can be made upon approval by the AQD District Supervisor. <p style="text-align: right;">(CO No. 0096-10, Section 5e, Paragraph 1), R336.1213(3), R336.1911)</p>	

* This requirement is state enforceable only.

TABLE E-01.04 LADLE METALLURGY FACILITY OPERATIONS					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP		EGLMF-OPERATIONS			
Flexible Grouping ID		N/A			
I. DESIGN PARAMETERS					
A. Pollution Control Equipment		Baghouse			
B. Stack/Vent Parameters		NA			
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
N/A		N/A			
B. Pollutant		Maximum Emission Limit			
1. Particulate		1. 0.005 grains per dry standard cubic foot of exhaust gas (LMF and No.2 Argon Stirring Station Baghouse stack). 2. 1.077 pounds per heat (LMF Furnace Operation). 3. 0.180 pounds per heat (No.2 Argon Stirring Station). (SIP No. 27-1993, Exhibit B, Paragraph 6), (R336.1201(3)) 4. 0.856 pounds per hour (LMF material Handling operation baghouse) (R336.1201(3))			
2. Opacity		10% opacity (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make it available to AQD upon request: 1. Pressure drop across baghouse filters recorded daily. A pressure drop between 3 and 12 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. 2. Total number of heats per year based on a 12-month rolling time period determined at the end of each calendar month for LMF Furnace operation and No.2 Argon Stir Operation. R336.1213(3)			
3. Other Monitoring and/or Recordkeeping		1. The permittee shall perform a non-certified visible emission observation of the No.2 argon stir station and LMF furnace baghouse stacks at least once a week during source operations. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action.			

**TABLE E-01.04 LADLE METALLURGY FACILITY OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

2. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the baghouse, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions as warranted, but not less frequently than at least once a month and shall keep a written record of each inspection and corrective action taken if any. **(R336.1213(3))**

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	Particulate (R336.1213(3))
2. Method/Analysis	Reference Method 17 or other approved method (R336.1213(3))
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct a particulate matter emission test and shall conduct a particulate matter emission test once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R336.1213(3))

IV. REPORTING

Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

- The maximum number of heats for the LMF furnace operation shall not exceed 9,855 heats per year. **(SIP No. 27-1993, Exhibit B, Paragraph 6), (R336.1201(3))**
- The maximum number of heats for the LMF No.2 argon stir operation shall not exceed 12,775 heats per year. **(SIP No. 27-1993, Exhibit B, Paragraph 6), (R336.1201(3))**
- The permittee shall not operate the LMF operations unless an instrumentation which shall measure pressure drop across the fabric filter collectors are installed and operating properly. **(R336.1201(3))**

VI. OTHER REQUIREMENTS

The permittee shall implement and maintain the Malfunction Abatement Plan (MAPs) for the LMF Baghouse developed pursuant to Consent Order WCAQMD 0096-10. The MAPs can be revised as appropriate, and alternate formats or revisions to the approved MAPs can be made upon approval by the AQD District Supervisor. **(CO No. 0096-10, Section 5e, Paragraph 1), R336.1213(3), R336.1911)**

* This requirement is state enforceable only.

TABLE E-01.05 VACUUM DE-GASSING OPERATIONS					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGVDG-OPERATIONS Vacuum Degassing Operations comprising of Ruhrstahl-Heraeus recirculation vacuum degassing process and Kawasaki top blown oxygen blowing equipment, equipped with process flare, baghouse, and water condenser cooling system. Also includes ladle metallurgy additive handling system equipped with baghouse.				
Flexible Grouping ID	N/A				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Vacuum degassing process flare and baghouse.				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVVDG-DGAS-FLARE	190	NA	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Natural Gas usage in the flare		210,240,000 cubic feet per 12-month rolling time period as determined at the end of each calendar month. (R336.1201(3))			
B. Pollutant		Maximum Emission Limit			
1. Particulate		0.005 grains per dry standard cubic foot of exhaust gas (vacuum degassing process and ladle metallurgy additive handling systems baghouse). (SIP No. 27-1993, Exhibit B, Paragraph 5), (R336.1201(3))			
2. Carbon Monoxide		7 pounds per hour (vacuum degassing process) (R336.1201(3))			
3. Nitrogen Oxides		3.36 pounds per hour (vacuum degassing process) (R336.1201(3))			
4. Opacity		A. Vacuum degassing process and ladle metallurgy additive handling systems baghouse stacks. 1. Shall not exceed a six-minute average of 5% opacity. B. Vacuum degassing process flare. 1. Shall not exceed a six-minute average of 5% opacity. C. Vacuum degassing process roof monitors. 1. Shall not exceed a six-minute average of 10% opacity. (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep the following information and make it available to AQD upon request:				

**TABLE E-01.05 VACUUM DE-GASSING OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<ol style="list-style-type: none"> 1. Total monthly natural gas usage per year based on a 12-month rolling time period determined at the end of each calendar month. 2. Total number of processed heats per year based on a 12-month rolling time period determined at the end of each calendar month. 3. Total amount of processed steel per year based on a 12-month rolling time period determined at the end of each calendar month. (R336.1201(3), R336.1213(3)) 4. Pressure drop across the baghouses located in the Vacuum De-gassing Operations, recorded daily. A pressure drop of between 3 and 12 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R336.1213(3)) 5. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month records of the flare natural gas consumption, the number of heats processed, and tons of steel processed in the vacuum degassing operation. (R336.1201(3), R336.1213(3))
<p>3. Other Monitoring and/or Recordkeeping</p>	<ol style="list-style-type: none"> 1. The permittee shall perform a non-certified visible emission observation of the Vacuum degassing process and ladle metallurgy additive handling systems baghouse stacks, Vacuum degassing process flare and baghouse dust collector, and vacuum degassing process roof monitors at least once a week during vacuum degassing activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 2. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the baghouses, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions as warranted, but not less frequently than at least once a month and shall keep a written record of each inspection and corrective action taken if any. (R336.1213(3)) 3. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the flare at least once every six month. A log of the inspection, cause(s) of malfunction or failure, repairs made and corrective actions taken shall be kept and maintained on file for a period of at least five years. (R336.1213(3))
<p>B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A</p>	
<p>1. Parameter to be Tested/Recorded</p>	<p>Particulate (R336.1213(3))</p>
<p>2. Method/Analysis</p>	<p>Reference Method 17 or any other approved methods. (R336.1213(3))</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct particulate matter emission test on the baghouse emissions once every five year or more frequently upon the request of AQD. No less than 30 days prior to each testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R336.1213(3))</p>
<p>IV. REPORTING</p>	
<p>Reports and Schedules</p>	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A.

**TABLE E-01.05 VACUUM DE-GASSING OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. <p style="text-align: right;">(R336.1213(3)(c)(i))</p> 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. <p style="text-align: right;">(R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

1.	The permittee shall not process more than 10,950 heats per 12-month rolling time period as determined at the end of each calendar month. <p style="text-align: right;">(R336.1201(3))</p>
2.	The permittee shall not process more than 2,737,500 tons of steel per 12-month rolling time period as determined at the end of each calendar month. <p style="text-align: right;">(R336.1201(3))</p>
3.	The permittee shall not operate the vacuum degassing operations unless the process flare, baghouse, and water condenser cooling system are installed, maintained, and operated in a satisfactory manner. (R336.1201(3))
4.	The permittee shall not operate the ladle metallurgy additive handling system unless the baghouse is installed, maintained, and operated in a satisfactory manner. <p style="text-align: right;">(R336.1201(3))</p>

VI. OTHER REQUIREMENTS

NA	
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* This requirement is state enforceable only.

TABLE E-01.06 VACUUM DE-GASSING OPERATION, PACKAGE WATER TUBE STEAM BOILER – MAIN PLANT

EMISSION UNIT/PROCESS GROUP REQUIREMENTS

EMISSION GROUP	EGVDG-DGAS-BLR Vacuum De-gassing Operations, Package water tube steam boiler at the main plant. Natural gas fired boiler to produce 60,000 pounds per hour steam for process requirements.				
Flexible Grouping ID	N/A				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVVDG-DGAS-BLR	45	48	NA	NA	R336.1201(3)
C. Other Design Parameters					
The maximum heat input to the boiler shall not exceed 90.4 million BTU per hour. (R336.1201(3))					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
1. Particulate		1. 0.001 pounds per million BTU 2. 0.09 pounds per hour (R336.1201(3))			
2. Carbon Monoxide		1. 0.15 pounds per million BTU 2. 13.6 pounds per hour (R336.1201(3))			
3. Nitrogen Oxides		1. 0.20 pounds per million BTU 2. 18.1 pounds per hour (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make it available to AQD upon request: 1. Total monthly natural gas consumption. 2. Total monthly operating hours. 3. Emission rate calculation monthly of pollutants mentioned in II.B. 1-3 of this permit using PTI emission factor. (R336.1213(3))			
3. Other Monitoring and/or Recordkeeping		The permittee shall perform a non-certified visible emission observation of the boiler stack at least once a week during boiler operation. The permittee shall			

TABLE E-01.06 VACUUM DE-GASSING OPERATION, PACKAGE WATER TUBE STEAM BOILER – MAIN PLANT	
EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))
B. TESTING/RECORDKEEPING (R 336.1213(3))	
In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 1.8</p>
V. OPERATIONAL PARAMETERS	
1. There shall be no visible emissions from the operation of the boiler.	(R336.1201(3))
2. The boiler shall be operated using only natural gas as a fuel.	(R336.1201(3))
VI. OTHER REQUIREMENTS	
NA	

* This requirement is state enforceable only.

TABLE E-01.07 KISH WETTING STATION					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGKISH-WETTING Kish wetting station. Kish pots are transferred from #2 BOP iron skimming station to Levy's watering station where pots are wetted with water to control particulate matter when kish pots are emptied. There are a total of 10 watering stations.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Water/wetting system				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	
C. Other Design Parameters					
2. NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutant			Maximum Emission Limit		
Opacity			10%. (R336.1301, R336.1331, R336.1201(3))		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	NA				
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> 1. The permittee shall perform a non-certified visible emission observation of the kish wetting station at least once a week during kish pot wetting activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 2. The permittee shall perform a certified Method 9 visible emission observation of the kish wetting station at least once a month during kish pot wetting operations. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 3. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the kish pot watering system, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions, but not less frequently than at least once a month and shall keep a written record of each inspection 				

TABLE E-01.07 KISH WETTING STATION EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	and corrective action taken if any. (R336.1213(3))
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 1.8
V. OPERATIONAL PARAMETERS	
1. The permittee shall not use untreated wastewater or process water for kish pot watering makeup. (R336.1301, R336.1331, R336.1201(3)) 2. The permittee shall implement the approved program for fugitive dust control program.. (R336.1301, R336.1331, R336.1201(3)) 3. The permittee shall not dump kish pots unless kish pot watering system is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the kish pot watering system is defined as maintaining the visible emissions limit from the kish pot dumping area. (R336.1301, R336.1331, R336.1201(3))	
VI. OTHER REQUIREMENTS	
1. The permittee shall maintain and implement agreed upon Levy Standard Operating Procedures for kish wetting and pit slag wetting made part of this permit condition by reference. (Consent Order No. 0035-97 (33)(a), (R336.1901*) 2. The permittee shall maintain the second truck watering station. (Consent Order No. 0035-97 (33)(b), (R336.1910) 3. The permittee shall require Levy to maintain a 15 minute wetting time for the pit slag. (Consent Order No. 0035-97 (33)(b), (R336.1901*) 4. Fugitive dust emissions from pit slag handling operations at the Levy Company facility located on property contiguous to Great Lakes shall be controlled further by wetting such pit slag at the Levy Company Kish Watering Station prior to unloading. (CO No. 96-10, Section 5b, Paragraph 2), (R336.1901*)	

* This requirement is state enforceable only.

TABLE E-01.08 PICKLE LINE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EG5-PICKLE-LINE No. 5 Pickle Line and Operations, including: pickle line, welder, acid fume wet scrubber and dust collector.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Scrubber and Baghouse				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVPIC-SCRUBBER	69	42	NA	NA	(R336.1201(3), R336.1225)
C. Other Design Parameters					
The permittee shall install, operate and maintain system of measurement and recording of the scrubber makeup water flow rate and, if required, recirculation water flow rate. (40 CFR Part 63, Subpart CCC, 63.1162(a)(2))					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
NA	NA				
B. Pollutant	Maximum Emission Limit				
Hydrogen Chloride	1. 18 parts per million by volume (ppmv); OR 2. HCl at mass emission rate that corresponds to a collection efficiency of less than 97 percent. 3. 1.64 pounds per hour. (R336.1201(3), (R336.1225), (R336.1299, 40 CFR Part 63, Subpart CCC)				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The water flow rate to the scrubbers must be monitored continuously and recorded at least once per shift while scrubber is operating. Operation of the scrubber shall be with a minimum of scrubber makeup water flow rate and recirculation water flow rate as established during the most recent performance test. The normal pressure drop range of 3 to 10 inches of water column is considered normal range. The permittee shall initiate appropriate maintenance activity per 63.1160(b)(2) on the scrubber if the pressure drop exceed the normal range which is not a deviation. (40 CFR Part 63, Subpart CCC, 63.1162(a)(2))				
3. Other Monitoring and/or Recordkeeping	The permittee shall record and keep the following information and make it available to AQD upon request: 1. Operating parameters for the scrubbers established from the initial test conducted. (40 CFR Part 63, Subpart CCC, 63.1162(a)(4)) 2. Occurrence and duration of each startup, shutdown, or malfunction of the				

**TABLE E-01.08 PICKLE LINE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p>pickling operation. (40 CFR Part 63, Subpart CCC, 63.1165(a)(1))</p> <p>3. Occurrence and duration of each startup, shutdown, or malfunction of the air pollution control equipment (40 CFR Part 63, Subpart CCC, 63.1165(a)(2))</p> <p>4. All maintenance performed on the air pollution control equipment (40 CFR Part 63, Subpart CCC, 63.1165(a)(3))</p> <p>5. Actions taken during periods of startup, shutdown, and malfunction and dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the Startup, Shutdown, and Malfunction Plan (SSMP). (40 CFR Part 63, Subpart CCC, 63.1165(a)(4))</p> <p>6. All information necessary to demonstrate conformance with the SSMP when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in the plan. Can be recorded on a checklist or similar form. (40 CFR Part 63, Subpart CCC, 63.1165(a)(5))</p> <p>7. All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements and measurements as may be necessary to determine the conditions of the initial test or subsequent tests. (40 CFR Part 63, Subpart CCC, 63.1165(a)(6))</p> <p>8. All results of initial or subsequent performance tests. (40 CFR Part 63, Subpart CCC, 63.1165(a)(7))</p> <p>9. All documentation supporting initial notifications and notifications of compliance status required by 63.9 (40 CFR Part 63, Subpart CCC, 63.1165(a)(10))</p> <p>10. The permittee shall keep and maintain the following record for 5 years from date of each record of: a. Scrubber makeup water flow rate and recirculating water flow rate. b. Calibration and manufacturer certification that monitoring devices are accurate to within 5%. c. Each maintenance inspection and repair, replacement, or other corrective actions (40 CFR Part 63, Subpart CCC, 63.1165(a)(11)(b)(i, ii, iii))</p> <p>11. Records of any applicability determination, including supporting analyses. (40 CFR Part 63, Subpart CCC, 63.1165(a)(11))</p> <p>12. The permittee shall keep records of emission information; operating parameters; maintenance information; and inspections to comply with the National Emission Standards for Hazardous Air Pollutants as specified in 40</p>
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**TABLE E-01.08 PICKLE LINE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

CFR 63 Subparts A and CCC. All source emissions and operating and maintenance information shall be kept on file for a period of at least five years and made available to the Department upon request.
(R336.1201(3), R 336.1213(3), 40 CFR Part 63, Subpart A & CCC)

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	Hydrogen chloride emissions.
2. Method/Analysis	EPA reference Method 26A (40 CFR Part 63, Subpart CCC, 63.1161(d))
3. Frequency and Schedule of Testing/Recordkeeping	<ol style="list-style-type: none"> The permittee shall conduct a hydrochloric acid emission test on the pickle line scrubber stack twice during the term of this permit in compliance with the required testing interval of every 2 ½ years or more frequently upon the request of AQD. (40 CFR Part 63, Subpart CCC, 63.1162(a)(1)) No less than 60 days prior to the hydrochloric acid emission test, a complete stack test protocol must be submitted to AQD for approval and the time schedule of the testing to allow the AQD to have an observer present during the test. The final plan must be approved by the AQD prior to testing. (40 CFR Part 63, Subpart CCC, 63.1163(d))

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by a responsible official shall be submitted to AQD semiannually and delivered or postmarked by the 30th day following the end of each calendar half, June 30. (40 CFR Part 63, Subpart CCC, 63.1164(c)(2)) Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). See Appendix 8 for summary of 63.10(d)(5)(ii) reporting requirement. (40 CFR Part 63, Subpart CCC, 63.1164(c)(3)) <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

- The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR 63 Subparts A and CCC, as they apply to EUPICKLE5.
(R336.1201(3), 40 CFR 63 Subparts A & CCC)
- The permittee shall not operate EUPICKLE5 unless the acid fume wet scrubber is installed, maintained, and operated

TABLE E-01.08 PICKLE LINE OPERATIONS
EMISSION UNIT/PROCESS GROUP REQUIREMENTS

in a satisfactory manner. **(R336.1201(3), R336.1225, R336.1299, 40 CFR 63)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the makeup and recirculation water and recirculation water flowrate in the EUPICKLE5 acid fume wet scrubber consistent with the requirements of 40 CFR 63 Subpart CCC. Monitored data shall be recorded once per operating shift.

(R336.1201(3), R336.1225, R336.1229, R336.1901, R336.1910 and 40 CFR 63 Subparts CCC)

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the pressure drop across the EUPICKLE5 acid fume wet scrubber consistent with the requirements of 40 CFR 63 Subpart CCC. Monitored data shall be recorded once per operating shift.

(R336.1201(3), R336.1225, R336.1229, R336.1901, R336.1910 and 40 CFR 63 Subparts CCC)

VI. OTHER REQUIREMENTS

1. The permittee shall provide and operate the hydrochloric acid storage vessels, except during loading and unloading of acid, a closed-vent system for each vessel. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device. **(40 CFR Part 63, Subpart CCC, 63.1159(b))**

2. The permittee shall comply with the operation and maintenance requirements prescribed under 63.6(e) of subpart A. **(40 CFR Part 63, Subpart CCC, 63.1160(b)(1))**

3. The permittee shall prepare and implement an approved operation and maintenance plan (OMP) for the pickle line scrubber and pickle line welder cartridge filter dust collector. This plan is incorporated by reference into this permit as No. 5 Pickle Line Operation and Maintenance Plans. These plans must be consistent with good maintenance practices and for the scrubber emission control device, must at a minimum:

- (i) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.
- (ii) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.
- (iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling.
- (iv) Require an inspection of each scrubber at intervals of no less than 3 months with:
 - (A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices.
 - (B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components.
 - (C) Repair or replacement of droplet eliminator elements as needed.
 - (D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber.
 - (E) Adjustment of damper settings for consistency with the required air flow.
- (v) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection.
- (vi) The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of this subpart.

- (vii) The permittee shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iv) of this section, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

(40 CFR Part 63, Subpart CCC, 63.1160(b)(2), (40 CFR Part 63, Subpart CCC, 63.1164(c)(1), (40 CFR Part 63, Subpart CCC, 63.6(e)(3), (R336.1213(3))

**TABLE E-01.08 PICKLE LINE OPERATIONS
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

4. Each water flow monitoring device shall be certified by the manufacturer to be accurate to within 5% and shall be calibrated in accordance with the manufacturer's instructions at least once per year.
(40 CFR Part 63, Subpart CCC, 63.1162(a)(5))
5. The permittee may develop and implement alternative monitoring requirements subject to the approval by the AQD District Supervisor.
(40 CFR Part 63, Subpart CCC, 63.1162(a)(6))
6. The permittee shall inspect each pickle line operation associated hydrochloric acid storage vessel semiannually to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.
(40 CFR Part 63, Subpart CCC, 63.1162(c))
7. The permittee shall operate and maintain each emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all time, including during period of startup, shutdown, or malfunction. Malfunction must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.
(40 CFR Part 63, Subpart CCC, 63.1164(c)), (40 CFR Part 63, Subpart A, 63.6(e)(1)(i))

***This requirement is state enforceable only.**

TABLE E-01.09 ELECTROGALVANIZING LINE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGEGL-OPERATIONS Electrogalvanizing line operations, consists of the following: (a. uncoiler, b. precleaning, c. plating tanks, d. recoiler, e. fume collectors). Fume scrubbers associated with the operations is (1) De-greasing unit Scrubber (exempt), (2) pre-treatment scrubber (east), (3) post-treatment scrubber (west), (4) Boiler (insignificant source).				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Scrubbers				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVEGL-POST-SCRBR	69	42	NA	NA	R 336.1201(3)
SVEGL-PRE-SCRBR	69	42	NA	NA	R 336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Sulfuric Acid Mist		1 milligram per cubic meter, corrected to 70 degrees Fahrenheit and 29.92 mm Hg. R 336.1201(3)			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep the following information and make it available to AQD upon request: 1. EGL scrubber system pressures, daily. 2. Pump and fan amperage where available, daily 3. System maintenance inspection status, monthly (Consent Order No. 0035-97, Paragraph A(9), (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	The permittee shall keep a record for at least five years and made available to AQD of the regular monthly inspection conducted on the EGL scrubber systems with detailed inspection observations and any corrective action taken. (Consent Order No. 0035-97, Paragraph A(9), (R 336.1213(3))				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	Sulfuric Acid Mist emission				
2. Method/Analysis	Method 8 or other approved method				

**TABLE E-01.09 ELECTROGALVANIZING LINE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

3. Frequency and Schedule of Testing/Recordkeeping

The permittee shall conduct a sulfuric acid mist emission test on the scrubber stack once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing.
(R 336.1213(3))

IV. REPORTING

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A. **(R336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. **(R336.1213(4)(c))**

See Appendix 1.8

V. OPERATIONAL PARAMETERS

The permittee shall not operate the electrogalvanizing line unless the emission control system is installed and operating properly. **(R336.1910), (R336.1201)(3)**

VI. OTHER REQUIREMENTS

1. The permittee shall implement increased maintenance operations for the pumps on the EGL scrubber systems and increased regular inspections of these systems. Such inspection shall be implemented monthly and shall include, at a minimum, EGL scrubber system pressures, pump and fan amperage where available, and system maintenance status. **(WCAQMD Consent order 0035-97, Paragraph A (9), (R336.1213)(3), (R336.1910))**

2. The permittee shall implement and maintain the Malfunction Abatement Plan (MAPs) for the EGL Scrubbers developed pursuant to Consent Order WCAQMD 0096-10. The MAPs can be revised as appropriate, and alternate formats or revisions to the approved MAPs can be made upon approval by the AQD District Supervisor.

(CO No. 0096-10, Section 5e, Paragraph 1), R336.1213(3), R336.1911)

TABLE E-01.10 ELECTROGALVANIZING LINE STORAGE TANKS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGEGL-STO-TANKS Electrogalvanizing line storage tanks, including: 1) 3 EGL Solution storage and recirculation tanks 2) Exhaust system 3) Mist eliminator.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Mist Eliminator				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Sulfuric Acid		1. 1 milligram per cubic meter exhaust air, corrected to 70 degrees Fahrenheit and 29.92 inches of mercury 2. 0.038 pounds per hour 3. 0.17 tons per year (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and make it available to AQD upon request: 1. The water flow rate in the mist eliminator, daily (R 336.1213(3))			
3. Other Monitoring and/or Recordkeeping		NA			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded		Sulfuric Acid			
2. Method/Analysis		Method 8 or other approved method.			
3. Frequency and Schedule of Testing/Recordkeeping		The permittee shall conduct a sulfuric acid mist emission test from the EGL storage tanks exhaust system operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))			
IV. REPORTING					
Reports and Schedules		1. Prompt reporting of deviations pursuant to Condition 24 of Part A.			

**TABLE E-01.10 ELECTROGALVANIZING LINE STORAGE TANKS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	(R336.1213(3)(c)(ii))
	2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))
	3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))
See Appendix 1.8	

V. OPERATIONAL PARAMETERS

1. The electrogalvanizing solution storage tank exhaust venting system shall not be used unless the mist eliminator is installed and operating properly. **(R 336.1201(3), (R 336.1910))**
2. There shall be no visible emission from the mist eliminator discharge stack. **(R 336.1201(3))**
3. The water used in the mist eliminator shall not be reused in the mist eliminator. **(R 336.1201(3))**

VI. OTHER REQUIREMENTS

After a determination by and written notification from the AQD District Supervisor that the emission from the mist eliminator are causing R336.1901 violations, the permittee shall take immediate action to abate the source of odors. The permittee shall submit an abatement program for the permanent resolution of the odor problem within 30 days of the notification by AQD. **(R 336.1201(3))**

**TABLE E-01.11 CONTINUOUS GALVANIZING OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

EMISSION UNIT	EGCON-GALV-LINE Continuous galvanizing operations consisting of the following: 1. Continuous galvanizing line, 2. Continuous galvanizing line annealing furnace, 3. Continuous galvanizing line selective catalytic reduction unit with exhaust gas NOx and Oxygen analyzers, 4. Continuous galvanizing line oiler, and 5. Continuous galvanizing line pre-cleaner mist scrubber.
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Flexible Grouping ID	NA
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I. DESIGN PARAMETERS

A. Pollution Control Equipment	Pre-cleaner mist scrubber.
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B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.
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Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
1. SVCONGALVSCRBR	75	24	NA	NA	R336.1201(3)
2. SVCONGALVFENCE	130	60	NA	NA	R336.1201(3)

C. Other Design Parameters

1. NA

II. MATERIAL USAGE/EMISSION LIMITS

A. Material	Maximum Usage Rate
1. Galvanized Steel	850,000 tons per year processed in the hot dip galvanizing line based on a 12-month rolling time period as determined at the end of each month. (R336.1201(3), R336.1205)
2. Natural Gas	838.6 million cubic feet per year based on 12-month rolling time period as determined at the end of each calendar month for the total combined usage in the annealing furnace and edge burners. (R336.1201(3), R336.1205)

B. Pollutant	Maximum Emission Limit
1. Total combined nitrogen oxide emissions as nitrogen dioxide (NOx)	A) From Annealing Furnace and the edge burners of the hot dip galvanizing line in the G-Building: 1. 7.24 pounds per hour 2. 27.51 tons per year, based on a 12-month rolling time period (R336.1201(3), R336.1205)
2. Nitrogen Oxide	A) From Annealing Furnace controlled by a Selective Catalytic Reduction (SCR) unit: 1. 6.6 pounds per hour 2. 25 tons per year based on a 12-month rolling time period as determine at the end of each calendar month. (R336.1201(3), R336.1205)
3. Particulate Matter	A) From Electrolytic cleaning process equipment controlled by a cross flow packed bed scrubber system: 1. 0.26 pounds per hour (R336.1201(3), R336.1205, R336.1331)
4. VOC	A) From Rust preventive oil application electrostatic spray unit operation: 1. 28.91 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. 2. 0.44 lb of VOC per gallon of oil. (R336.1201(3), R336.1205, R336.1702)
5. Ammonia*	A) From Annealing furnace controlled by SCR unit: 1. 1.44 pounds per hour (R336.1201(3), R336.1224, R336.1225)

III. COMPLIANCE EVALUATION

Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

**TABLE E-01.11 CONTINUOUS GALVANIZING OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

**A. MONITORING/RECORDKEEPING (R 336.1213(3))
 In Addition To General Requirements in Part A**

1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA
2. Process Monitoring System and Recordkeeping	<p>The permittee shall record and keep the file of the following information and shall be made available to AQD upon request:</p> <ol style="list-style-type: none"> 1. Occurrence of abnormal functions by the automatic control system of the automatic urea feed injection system of the SCR. 2. Total amount of galvanized steel processed per month. 3. Total amount of galvanized steel processed on a 12-month rolling time period determined at the end of each calendar month. 4. Total amount of urea usage per day. 5. Water flow rate reading in the cross flow packed bed scrubber,daily. 6. Calibration and maintenance activities conducted on the automatic calibration equipment for the NOx and Oxygen Analyzers. (R 336.1201(3), R 336.1213(3))
3. Other Monitoring and/or Recordkeeping	<p>The permittee shall keep a monthly record and keep the file for a period of at least five years and shall be made available to AQD upon request of the following:</p> <ol style="list-style-type: none"> 1. The amount in gallons and VOC content of each oil applied in the rust preventive oil application electrostatic spray unit of the hot dip galvanizing line. 2. VOC emission calculations determining the total mass emissions in tons per month based on a 12-month rolling time period as determined at the end of each calendar month in tons per year for the use of the rust preventive oil application electrostatic spray unit of the hot dip galvanizing line. 3. Total natural gas usage for the annealing furnace and edge burners based on the 12-month rolling time period as determined at the end of each calendar month. 4. Calculations of monthly NOx emissions for the annealing furnace and edge burners. (R 336.1201(3), R 336.1213(3))

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	<ol style="list-style-type: none"> 1. Nitrogen Oxides 2. Ammonia 3. Particulate Matter (R 336.1213(3))
2. Method/Analysis	<ol style="list-style-type: none"> 1. Method 7E - 2. Any approved method - 3. Method 17 Or other approved method (R 336.1213(3))
3. Frequency and Schedule of Testing/Recordkeeping	<ol style="list-style-type: none"> 1. The permittee shall conduct a nitrogen oxides and ammonia emission test from the annealing furnace/SCR unit during operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3)) 2. The permittee shall conduct a particulate matter emission test from the cross flow packed scrubber stack during operation once every five years or more

**TABLE E-01.11 CONTINUOUS GALVANIZING OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. **(R 336.1213(3))**

IV. REPORTING

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A. **(R336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. **(R336.1213(4)(c))**

See Appendix 1.8.

V. OPERATIONAL PARAMETERS

1. The SCR unit shall be equipped with an automatic urea feed injection system controlled by an automatic control system based on a feed back and feed forward controls. This automatic control system shall be equipped with an alarm that will indicate any abnormal functioning of the system. **(R 336.1201(3), R 336.1205)**
2. The permittee shall not operate the electrolytic cleaning process equipment unless the cross flow packed bed scrubber is installed and operating properly. A minimum water flow rate of 30 gallons per minute shall be maintained. The permittee shall install a flow gauge to measure the water flow rate. **(R 336.1201(3), R 336.1205, R 336.1331)**
3. The permittee shall monitor NOx and Oxygen concentrations in the exhaust gases from the annealing furnace controlled by the SCR unit using the NOx and Oxygen analyzers. Such automatic calibration equipment shall be programmed pursuant to the manufacturer's specifications on a time frame acceptable to the AQD District Supervisor. **(R 336.1201(3), R 336.1205)**
4. The permittee shall conduct a cylinder gas audit on the NOx and Oxygen analyzers once each calendar quarter to assess the accuracy of the data collected by the monitors using a method acceptable to the AQD District Supervisor. **(R 336.1201(3))**
5. The permittee shall not operate the annealing furnace, unless the SCR unit is installed and operating properly. **(R 336.1201(3))**
6. The permittee shall monitor and record the monthly natural gas usage for the annealing furnace and separately for the edge burners in a manner and with instrumentation acceptable to the AQD District Supervisor. Acceptable instrumentation and manner of recording are natural gas meters and total natural gas usage summary every end of the month recorded by the permittee. **(R 336.1201(3))**

VI. OTHER REQUIREMENTS

1. The permittee shall develop and implement a malfunction abatement plan (MAP) for the hot dip galvanizing line including the annealing furnace controlled by SCR unit and the electrolytic cleaning process equipment controlled by a packed bed cross flow scrubber. The MAP shall also address malfunction and define abnormal operations of the process including when manual urea feed injections occur. **(R 336.1201(3))**

*** This requirement is state enforceable only.**

TABLE E-01.12 A BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGBLAST-FCE-A “A” Blast Furnace consisting of the following groups of devices: 1) Blast furnace proper 2) Group of 3 stoves 3) Cast house emission control systems (CECS), which is a collection hood followed by a baghouse and stack 4) Dust collector 5) Slag pit 6) BFG flare 7) Clean gas bleeder 8) Dirty gas bleeder				
Flexible Grouping ID	FGBLASTFCE-A,B&D				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SV-“A”BLAST	68	129.3	NA	NA	40CFR 52.21(c) & (d)
SV-“A”STOVE	250	120	NA	NA	40CFR 52.21(c) & (d)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Particulate Matter		0.0075 grains per dry standard cubic foot. (R 336.1331)			
Visible emissions from baghouse stack		10% opacity (6 minute average)		(R 336.1361, R 336.1331)	
Visible emissions from roof monitors		20% opacity (6 minute average)		(R 336.1358, R 336.1331)	
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	<p>1. The permittee shall keep a record of the pressure drop across the baghouse once a week, recorded weekly. A pressure drop of between 1 and 22 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R 336.1213(3))</p> <p>2. The permittee shall keep record of baghouse compartment shutdowns. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301), R 336.1331)</p>				
	3. The permittee shall initiate corrective action upon observation of visible emissions from the baghouse emission control of the EU-“A”BLAST				

**TABLE E-01.12 A BLAST FURNACE CAST HOUSE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p>exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301), R 336.1331)</p> <p>4. The permittee shall initiate corrective action upon observation of visible emissions from the roof monitors of the EU-“A” BLAST exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301), R 336.1331)</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>1. The permittee shall perform a non-certified visible emission observation for the baghouse emission control of the EU-“A” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations for the baghouse emission control of the EU-“A” BLAST using Method 9 at least once per month. (R336.1301), R336.1331)</p> <p>2. The permittee shall perform a non-certified visible emission observation for the roof monitors of the EU-“A” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations from the roof monitors of the EU-“A” BLAST using Method 9 at least once every two weeks. (R336.1301), R336.1331)</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

<p>1. Parameter to be Tested/Recorded</p>	<p>Particulate Matter</p>
<p>2. Method/Analysis</p>	<p>USEPA Method 17 or any approved method. (R 336.1213(3))</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct a particulate matter emission test on the “A” Blast Furnace baghouse stack during operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))</p>

IV. REPORTING

<p>Reports and Schedules</p>	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

<p>1. The permittee shall not operate EU-“A” BLAST unless the baghouse control system is installed, maintained, and operated in a satisfactory manner. (R336.1301), (R336.1331)</p>
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TABLE E-01.12 A BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS

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| 2. The permittee shall not simultaneously shut down more than one baghouse compartment.
(R336.1301), (R336.1331) |
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VI. OTHER REQUIREMENTS

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| 1. The permittee shall fully automate the cleaning cycle of the "A" Blast Furnace casthouse baghouse.
(CO No. 96-10, Section 5(i), Paragraph 1), (R336.1910) |
| 2. The permittee shall inspect the "A" Blast Furnace Casthouse Baghouse once per week. Such inspection shall consist of monitoring differential pressure for each operating chamber of the Baghouse and checking the operation of the screw conveyors.
(CO No. 96-10, Section 5(i), Paragraph 2), (R336.1213(3)) |

* **This requirement is state enforceable only.**

TABLE E-01.13 B BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGBLAST-FCE-B “B” Blast Furnace consisting of the following groups of devices: 1) Blast furnace proper 2) Group of 3 stoves 3) Cast house emission control system with baghouse 4) Dust collector 5) Slag pit 6) Clean gas bleeder 8) Dirty gas bleeder				
Flexible Grouping ID	FGBLASTFCE-A,B&D				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SV-“B”BLAST(BH)	73	120	NA	NA	40CFR 52.21(c) & (d)
SV-“B”STOVE	200	120	NA	NA	40CFR 52.21(c) & (d)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Particulate Matter		0.0075 grains per dry standard cubic foot. (R 336.1331)			
Visible emissions from baghouse stack		10% opacity (6 minute average) (R 336.1361, R 336.1331)			
Visible emissions from roof monitors		20% opacity (6 minute average) (R 336.1358, R 336.1331)			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		1. The permittee shall keep a record of the pressure drop across the baghouse once a week, recorded weekly. A pressure drop of between 1 and 22 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R 336.1213(3)) 2. The permittee shall keep records of baghouse compartment shutdowns. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)			
		3. The permittee shall initiate corrective action upon observation of visible emissions from the baghouse emission control of the EU-“B”BLAST			

**TABLE E-01.13 B BLAST FURNACE CAST HOUSE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p>exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)</p> <p>4. The permittee shall initiate corrective action upon observation of visible emissions from the roof monitors of the EU-“B”BLAST exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>1. The permittee shall perform a non-certified visible emission observation for the baghouse emission control of the EU-“B” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations for the baghouse emission control of the EU-“B” BLAST using Method 9 at least once per month. (R336.1301), R336.1331)</p> <p>2. The permittee shall perform a non-certified visible emission observation for the roof monitors of the EU-“B” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations for the roof monitors of the EU-“B” BLAST using Method 9 at least once every two weeks. (R336.1301), R336.1331)</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

<p>1. Parameter to be Tested/Recorded</p>	<p>Particulate Matter R 336.1213(3)</p>
<p>2. Method/Analysis</p>	<p>Method 17 or other approved method. R 336.1213(3)</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct a particulate matter emission test on the “B” Blast Furnace baghouse stack during operation once very five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))</p>

IV. REPORTING

<p>Reports and Schedules</p>	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

<p>1. The permittee shall not operate EU-“B” BLAST unless the baghouse control system is installed, maintained, and operated in a satisfactory manner. (R336.1301), R336.1331)</p>

TABLE E-01.13 B BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS

2. The permittee shall not simultaneously shutdown more than one baghouse compartment. (R336.1301), R336.1331

VI. OTHER REQUIREMENTS

NA

- This requirement is state enforceable only.

TABLE E-01.14 D BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGBLAST-FCE-D “D” Blast Furnace consisting of the following groups of devices: 1) Blast furnace proper 2) Group of 3 stoves 3) Cast house emission control system with baghouse 4) Dust collector 5) Slag pit 6) BFG flare 7) Clean gas bleeder 8) Dirty gas bleeder				
Flexible Grouping ID	FGB&CBFCASTHOUSE				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SV-“D”BLAST(BH)	68	130	NA	NA	40CFR 52.21(c) & (d)
SV-“D”STOVE	230	120	NA	NA	40CFR 52.21(c) & (d)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Particulate Matter		0.0052 grains per dry standard cubic foot. (R 336.1331)			
Visible emissions from baghouse stack		10% opacity (6 minute average) (R 336.1361, R 336.1331)			
Visible emissions from roof monitors		20% opacity (6 minute average) (R 336.1358, R 336.1331)			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	1. The permittee shall keep a record of the pressure drop across the baghouse once a week, recorded weekly. A pressure drop of between 1 and 12 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R 336.1213(3)) 2. The permittee shall keep record of baghouse compartment shutdowns. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)				
	3. The permittee shall initiate corrective action upon observation of visible emissions from the baghouse emission control of the EU-“D”BLAST				

**TABLE E-01.14 D BLAST FURNACE CAST HOUSE OPERATIONS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p>exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)</p> <p>4. The permittee shall initiate corrective action upon observation of visible emissions from the roof monitors of the EU-“D”BLAST exceeding the visible emission limits of this permit and shall keep a written record of each required observations and any corrective actions taken. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1301, R 336.1331)</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>1. The permittee shall perform a non-certified visible emission observation for the baghouse emission control of the EU-“D” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations for the baghouse emission control of the EU-“D” BLAST using Method 9 at least once per month. (R336.1301), R336.1331)</p> <p>2. The permittee shall perform a non-certified visible emission observation for the roof monitors of the EU-“D” BLAST at least once a week during blast furnace processing activity. The permittee shall also conduct visible emissions observations for the roof monitors of the EU-“D” BLAST using Method 9 at least once every two weeks. (R336.1301), R336.1331)</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

<p>1. Parameter to be Tested/Recorded</p>	<p>Particulate (R 336.1213(3))</p>
<p>2. Method/Analysis</p>	<p>Method 17 or any approved method (R 336.1213(3))</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct a particulate matter emission test from the “D” Blast Furnace baghouse stack during operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))</p>

IV. REPORTING

<p>Reports and Schedules</p>	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

<p>1. The permittee shall not operate EU-“D” BLAST unless the baghouse control system is installed, maintained, and operated in a satisfactory manner. (R336.1301), R336.1331)</p>

TABLE E-01.14 D BLAST FURNACE CAST HOUSE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS

2. The permittee shall not simultaneously shutdown more than one baghouse compartment. (R336.1301), R336.1331)

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

TABLE E-01.15 BLAST FURNACE COOLING TOWER EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGBF-COOLING-TWR Blast Furnace Cooling Tower				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
Ammonia*		1. 1.05 grams per second 2. 8.34 pounds per hour (R 336.1225), (R 336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep the file of the following information and shall be made available to AQD upon request: 1. Total hours of operation per day. 2. Calculation of ammonia emission once a year based on result of annual analytical test conducted as required under III(B)(1-3) of this Table. (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	Ammonia Concentration in Water of the Cooling Tower				
2. Method/Analysis	Per approved method				
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct test to determine the ammonia concentration in water of the cooling tower during operation once a year or more frequently upon the request of AQD. The result of this test will be used by permittee to determine ammonia emission by calculation as required under III(A)(2)(2) of this Table. (R 336.1213(3))				

**TABLE E-01.15 BLAST FURNACE COOLING TOWER
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

IV. REPORTING

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A. **(R336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. **(R336.1213(4)(c))**

See Appendix 1.8

V. OPERATIONAL PARAMETERS

NA

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

**TABLE E-01.16 No. 2 BASIC OXYGEN PROCESS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

EMISSION GROUP	EG2BOP-HMT No. 2 Basic Oxygen Process - Hot Metal Transfer and Desulfurization Operations, including: Two Hot metal transfer operations, Two desulfurization/slag skimming operations, #2 BOP Shop - #2 Baghouse serving the above operations (The baghouse is connected to the fume collection system and includes: two desulfurization / slag skimming operations, two hot metal transfer hood), and Baghouse flow monitoring device
Flexible Grouping ID	NA

I. DESIGN PARAMETERS

A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVBOP-2-BGHSE	90	114	NA	NA	R336.1201(3)

C. Other Design Parameters

NA

II. MATERIAL USAGE/EMISSION LIMITS

A. Material	Maximum Usage Rate
1. Iron	1. 4,106,250 tons per year 2. 16,425 heats per year Based on a production rate of 250 tons of iron per heat. R336.1201(3)

B. Pollutant	Maximum Emission Limit
1. Particulate matter	A. From two hot metal transfer station and two hot metal desulfurization/skimming stations controlled by the baghouse: 1. 0.0029 grain per dry standard cubic foot of exhaust air 2. 4.65 pounds per hour 3. 20.38 tons per year R336.1201(3) B. From two hot metal transfer station and two hot metal desulfurization/skimming stations controlled by the baghouse: 1. 2.482 pounds per heat on a calendar day basis. (CO No. 27-1993, Exhibit B, Paragraph 3)
2. Visible emissions from hot metal transfer or skimming operations controlled by the baghouse.	5% (3 minute average) (R336.1201(3) , 40 CFR, Part 60, Subpart Na, 60.142a(a)(3))
3. Visible emissions from slag skimming operations emitted through the No. 2 BOP shop roof monitor.	10% (3 minute average) (R336.1201(3) , 40 CFR, Part 60, Subpart Na, 60.142a(a)(1))

III. COMPLIANCE EVALUATION

Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

TABLE E-01.16 No. 2 BASIC OXYGEN PROCESS EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A	
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA
2. Process Monitoring System and Recordkeeping	<p>The permittee shall record and keep the file for a period of at least five years of the following information and shall be made available in an acceptable format to AQD upon request:</p> <ol style="list-style-type: none"> 1. Total number of heats based on the 12-month rolling time period as determined at the end of each calendar month. 2. Total amount of iron processed based on the 12-month rolling time period as determined at the end of each calendar month. 3. Pressure drop across the baghouse filters, recorded daily. A pressure drop of between 2 and 10 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. <p style="text-align: right;">(R336.1213(3))</p>
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> 1. The permittee shall perform a non-certified visible emission observation of the No. 2 baghouse stack at least once a week during the hot metal transfer and desulfurization operation. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. <p style="text-align: right;">(R336.1213(3))</p> 2. The permittee shall perform a certified Method 9 visible emission observation of the No. 2 baghouse stack at least once a month during the hot metal transfer and desulfurization operation. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. <p style="text-align: right;">(R336.1213(3))</p> 3. The permittee shall install, calibrate, operate and maintain a monitoring device that continually measures and records for each steel production cycle, the various rates or levels of exhaust ventilation at each phase of the cycle through the ducts of the secondary emission capture system controlling the skimming stations. The monitoring device or devices are to be placed at locations near each capture point of the secondary emission capture system to monitor the exhaust ventilation rates or levels adequately, or in alternative locations approved in advance by AQD District Supervisor. <p style="text-align: right;">(40 CFR, Part 60, Subpart Na, 60.143a(a))</p>
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	<ol style="list-style-type: none"> 1. Particulate matter emissions (R336.1213(3)) 2. Opacity (R336.1213(3))
2. Method/Analysis	<ol style="list-style-type: none"> 1. Method 17 or other approved method. (R336.1213(3)) 2. Reference Method 9 (R336.1213(3))
3. Frequency and Schedule of	<ol style="list-style-type: none"> 1. The permittee shall conduct a particulate matter emission test once every five

**TABLE E-01.16 No. 2 BASIC OXYGEN PROCESS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

Testing/Recordkeeping

years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing.
(R336.1213(3))

IV. REPORTING

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A. **(R336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. **(R336.1213(4)(c))**
4. The permittee shall report all measurements of exhaust flow ventilation rates or levels over any 3-hour period that average more than 10 percent below the average rates or levels of exhaust ventilation maintained during the most recent performance test conducted under 40 CFR 60.8 in which the facility demonstrated compliance with the standard under 40 CFR 60.142a(a)(2). The accuracy of the respective measurements, not to exceed +10 percent compares to EPA Reference Method 2, may be considered when determining the measurement results that must be reported. Reportable measurements under this provision should be reported as part of the semiannual reporting referenced in IV.2 above.
(40 CFR 60.143a(d))

See Appendix 1.8

V. OPERATIONAL PARAMETERS

1. The permittee shall not perform the hot metal operations unless the baghouse dust collector is installed and operating properly. **(336.1910), (336.1201)(3))**
2. The permittee shall not operate the hot metal transfer station and two hot metal desulfurization/skimming stations simultaneously. **(336.1201)(3))**

VI. OTHER REQUIREMENTS

1. The permittee shall further control fugitive dust emissions by conducting all loading of pit slag within the No. 2 BOF Structure. **(CO No. 96-10, Section 5b, Paragraph 1), (R336.1901*)**
2. The permittee shall implement and maintain the approved Malfunction Abatement Plan for the No. 2 Baghouse (Hot Metal Transfer). Alternate formats or revisions to the approved Plan must be approved by the AQD District Supervisor. **(CO No. 96-10, Section 5e, Paragraph 1(b)), (R336.1911)**
3. No. 2 BOF dust transported to the briquetting facility for processing shall be transported by pneumatic truck, live bottom truck, or equipment with similar dust minimization proven potential. **(CO No. 96-10, Section 6, Paragraph (a)), (R336.1901*)**
4. Processed briquette will be recycled into the steel-making process or otherwise recycled within the iron and steel making process. **(CO No. 96-10, Section 6, Paragraph (b)), (R336.1901*)**
5. No. 2 BOP ESP dust that is not processed through the briquetting facility shall be unloaded into pneumatic or enclosed trucks using a telescoping chute or other equivalent means and disposed of at an offsite facility having all applicable

TABLE E-01.16 No. 2 BASIC OXYGEN PROCESS EMISSION UNIT/PROCESS GROUP REQUIREMENTS
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waste and air permits.

(CO No. 96-10, Section 6, Paragraph (b)), (R336.1901*)
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* This requirement is state enforceable only.

TABLE E-01. 17 BASIC OXYGEN FURNACE - CHARGING EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EG2BOF-CHARGING Basic Oxygen Furnace – Charging emission unit group includes the following processes and process equipment: 1. Loading scrap bundles into Number 25 and Number 26 Furnaces. 2. Transfer of hot metal from the hot metal ladles into the Number 25 and Number 26 Furnaces. 3. Three sided enclosures and integral secondary fume hoods for fumes generated during the above charging operations referred to as “secondary emissions) Charging operation “secondary emissions” are captured by the secondary emission control system baghouse (the BOP No. 1 Baghouse).				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
NA	NA				
B. Pollutant	Maximum Emission Limit				
1. Particulate matter.	A. Basic Oxygen Furnace(BOF) Secondary Collection System No. 1 Baghouse 1. 0.005 grains per dry standard cubic foot. (CO. No. 27-1993, Exhibit B, Paragraph 2) 2. 0.038 lbs. per 1,000 lbs. gas for secondary control equipment. (R336.1331(a) Table 31(C)(1)(B)))				
2. Visible emissions from secondary control device	20% Opacity (3 minute average) (R336.1364(1))				
3. Visible emissions from roof monitor	20% Opacity (3 minute average) (R336.1364(2), (40CFR, Part 63, Sub Part FFFFF, 63.7790(a))				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep the file of the following information and be made available to AQD upon request:				
	1. Pressure drop across the baghouse filters, recorded daily. A pressure drop of between 3 and 15 inches of water column shall be considered normal .which				

TABLE E-01. 17 BASIC OXYGEN FURNACE - CHARGING EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R336.1213(3))
3. Other Monitoring and/or Recordkeeping	1. The permittee shall perform a non-certified visible emission observation of the No. 1 baghouse roof monitors (since BOP No. 1 baghouse does not have a stack) at least once a week during the charging activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	1. Particulate matter (R336.1213(3)) 2. Opacity (R336.1213(3))
2. Method/Analysis	1. Method 17 (R336.1213(3)) 2. Reference Method 9C (R336.1213(3)) or other approved method.
3. Frequency and Schedule of Testing/Recordkeeping	1. The permittee shall conduct a particulate emission test from the No. 1 baghouse at the No.2 BOP every other year beginning in 1998 or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (CO No. 0035-97, Section H, Paragraph 35, (R336.1213(3)) 2. The permittee shall perform a certified Method 9 visible emission observation of the basic oxygen furnace (BOF) Baghouse No. 1 roof monitors at least once a month during the charging activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 1.8
V. OPERATIONAL PARAMETERS	
NA	
VI. OTHER REQUIREMENTS	
1. The permittee shall implement and maintain methods to further control emissions from hot metal charging which are captured by the secondary hoods and baghouse system. This methods include hot metal pouring technique and vessel angle to improve emission capture. (CO No. 0035-97, Section F, Paragraph 26, (R336.1901*))	

**TABLE E-01. 17 BASIC OXYGEN FURNACE - CHARGING
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

2. The permittee shall maintain and operate an event recorder to log the position of the secondary emission control system duct louver during the furnace operation cycle.
(CO No. 0035-97, Section F, Paragraph 27, (R336.1213(3))
3. The permittee shall keep records of the event recorder log of the position of the secondary emission control system duct louver during the furnace operation cycle and keep the file for a period of at least two years and shall be made available in an acceptable format to AQD upon request.
CO No. 0035-97, Section F, Paragraph 27, (R336.1213(3))

***This requirement is state enforceable only.**

TABLE E-01. 18 BASIC OXYGEN VESSELS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EG2BOF-VESSELS Basic Oxygen Furnace Vessels, Including: <ol style="list-style-type: none"> Two main Basic Oxygen Process Vessels (BOP Vessels) (Basic Oxygen Furnace No. 25 and Basic Oxygen Furnace No. 26) Primary emission control system including an electrostatic precipitator and ancillary equipment. Primary emission control system opacity monitor. 				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Electrostatic Precipitator (ESP)				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
1. The permittee shall not operate the Basic Oxygen Furnace (BOF) controlled by an electrostatic precipitator control system unless each transformer-rectifier set of the electrostatic precipitator is equipped with an automatic control system (microprocessor controls) approved by the AQD District Supervisor. (R336.1330(1))					
2. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode, from its respective transformer-rectifier set. (R336.1330(1))					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutant			Maximum Emission Limit		
1. Particulate Matter			0.057 pound per 1,000 pounds dry gas. (R336.1331, Table 31, Section C(1)(A)) 0.02 gr/dscf from ESP stack (40 CFR Part 63 Subpart FFFFF 63.7790(a))		
2. Visible emissions from roof monitors			20% Opacity (3 minute average) (R336.1364(2))		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping			NA		
2. Process Monitoring System and Recordkeeping			The permittee shall record and keep file for a period of at least five years of the following information and shall be made available in an acceptable format to AQD upon request: <ol style="list-style-type: none"> Written or electronic record of the data of the opacity monitor readings. (CO No. 96-10, Section 5c, Paragraph 4), (R336.1213(3)) 		
			<ol style="list-style-type: none"> Log book recording by date and activity of all cleaning, inspection, calibration and certification performed on the No. 2 BOF Opacity Monitor. 		

**TABLE E-01. 18 BASIC OXYGEN VESSELS
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p>(CO No. 96-10, Section 5c, Paragraph 4), (R336.1213(3))</p> <p>3. Results of the annual audit of the continuous opacity monitor. (CO No. 35-97, Section G32, Paragraph b), (R336.1213(3))</p> <p>4. All monitoring data and calibration and certification performed on the continuous opacity monitor. (CO No. 35-97, Section G32, Paragraph c), (R336.1213(3))</p>
3. Other Monitoring and/or Recordkeeping	<p>The permittee shall perform a certified visible emission observation of the ESP stack using Method 9 for a minimum of 1 hour at least once per month during the steel making activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	<p>Particulate Matter (CO No. 35-97, Section H34, Paragraph a), (R336.1213(3))</p>
2. Method/Analysis	<p>Method 17 or other approved method (R336.1213(3))</p>
3. Frequency and Schedule of Testing/Recordkeeping	<p>Within one year of the issuance of this Renewable Operating Permit, the permittee shall conduct a particulate emission test at the main stack (ESP) of the No. 2 BOP every other year thereafter or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. The stack test report shall be provided to AQD within 30 days after completion of the stack test, unless a longer period is agreed to by AQD. (CO No. 0035-97, Section H, Paragraph a, b, and c), (R336.1213(3))</p>

IV. REPORTING

Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

<p>1. The permittee shall calibrate, operate and maintain the continuous opacity monitor in the No. 2 BOF Electrostatic Precipitator System in accordance set forth in 40 CFR 60.13 and Performance Specification 1 (PS1) of Appendix B, 40 CFR 60. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations. (CO No. 96-10, Section 5c, Paragraph 1, CO No. 35-97, Section G32, Paragraph b), (R336.2150)</p> <p>2. The permittee shall inspect and clean the opacity monitor a minimum of once every two months. (CO No. 96-10, Section 5c, Paragraph 2), R336.1213(3))</p> <p>3. The permittee shall calibrate the opacity monitor a minimum of twice a year and recertify the opacity monitor a minimum of once per year. (CO No. 96-10, Section 5c, Paragraph 3), R336.1213(3))</p>
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**TABLE E-01. 18 BASIC OXYGEN VESSELS
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

4. The permittee shall perform an annual audit of the continuous opacity monitor using procedures set forth in USEPA publication No. 450/4-92-010, "Performance Audit Procedures for Opacity Monitors", as amended.
(CO No. 35-97, Section G32, Paragraph b), R336.1213(3))

5. The permittee shall comply with all the applicable operating limitations for capture systems and control devices as specified in 40 CFR Part 60 Subpart FFFF 63.7790.
(40 CFR Part 60 Subpart FFFF 63.7790(b))

VI. OTHER REQUIREMENTS

1. The permittee shall not operate the two main basic oxygen process vessels (BOP Vessels / BOF No. 25 and BOF No. 26) unless the electrostatic precipitator (ESP) dust collector is installed and operating properly. **(R336.1910)**

2. The permittee shall maintain an average primary blowrate at the No. 2 BOF, depending upon the number of operating fields in the electrostatic precipitator as follows:

Number of Fields	Average Primary Blowrate
23 - 24	20,000 scfm
20 - 22	18,000 scfm

(CO No. 96-10, Section 5g, Paragraph 4, R336.1910)

3. The permittee shall not operate the ESP dust silo unless a telescoping chute or other equivalent means to the bottom of the ESP dust silo is installed and operating properly. **(CO No. 96-10, Section 5h, R336.1910)**

4. The permittee shall operate and maintain the Water Spray Wands for No. 25 Furnace.
(CO No. 35-97, Section F, Paragraph 28, R336.1910)

5. In the event that the permittee conducts stack testing which supports a higher or lower blow rate, the Title V Permit shall be modified by a minor permit amendment to reflect the modified blowrates.
(CO No. 96-10, Section 5, Sub Section g, Paragraph 5)

* This requirement is state enforceable only.

TABLE E-01.19 80" HOT STRIP MILL REHEAT FURNACES EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EG80MILLFURNCS 80" Hot strip mill including five natural gas and coke oven gas-fired steel slab reheat ovens.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutant			Maximum Emission Limit		
Opacity			20% (R336.1331, Table 31, Section C1C)		
Nitrogen Oxide			0.25 lb/MMBTU (R336.1801(4)(c))		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		1. The permittee shall monitor and record both natural gas and coke oven gas usage for the entire ozone season. (R336.1213(3)) 2. The permittee shall monitor and record the total operating time of the Hot Strip Mill during the ozone season. (R336.1213(3)) 3. The permittee shall calculate NOx emissions during the ozone season using the appropriate emission factors. (R336.1213(3))			
3. Other Monitoring and/or Recordkeeping		The permittee shall perform a certified Method 9 visible emission observation for a minimum of one hour of the 80" Mill furnaces roof monitors during steel slab reheating activities at least twice a year. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded		NA			
2. Method/Analysis		NA			
3. Frequency and Schedule of Testing/Recordkeeping		NA			
IV. REPORTING					

**TABLE E-01.19 80” HOT STRIP MILL REHEAT FURNACES
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A. **(R336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. **(R336.1213(4)(c))**
4. The permittee shall submit a summary report within 60 days after the end of each ozone season, containing the following information:
 - a. The calculated NOx emissions from the Hot Strip Mill for the ozone season.
 - b. The total operating time of the Hot Strip Mill
((R336.1801, R336.1213(3))

See Appendix 1.8

V. OPERATIONAL PARAMETERS

The permittee shall implement the NOx control program to ensure proper operation and proper combustion in each of the five reheat furnaces at the Hot Strip Mill as submitted under Michigan Rule 801 Reasonably Available Control Technology (RACT) for Oxides of Nitrogen from Emission Sources at USSC-GLW. **(R336.1801)**

VI. OTHER REQUIREMENTS

NA

TABLE E-01. 20 The FLUX SYSTEM OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EG2BOP-FLUX-SYS The Flux System Operations include the flux (Lime) material handling and ancillary equipment				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep on file the following information and shall be made available to AQD upon request: Dates on which inspections are performed in accordance with the schedule in Appendix A of CO No. 96-10. (CO No. 96-10, Section 5d, Paragraph 2, R336.1213(3))				
3. Other Monitoring and/or Recordkeeping	1. The permittee shall perform a non-certified visible emission observation of the conveyor cover housing of the No. 2 BOF lime handling system at least once a week during lime handling activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 2. The permittee shall perform a certified Method 9 visible emission observation of the Lime truck transferring enclosure building at least once a month during lime handling/transferring from truck to the storage basement. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))				
B. TESTING/RECORDKEEPING (R 336.1213(3))					

TABLE E-01. 20 The FLUX SYSTEM OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 1.8</p>
V. OPERATIONAL PARAMETERS	
<ol style="list-style-type: none"> 1. The permittee shall develop and implement a BOF Lime Handling System Equipment Inspection Plan to inspect the specified components of the BOF Lime Handling System in accordance with the schedule in Appendix A of CO No. 96-10. This Plans shall be revised as appropriate, and alternate formats or revisions to the Plans must be approved by the AQD District Supervisor. (CO No. 96-10, Section 5d, Paragraph 2), R336.1213(3)) 2. The permittee shall implement and maintain the Standard Maintenance Procedures (SMPs) for the specified components of the BOF Lime Handling System in accordance with Appendix B of CO No. 96-10. These Plans shall be revised as appropriate, and alternate formats or revisions to the Plans must be approved by the AQD District Supervisor. (CO No. 96-10, Section 5d, Paragraph 3), (336.1213(3)) 3. The permittee shall implement and maintain the Malfunction Abatement Plan (MAP) for the Lime Handling System. The Plan shall be revised as appropriate, and alternate formats or revisions to the Plan must be approved by the AQD District Supervisor. (CO No. 96-10, Section 5e, Paragraph 2), R336.1911) 	
VI. OTHER REQUIREMENTS	
NA	

F-1. Flexible Grouping Requirements

The tables in Part F outline the applicable requirements for each flexible grouping listed in the Flexible Groupings Summary Table. The permittee is subject to the requirements for each flexible grouping in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each flexible grouping shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Table F-01.01 through F-01.12 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the flexible grouping, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE F-01.01 No. 1 and No. 2 BOILERS at No. 3 BOILER HOUSE ZUG ISLAND FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBHZI-3-BLRHSE				
Emission Unit/Process Groups	EGBHZI3-1-BOILER, EGBHZI3-2-BOILER				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
1. Nitrogen Oxide expressed as NO2		383.8 tons per year.		(R336.1201(3))	
2. Carbon Monoxide		76.75 tons per year		(R336.1201(3))	
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall keep and maintain records of natural gas consumption on a monthly, and annual basis. (R336.1201(3), (R336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	NA				
2. Method/Analysis	NA				
3. Frequency and Schedule of Testing/Recordkeeping	NA				
IV. REPORTING					
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 1.8				
V. OPERATIONAL PARAMETERS					
1. Boiler No. 1 and Boiler No. 2 shall be fired with natural gas as the only fuel.					(R336.1201(3))

**TABLE F-01.01 No. 1 and No. 2 BOILERS at No. 3 BOILER HOUSE ZUG ISLAND
FLEXIBLE GROUPING REQUIREMENTS**

2. There shall be no visible emissions from the operation of Boiler No. 1 and Boiler No. 2.
(R336.1201(3))
3. The permittee shall install and maintain natural gas metering devices acceptable to AQD to verify the permit limitations.
(R336.1201(3))

VI. OTHER REQUIREMENTS

NA

*** This requirement is state enforceable only.**

TABLE F-01.02 BOILERHOUSE NO. 1 & 2 FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBHZI-1&2BLRHSE				
Emission Unit/Process Groups	EGBHZI1-1-BOILER, EGBHZI1-2-BOILER, EGBHZI1-3-BOILER, EGBHZI1-4-BOILER, EGBHZI1-5-BOILER, EGBHZI2-1-BOILER, EGBHZI2-2-BOILER, EGBHZI2-3-BOILER, EGBHZI2-4-BOILER, EGBHZI2-5-BOILER				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall keep records of all types and total amount of fuels consumed for each boiler on a monthly basis. (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	Opacity observations.				
2. Method/Analysis	USEPA Test Method 9				
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall perform a Method 9 certified visible emission observation for a minimum of one hour of the stack of each operating boiler at least twice a year during operation. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))				
IV. REPORTING					
Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September</p>				

**TABLE F-01.02 BOILERHOUSE NO. 1 & 2
 FLEXIBLE GROUPING REQUIREMENTS**

	15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))
	3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))
	See Appendix 1.8

V. OPERATIONAL PARAMETERS

1. The type of fuels burned in No. 1 Boiler House Boilers No. 1 through No. 5 and in No. 2 Boiler House Boilers No. 1 through No. 5 shall be restricted to either Blast Furnace Gas (BFG), Coke Oven Gas (COG), or Natural Gas (NG). (SIP Consent Order No. 0027-1993, Exhibit B, Zug Island Facility, Paragraph 1)

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

TABLE F-01.03 MAIN PLANT BOILERHOUSE NO. 1 FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBHMP1-8&9-BLRS				
Emission Unit/Process Groups	EGBHMP-1-8, EGBHMP-1-9				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall keep records of all types and total amount of fuels consumed for each boiler on a monthly basis. (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	Opacity observations.				
2. Method/Analysis	USEPA Test Method 9				
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall perform a Method 9 certified visible emission observation for a minimum of one hour of the stack of each operating boiler at least twice a year during operation. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))				
IV. REPORTING					
Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year.</p>				

TABLE F-01.03 MAIN PLANT BOILERHOUSE NO. 1 FLEXIBLE GROUPING REQUIREMENTS	
	(R336.1213(4)(c))
	See Appendix 1.8
V. OPERATIONAL PARAMETERS	
The type of fuels burned in No. 8 Boiler and No. 9 Boiler at the No. 1 Boiler House at the Main Plant shall be restricted to either Coke Oven Gas (COG), or Natural Gas (NG). (Consent Order WCAQMD 0027-1993, Paragraph 13 and Exhibit B, Main Plant, 80" Mill (1), R336.1901*)	
VI. OTHER REQUIREMENTS	
NA	

* This requirement is state enforceable only.

TABLE F-01.04 BURNOUT OVENS NO. 1 and NO. 2 FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBURNOUT-OVENS				
Emission Unit/Process Groups	EGBURNOUT-OVEN-1, EGBURNOUT-OVEN-2				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall keep records of the following for each operating burnout oven : 1. Total hours on a 12-month rolling time period determined at the end of each calendar month. (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	NA				
2. Method/Analysis	NA				
3. Frequency and Schedule of Testing/Recordkeeping	NA				
IV. REPORTING					
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year.				

TABLE F-01.04 BURNOUT OVENS NO. 1 and NO. 2 FLEXIBLE GROUPING REQUIREMENTS	
	(R336.1213(4)(c))
	See Appendix 1.8
V. OPERATIONAL PARAMETERS	
The permittee shall not operate each burn-out oven in FGBURNOUT-OVENS for more than 2,920 hours per 12-month rolling time period as determined at the end of each calendar month.	
	(R336.1201(3))
VI. OTHER REQUIREMENTS	
NA	

* **This requirement is state enforceable only.**

TABLE F-01.05 A, B AND D BLAST FURNACES FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBLASTFURNACES-A,B&D				
Emission Unit/Process Group	EGBLAST-FCE-A, EGBLAST-FCE-B, EGBLAST-FCE-D				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Total iron produced from FGBLASTFURNACES-A,B&D		3,718,000 tons per 12-month rolling time period as determine at the end of each calendar month. (R336.1205(3))			
B. Pollutant		Maximum Emission Limit			
Particulate Matter		447.4 tons per year on a 12-month rolling time period as determined at the end of each calendar month. (R336.1205(3))			
PM10		352.2 tons per year on a 12-month rolling time period as determined at the end of each calendar month. (R336.1205(3))			
Nitrogen Oxide		821.4 tons per year on a 12-month rolling time period as determined at the end of each calendar month. (R336.1205(3))			
Visible emissions		10% (6 minute average) opacity from casthouse baghouse stacks. (R336.1201(3), (R336.1361(1))			
Visible emissions		20% (6 minute average) opacity from casthouse roof monitors. (R336.1201(3),(R336.1358), (40 CFR, Part 63, Sub Part FFFFF, 63.7790(a))			
Particulate Matter		0.01 gr/dscf (40 CFR, Part 63, Sub Part FFFFF, 63.7790(a))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	1. The permittee shall keep, in satisfactory manner, monthly and annual iron production rates. Annual iron production rates shall be based on a 12-month rolling time period as determined at the end of each calendar month. All records shall be kept and made available to the AQD upon request. (R 336.1205 (3)) 2. The permittee shall keep, in satisfactory manner, monthly and annual natural gas usage records, indicating the total amount of natural gas used, in cubic feet, on a calendar month basis. Annual natural gas usage records shall be based on a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205 (3))				
	3. The permittee shall keep, in satisfactory manner, monthly and annual blast furnace gas usage records, indicating the total amount of blast furnace gas used, in cubic feet, on a calendar month basis. Annual blast furnace gas usage				

**TABLE F-01.05 A, B AND D BLAST FURNACES
 FLEXIBLE GROUPING REQUIREMENTS**

	<p>records shall be based on a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205 (3))</p> <p>4. The permittee shall keep, in satisfactory manner, calculations determining the monthly and annual mass emissions of PM, PM10 and NOx. Annual emission calculations shall be based on a 12-month rolling time period as determined at the end of each calendar month. Separate calculations shall be conducted for each Emission Unit and for the Flexible Group. All calculations shall be conducted in accordance with the methodology specified in Appendix 7B of this permit. (R 336.1205 (3))</p> <p>5. The permittee shall monitor pressure drop across each baghouse cell each day to ensure pressure drop is within normal operating range as specified in 40 CFR Part 63 Subpart FFFFF 63.7830 (b)(1). (40 CFR Part 63 Subpart FFFFF 63.7830 (b)(1))</p> <p>6. The permittee shall demonstrate continuous compliance of the blast furnace baghouses as specified in 40 CFR Part 63 Subpart FFFFF 63.7833 (c)(1) and (2). (40 CFR Part 63 Subpart FFFFF 63.7833 (c)(1) and (2))</p> <p>7. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7834(a) and (b). (40 CFR Part 63 Subpart FFFFF 63.7834 (a) and (b))</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>The permittee shall comply with the recordkeeping requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d). (40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d))</p>
<p>B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A</p>	
<p>1. Parameter to be Tested/Recorded</p>	<p>1. Particulate matter (baghouse) 2. Particulate matter and NOx (stove)</p>
<p>2. Method/Analysis</p>	<p>NA</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>1. Within one year after commencement of trial operation, excluding shutdown days, a PM emission factor shall be determined for the baghouse (BH) emission control of the EU-"A"BLAST AND EU-"B"BLAST, by testing at owner's expense, in accordance with Department requirements. Within one year of permit issuance, excluding shutdown days, a PM emission factor shall be determined for the baghouse (BH) emission control of the EU-"D"BLAST, by testing at owner's expense, in accordance with Department requirements. Testing for the emission factor shall encompass at least one full cycle of production operations (ie., cast to cast) per run. In addition, the production rates shall be measured. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1205, R 336.1299, R 336.2001, R 336.2003, R 336.2004)</p> <p>2. Within one year of issuance of the permit, PM and NOx emission factors shall be determined for the combustion of blast furnace gas for one of the FG-BLASTFURNACES, by testing at owner's expense, in accordance with Department requirements. In addition, the blast furnace gas usage rate shall</p>

**TABLE F-01.05 A, B AND D BLAST FURNACES
 FLEXIBLE GROUPING REQUIREMENTS**

be simultaneously measured and recorded. Testing for PM will be performed in accordance with Method 5D unless another test method is proposed in the testing protocol and approved by AQD. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.

(R 336.1205, R 336.1299, R 336.2001, R 336.2003, R 336.2004)

3. The emission tests mentioned in III(B)(3)(1) above shall be conducted every fifth year thereafter or more frequently upon request of AQD. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing.

(R 336.1213(3))

4. The permittee shall conduct a performance test to demonstrate initial compliance with applicable emission and opacity limit as specified in 40 CFR Part 63 Subpart FFFFF 63.7820(a) and shall conduct subsequent performance tests no less frequently than twice during the term of this ROP.

(40 CFR Part 63 Subpart FFFFF 63.7820 (a), (40 CFR Part 63 Subpart FFFFF 63.7821))

IV. REPORTING

Reports and Schedules

1. Prompt reporting of deviations pursuant to Condition 24 of Part A.
(R336.1213(3)(c)(ii))

2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.
(R336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year.
(R336.1213(4)(c))

4. The permittee shall comply with the notification requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e).
(40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e))

5. The permittee shall comply with the reporting requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d).
(40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d))

See Appendix 1.8

V. OPERATIONAL PARAMETERS

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the monthly natural gas usage rate in cubic feet.
(R336.1205(3))

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the monthly blast furnace gas usage rate in cubic feet.
(R336.1205(3))

3. The permittee shall install, operate, and maintain a bag leak detection system according to the requirements of 63.7831(f) and conduct inspection according to the requirements of 63.7830 as specified in 40 CFR Part 63 Subpart FFFFF 63.7830 (b).
(40 CFR Part 63 Subpart FFFFF 63.7830 (b))

VI. OTHER REQUIREMENTS

**TABLE F-01.05 A, B AND D BLAST FURNACES
FLEXIBLE GROUPING REQUIREMENTS**

1. The A, B, and D blast furnace baghouses will be inspected by checking the following: the existence of visible stack emissions, chamber pressure differential, fan amps, compressor pressure and collectate handling operations. The permittee will inspect the A, B, and D blast furnace baghouse once every two weeks and record the results on an inspection form and shall retain such records for at least two years following the date of the record and shall be made available upon request to AQD.
(WCAQMD Consent Order No. 0035-97, Section D, Paragraph 19), R336.1213(3))
2. The permittee shall perform regular inspections of the A, B, and D blast furnace baghouses, and shall perform baghouse systems maintenance as required.
(WCAQMD Consent Order No. 0035-97, Section D, Paragraph 19), R336.1213(3))
3. The permittee shall maintain and implement Standard Operating Procedure (SOP) detailing work practices at the A, B, and D blast furnace casthouses. **(WCAQMD Consent Order No. 0035-97, Section D, Paragraph 20), R336.1901*)**
4. The permittee shall maintain and implement a written procedure to address abnormal conditions that occur during blast furnace process upsets. The written procedure shall have been reviewed with operation personnel and will be implemented as necessary and shall comply with the requirements of R336. 1912.
(R336. 1912),. (WCAQMD Consent Order No. 0035-97, Section D, Paragraph 21)
5. The permittee shall comply with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b). **(40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b))**
6. The permittee shall develop and implement a Start-up, Shutdown, and Malfunction Plan as specified in 40 CFR Part 63 Subpart FFFFF 63.7810 (c). **(40 CFR Part 63 Subpart FFFFF 63.7810 (c))**
7. The permittee shall demonstrate continuous compliance with other requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7835(a) and (b). **(40 CFR Part 63 Subpart FFFFF 63.7835 (a) and (b))**

*** This requirement is state enforceable only.**

TABLE F-01.06 SLAG PITS for “A”, “B” and “D” BLAST FURNACES FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FG-SLAG-PITS				
Emission Unit/Process Groups	EGSLAG-PITA, EGSLAG-PITB, EGSLAG-PITD				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall keep records of the following operational conditions of the hydrogen peroxide spray water quench system for each operating blast furnace and make it available to AQD upon request: <ol style="list-style-type: none"> 1. Water flow system operational status daily. 2. Hydrogen peroxide additive system operational status daily. <p style="text-align: right;">(R 336.1213(3))</p>				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	NA				
2. Method/Analysis	NA				
3. Frequency and Schedule of Testing/Recordkeeping	NA				
IV. REPORTING					
Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of 				

**TABLE F-01.06 SLAG PITS for “A”, “B” and “D” BLAST FURNACES
FLEXIBLE GROUPING REQUIREMENTS**

Part A. Due annually by March 15 for the previous calendar year.
(R336.1213(4)(c))

V. OPERATIONAL PARAMETERS

The permittee shall reduce hydrogen sulfide emissions generated at the blast furnace slag pits servicing casthouses A, B, and D by installing and properly maintaining hydrogen peroxide spray water quenching systems.
(CO. NO. 90-2, Section 5B, Paragraph 1), R336.1910, 336.1901*)

VI. OTHER REQUIREMENTS

The permittee shall follow and maintain Standard Operating Plan (SOP) incorporating operational parameters as reviewed and approved by then WCAQMD based on **CO. NO. 90-2, Section 5B** scheduled dates. The Plan shall be revised as appropriate, and alternate formats or revisions to the Plan must be approved by the AQD District Supervisor.
(R336.1910), CO. NO. 90-2, Section 5B)

*** This requirement is state enforceable only.**

TABLE F-01.07 No. 2 BASIC OXYGEN PROCESS SHOP FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FG2BOP-SHOP				
Emission Unit/Process Groups	EG2BOP-HMT, EG2BOF-VESSELS, EG2BOF-CHARGING, EG2BOF-TAPPING, EG2BOF-FLUX-SYS				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Electrostatic Precipitator (ESP), Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
1. Opacity of fugitive visible emission from a building or enclosure containing the hot metal transfer operation.	20%	(3 minute average)	(R336.1365(2))		
2. Opacity of fugitive visible emission from a building or enclosure containing the hot metal desulfurization operation	20%	(3 minute average)	(R336.1366(2))		
3. Opacity from the roof monitor of the BOP shop	20%	(3 minute average)	(40 CFR, Part 63, Sub Part FFFFF, 63.7790(a))		
4. Particulate Matter	0.01 gr/dscf		(40 CFR, Part 63, Sub Part FFFFF, 63.7790(a))		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and keep the following information and shall make it available to AQD upon request: <ol style="list-style-type: none"> Documentation of the re-sealing of the emergency damper if it does not automatically re-seal after opening. (CO No. 0035-97, Section F, Paragraph 29), R336.1213(3)) Computer files from the CMMS. (CO No. 0035-97, Section F, Paragraph 31), R336.1213(3)) Dates on which inspection are performed to the equipment at the No. 2 BOF in accordance with the schedule in Appendix 9. (CO No. 0096-10, Section 5f, Paragraph 1), R336.1213(3)) 				
	4. The permittee shall monitor pressure drop across each baghouse cell each day to ensure pressure drop is within normal operating range as specified in				

**TABLE F-01.07 No. 2 BASIC OXYGEN PROCESS SHOP
 FLEXIBLE GROUPING REQUIREMENTS**

	<p>40 CFR Part 63 Subpart FFFFF 63.7830 . (40 CFR Part 63 Subpart FFFFF 63.7830)</p> <p>5. The permittee shall demonstrate continuous compliance of the basic oxygen plant baghouses as specified in 40 CFR Part 63 Subpart FFFFF 63.7833. . (40 CFR Part 63 Subpart FFFFF 63.7833)</p> <p>6. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7834. (40 CFR Part 63 Subpart FFFFF 63.7834)</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>1. The permittee shall perform a non-certified visible emission observation of the BOP roof monitors at least once a week during the BOP shop operations. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))</p> <p>2. The permittee shall perform a Method 9 certified visible emission observation of the BOP roof monitors at least once every two weeks during the BOP shop operations. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))</p> <p>3. The permittee shall comply with the recordkeeping requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d). (40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d))</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

<p>1. Parameter to be Tested/Recorded</p>	<p>NA</p>
<p>2. Method/Analysis</p>	<p>NA</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct a performance test to demonstrate initial compliance with applicable emission and opacity limit as specified in 40 CFR Part 63 Subpart FFFFF 63.7820(a) and shall conduct subsequent performance tests no less frequently than twice during the term of this ROP. (40 CFR Part 63 Subpart FFFFF 63.7820 (a), (40 CFR Part 63 Subpart FFFFF 63.7821))</p>

IV. REPORTING

<p>Reports and Schedules</p>	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p>
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**TABLE F-01.07 No. 2 BASIC OXYGEN PROCESS SHOP
FLEXIBLE GROUPING REQUIREMENTS**

4. The permittee shall comply with the notification requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e).
(40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e))
5. The permittee shall comply with the reporting requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d).
(40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d))

See Appendix 1.8

V. OPERATIONAL PARAMETERS

1. The permittee shall implement and maintain a program with recommended methods to further control emissions from the hot metal charging which are captured by the secondary hoods and baghouse system initiated and developed pursuant to Consent Order WCAQMD 0035-97. This method shall include hot metal pouring technique and vessel angle to improve emission capture. This program can be revised as appropriate, in accordance with the procedures in the program and upon approval by the AQD District Supervisor.
(CO No. 0035-97, Section F, Paragraph 26a), R336.1213(3))
2. The permittee shall implement and maintain procedures to improve the response time for re-sealing the emergency damper if it does not automatically re-seal after opening. These procedures will establish an average response time of 4 hours from the end of the next steel making heat, on the vessel which experienced the emergency damper opening.
(CO No. 0035-97, Section F, Paragraph 29), R336.1901*)
3. The permittee shall implement and maintain a computerized maintenance management system (CMMS) for the pollution control equipment at the No. 2 BOP (i.e., the ESP, the secondary emissions baghouse, and the hot metal transfer baghouse).
(CO No. 0035-97, Section F, Paragraph 31), R336.1213(3))
4. The permittee shall install, operate, and maintain a bag leak detection system according to the requirements of 63.7831(f) and conduct inspection according to the requirements of 63.7830 as specified in 40 CFR Part 63 Subpart FFFFF 63.7830 (b).
(40 CFR Part 63 Subpart FFFFF 63.7830 (b))

VI. OTHER REQUIREMENTS

1. The permittee shall implement and maintain the Malfunction Abatement Plan (MAPs) for the No. 1 Baghouse (Secondary Emissions), and No. 2 Baghouse (Hot Metal Transfer) developed pursuant to Consent Order WCAQMD 0096-10. The MAPs can be revised as appropriate, and alternate formats or revisions to the approved MAPs can be made upon approval by the AQD District Supervisor.
(CO No. 0096-10, Section 5e, Paragraph 1), R336.1213(3), R336.1911)
2. The permittee shall develop and implement a BOP Equipment Inspection Plan to inspect the equipment at the No. 2 BOF in accordance with the schedule in Appendix C of Consent Order No. 0096-10. These Plans shall be revised as appropriate, and alternate formats or revisions to the Plans must be approved by the AQD District Supervisor.
(CO No. 0096-10, Section 5f, Paragraph 1), R336.1910)
3. The permittee shall implement and maintain the Standard Maintenance Plan (SMPs) for the equipment specified in Appendix D developed pursuant to Consent Order WCAQMD 0096-10. The SMPs shall be revised as appropriate, and alternate formats or revisions to the approved SMPs must be approved by the AQD District Supervisor.
(Consent Order No. 0096-10, Section 5f, Paragraph 3), R336.1910)
4. The permittee shall comply with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b).
(40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b))
5. The permittee shall develop and implement a Start-up, Shutdown, and Malfunction Plan as specified in 40 CFR Part

**TABLE F-01.07 No. 2 BASIC OXYGEN PROCESS SHOP
FLEXIBLE GROUPING REQUIREMENTS**

63 Subpart FFFFF 63.7810 (c).

(40 CFR Part 63 Subpart FFFFF 63.7810 (c))

6. The permittee shall demonstrate continuous compliance with other requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7835(a) and (b).

(40 CFR Part 63 Subpart FFFFF 63.7835 (a) and (b))

*** This requirement is state enforceable only.**

TABLE F-01. 08 ELECTROGALVANIZING LINE ION REACTOR FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUP	FGREACTORS-EGL-OPS Electrogalvanizing line ion reactor operations, including: Ion reactor operations (10 ion reactors installed) and Fume scrubber system				
Emission Unit/Process Group	EUREACTOR 1, EUREACTOR 2, EUREACTOR 3, EUREACTOR 4, EUREACTOR 5, EUREACTOR 6, EUREACTOR 7, EUREACTOR 8, EUREACTOR 9, EUREACTOR 10				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Fume scrubber system				
B. Stack/Vent Parameters	Exhaust gases shall be discharged unobstructed vertically upwards unless otherwise noted.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVEGL-FUME-SCRBR	88	54	NA	NA	R 336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutant			Maximum Emission Limit		
Sulfuric Acid			0.20 lb/hr based on 8-hour time period average. (R336.1224, R336.1225)		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	<ol style="list-style-type: none"> The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the water flow rate to the fume scrubber on a daily basis. The monitoring device shall have an alarm to notify the permittee when the flow rate has fallen below the value specified in the operation and maintenance plan. (R336.1224, R336.1225, R336.1910) The permittee shall keep, in a satisfactory manner, daily water flow readings for the fume scrubber and records for any low flow alarms, including the date and time of the alarm, and the actions taken to correct the malfunction. All records are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request. (R336.1224, R336.1225, R336.1910) The permittee shall keep, in a satisfactory manner, monthly production records for FGREACTORS. All production records for FGREACTORS are for the purpose of compliance demonstration for evaluating sulfuric acid usage and shall be kept on file for a period of at least five years and made available to the Department upon request. (R336.1224, R336.1225) 				
3. Other Monitoring and/or	NA				

TABLE F-01. 08 ELECTROGALVANIZING LINE ION REACTOR FLEXIBLE GROUPING REQUIREMENTS	
Recordkeeping	
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	Sulfuric Acid
2. Method/Analysis	Method 8 or other approved method.
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct a sulfuric acid emission test during electrogalvanizing line ion reactor operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 8</p>
V. OPERATIONAL PARAMETERS	
<ol style="list-style-type: none"> 1. The permittee shall not operate the ion reactors unless the fume scrubber is installed, maintained and operated in a satisfactory manner. Satisfactory operation includes maintaining the water flow rate as specified in the operation and maintenance plan. (R 336.1224, R336.1225, R 336.1910) 2. The permittee shall keep, implement and maintain the approved operation and maintenance plan (Plan) for the scrubber. Alternate formats or revisions to the approved Plan must be approved by the AQD District Supervisor. This approved Plan shall contain the following: <ol style="list-style-type: none"> a) Operation and maintenance criteria for the scrubber and for the scrubber monitoring equipment to document the operation and maintenance of the equipment; b) The work practice standards for the scrubber and monitoring equipment; c) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and d) A systematic procedure for identifying the scrubber and monitoring equipment malfunctions and for implementing corrective actions to address such malfunctions. <p style="text-align: right;">(R 336.1224, R336.1225, R336.1910)</p> 	
VI. OTHER REQUIREMENTS	
NA	

TABLE F-01.09 MAIN PLANT 80" MILL FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGMAINPLANT-FUG-DUST				
Emission Unit/Process Groups	EGMAINPLANT-FUG-DUST, EG80MILL-FUG-DUST				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Application of dust suppressant. SIP No. 27-1993 Fugitive Dust Control Plan				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutants		Maximum Emission Limit			
Opacity of fugitive dust emissions from storage piles.		5% via Method 9D		(R324.5524(2))	
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall inspect the roads and lots on a daily basis, 5 days a week, during control season and once a week during the non-control season and shall keep a record in a journal log book of the following for at least two years: <ol style="list-style-type: none"> 1. Date 2. Time 3. Weather conditions 4. Observations of roadway and lot conditions 5. Control Activities <ol style="list-style-type: none"> a. Recently completed activities b. Actions requiring implementation (SIP Consent Order No. 27-1993, Exhibit A, Paragraph 5)				
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> 1. The permittee shall record the treatment information for the fugitive dust sources using the format specified in Appendix 4. (SIP Consent Order No. 27-1993, Exhibit A, Paragraph 5 and ADDENDUM) 2. Vehicle speeds are restricted to 15 mph at all times and shall be monitored by GLS Security. (SIP Consent Order No. 27-1993, Exhibit A, Paragraph 5,C) 				
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					

**TABLE F-01.09 MAIN PLANT 80" MILL
 FLEXIBLE GROUPING REQUIREMENTS**

1. Parameter to be Tested/ Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) 4. The permittee shall submit to on a quarterly basis to AQD a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement as specified in Exhibits A or B of SIP No. 27-1993 was not met. This report shall for each instance explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. SIP No. 27-1993, Paragraph 11 <p style="text-align: right;">See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

<p>The permittee shall comply with the following source descriptions and control measures:</p>	
<p>A. PAVED ROADS</p> <ol style="list-style-type: none"> 1. Paved roads are water flushed. Roadway Nos. 526 and 527, which serve the BOP area, and Nos. 528, 529 and 518, which are used by the Levy Company to haul BOP slags, etc., will be vacuum swept in addition to being water flushed. 2. Cleaning Equipment Description: <ol style="list-style-type: none"> a) Water Flushing – A water truck (approximately 3000 gallon capacity) with a three-way water piping system for high pressure discharge. A hydraulic pump, powered by the vehicle engine via a power take-off drive, assures constant water discharge pressure independent of vehicle speed. b) Vacuum Sweeping – An industrial road road sweeper wets, sweeps and vacuums in one traverse. An on-board water tank supplies the wetting water for the front spray bar, and directly behind the flush bars are two rotary brooms which sweep the road surface washings toward the center of the road sweeper. A vacuum spout draws the swept washings into the debris tank mounted on the truck. 3. Frequency and Application Rate: <ol style="list-style-type: none"> a) Frequency of water flushing is once a day, five days a week. b) The frequency of vacuum sweeping of the roads listed in Paragraph V(A)(1) above is once a week. This sweeping is in addition to the water flushing program specified in Paragraph V(A)(3)(a) above. 	

**TABLE F-01.09 MAIN PLANT 80" MILL
FLEXIBLE GROUPING REQUIREMENTS**

c) Application rate for water flushing is 5 gal/100 sq. ft.

B. UNPAVED ROADS

1. All unpaved roads will be treated with asphalt emulsion, petroleum resin, or an acrylic cement.
2. Road Pro or an equivalently effective asphalt emulsion petroleum resin or acrylic cement, will be used as a chemical dust suppressant. The dilution ration is 7 parts water/1 part suppressant.
3. Application Intensity – The application rate will be 0.83 gal. solution / sq. yd.
4. The unpaved roads listed in Table 13 will be treated once every month, unless weather conditions preclude treatment. All unpaved roads not listed in Table 13 will be treated once per quarter, unless weather conditions preclude treatment.

C. PAVED and UNPAVED PARKING LOTS

1. Paved lot accesses are water flushed once a day, five (5) days per week.
2. An asphalt emulsion, petroleum resin, or acrylic cement will be applied to unpaved parking lots and unpaved parking lot accesses. The unpaved lots listed in Table 13, and any associated unpaved accesses, will be treated once every month, unless weather conditions preclude treatment. All unpaved lots not listed in Table 13, and any associated accesses will be treated once per quarter, unless weather conditions preclude treatment.
3. The dilution ratio and application rate are the same as for unpaved roads. The application rate for water flushing is five (5) gal./100 sq. ft.

D. Transportation of Bulk Materials

1. Each material unloaded and transported which is a result of collection by pollution control equipment is completely contained by one or more of the following methods:
 - a. Enclosed truck
 - b. Screw conveying
 - c. Elephant truck
2. Raw material with silt content > 1% received and transported are contained by one or more of the following methods:
 - a. Enclosed truck
 - a. Enclosed hoppers
 - b. Pneumatic truck
3. Observations of transportation of bulk materials are made five (5) times a week and recorded in the journal log book.

(SIP Consent Order No. 27-1993, Exhibit A, Paragraph 3)

VI. OTHER REQUIREMENTS

1. Conditions under which cleaning or water suppression maybe suspended:
 - A. When daytime temperatures are below 32 degrees F and/or freezing on roadway surfaces poses a hazard.
 - B. When precipitation in any form during the previous 24-hour period has exceeded 0.1 inches or current precipitation obviates the need for control.
 - C. Control measures are also suspended during the non-control season from November through February.
 - D. If an extended period of sub-freezing weather occurs under conditions where there is no snow or ice cover and if roadway surface loadings become excessive, a vacuum sweeper will be called in.

**TABLE F-01.09 MAIN PLANT 80" MILL
FLEXIBLE GROUPING REQUIREMENTS**

Therefore, the implementation of this action will be discretionary by the Manager, Environmental Control

SIP Consent Order No. 27-1993, Exhibit A, Paragraph 4)

*** This requirement is state enforceable only.**

TABLE F-01.10 ZUG ISLAND FACILITY FUGITIVE DUST FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGZUGISLAND-FUG-DUST				
Emission Unit/Process Groups	EGZUGISLAND-FUG-DUST				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Application of dust suppressant. SIP No. 27-1993 Fugitive Dust Control Plan				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutants			Maximum Emission Limit		
NA			NA		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	1. The permittee shall record the treatment information for the fugitive dust sources using the format specified in Appendix 4. (SIP Consent Order No. 27-1993, Exhibit A, Paragraph J (2) and ADDENDUM) , (R 336.1213(3))				
3. Other Monitoring and/or Recordkeeping	NA				
B. TESTING/RECORDKEEPING (R 336.1213(3))					
In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded	NA				
2. Method/Analysis	NA				
3. Frequency and Schedule of Testing/Recordkeeping	NA				
IV. REPORTING					
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) 4. The permittee shall submit to on a quarterly basis to AQD a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement as specified in Exhibits A or B of SIP No.				

**TABLE F-01.10 ZUG ISLAND FACILITY FUGITIVE DUST
 FLEXIBLE GROUPING REQUIREMENTS**

27-1993 was not met. This report shall for each instance explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **SIP No. 27-1993, Paragraph 11**

See Appendix 1 8

V. OPERATIONAL PARAMETERS

The permittee shall comply with the following source descriptions and control measures:

A. PAVED ROADS

1. Paved roads are vacuum swept twice a day, five (5) days a week.
2. Cleaning Equipment Description:
 - a) Vacuum Sweeping – An industrial road sweeper wets, sweeps and vacuums in one traverse. An on-board water tank supplies the wetting water for the front spray bar, and directly behind the flush bars are two rotary brooms which sweep the road surface washings toward the center of the road sweeper. A vacuum spout draws the swept washings into the debris tank mounted on the truck.
3. Roadway sweeper collected is deposited in one of two areas. Material collected from roadways in the coal fields is deposited near the working face of an active pile and is returned to the coal feed stream. Material collected in the breeze processing area can be treated similarly. Other roadway dusts are taken to the refuse transfer station, near D-4 furnace as shown in the plan. On a five (5) day a week basis debris is hauled from the transfer area to licensed landfills.

B. UNPAVED ROADS

1. All unpaved roads will be treated with asphalt emulsion, petroleum resin, or an acrylic cement.
2. Road Pro or an equivalent effective asphalt emulsion, petroleum resin or acrylic cement will be used as the chemical dust suppressant. The dilution ration is 7 parts water/1 part suppressant and the application rate will be 0.83 gal. solution / sq. yd..
3. Application Intensity – One (1) gallon of suppressant solution per 100 square feet of surface.
4. The unpaved roads listed in Table 13 will be treated once every month, unless weather conditions preclude treatment. All unpaved roads not listed in Table 13 will be treated once per quarter, unless weather conditions preclude treatment.

C. PAVED and UNPAVED PARKING LOTS

1. Paved lot accesses are vacuum swept once a week.
2. An asphalt emulsion, petroleum resin, or acrylic cement will be applied to unpaved parking lots and unpaved parking lot accesses. The unpaved lots listed in Table 13, and any associated unpaved accesses, will be treated once every month, unless weather conditions preclude treatment. All unpaved lots not listed in Table 13, and any associated accesses will be treated once per quarter, unless weather conditions preclude treatment.
3. The dilution ratio is 7 parts water / 1 part suppressant. The application intensity is 0.83 gal. solution / sq. yd.
4. Dust suppressant application is suspended during the non-control season from November through February. (Note: Not applicable to vacuum sweeping which is continuous.)
5. Roads are inspected on a daily basis, five (5) days a week during the control season and once a week during the non-control season.

**TABLE F-01.10 ZUG ISLAND FACILITY FUGITIVE DUST
FLEXIBLE GROUPING REQUIREMENTS**

6. The road sweeper operator traces his route on a plant map showing which roads were swept on his shift. The Environmental Control Inspector on duty at Zug Island reviews the maps and may make recommendations for priorities. In addition to those roads specified by Environmental Control, the sweeper operator at his discretion may resweep any road he determines to be dusty. This flexibility has been built in to permit the Environmental Control Inspector to focus on roads on a priority basis based on the locations in the plant where transportation activities are occurring. Sweeper route maps are maintained for a period of at least two (2) years.
7. Spills are observed by the Environmental Control Inspector or are reported by others to him. The environmental Control Inspector arranges with General Labor to have appropriate equipment and personnel dispatched to clean up the spill. Spills are removed by the end of the next weekday workday.
8. Vehicle speeds are restricted to 15 mph at all times and monitored by GLW Security.

D. TRANSPORTATION OF BULK MATERIALS

1. Material transported in trucks that are in the category of >1% to <5% silt are loaded with 6" freeboard or are adequately wetted and stable.
 - a. Mill Scale – oily material – 6" freeboard
2. Truck bodies are inspected to insure integrity.
3. Vehicles are limited to speeds less than 15 mph.
4. Vehicle exhaust are directed upwards.
5. Materials in the category of >5% to <20% silt are wet or transported in covered trucks.
 - a. B.F. flue dust – Not tarped because of high temperatures
 - b. Blend - Wet and stable crust
 - c. Slag Chips - Delivered to plant in vendor truck
6. When precipitation in any form during the previous 24 hour period has exceeded 0.1 inches or current precipitation obviates the need for control of the material being transported, wet suppression is suspended.
7. During the non-control season from November to March, wet suppression of materials is suspended.

E INSPECTION PROCEDURES

1. The Environmental Control Department will select 1 random trucks for inspection. These observations will be made on a monthly basis and shall record the following information:
 - a. Date
 - b. Truck Identification
 - c. Contents
 - d. Adequate freeboard
2. Truck bodies will be inspected by the trucking contractor and the Environmental Control Department with the following frequency:
 - a. Permanently assigned trucks – semiannually
 - b. Temporary or contract trucks – upon entry to site and every 6 months thereafterInspection reports will be prepared and retained on file for a period of 12 months following the date of inspection. Any permanently assigned truck found defective will be promptly scheduled for repair or replacement. Any temporary contract truck found defective will be promptly repaired or removed from the site.
3. Vehicle Speeds – The maximum posted and permitted speed on Great Lakes Works property is 15 mph. This speed is monitored and controlled by the mobile division of the Great Lakes Security Department.
4. Vehicle Exhaust – Truck exhausts will be reexamined to confirm their vertical discharge. Contract trucks will be inspected upon arrival at the plant. These inspections and the resulting records will be prepared and retained as in H.2 above.

F. RECORDKEEPING AND REPORTING REQUIREMENTS

**TABLE F-01.10 ZUG ISLAND FACILITY FUGITIVE DUST
FLEXIBLE GROUPING REQUIREMENTS**

1. A journal log book is kept and retained for a period of at least 2 years after the final entry. Records shall include:
 - a. Date
 - b. Time
 - c. Weather conditions
 - d. Observations of roadway and lot conditions
 - e. Observations of spills or reports of such
 - f. Observations of loading and unloading operations
 - g. Control activities:
 - 1 – Recently completed activities
 - 2 – Actions requiring implementation
 - h. Dates of arrival of boat or train shipments
2. Records of dust suppressant applications made pursuant to paragraph E.1 and E.2 above will be maintained by Great Lakes Works Environmental Control Department and will be retained for a period of at least 2 years.

G. SPECIAL CONSIDERATIONS

1. Most of the raw materials are received in self unloading boats. The booms from these boats are normally kept close to a pile top. However, occasionally wave action causes a boat to rock gently and results in boom rise and fall. To avoid boom damage under these conditions a greater vertical separation is maintained between the boom and pile top, and as a result, drop heights of 20 feet may occur at these times. Under more normal conditions, a drop height of 5 feet or less can be maintained. This height of 5 feet or less is also maintained for stacker booms.
2. All materials hauled from Zug Island are transported in contractor trucks. Although control of fugitive emissions from contractor trucks leaving Zug Island is rightfully the responsibility of each contractor, a requirement for 6" of freeboard will be included in all new truck hauling contracts.

(SIP Consent Order No. 27-1993, Exhibit A, Paragraph 3)

VI. OTHER REQUIREMENTS

1. Conditions under which cleaning or water suppression maybe suspended:
 - A. When daytime temperatures are below 32 degrees F and/or freezing on roadway surfaces poses a hazard.
 - B. When precipitation in any form during the previous 24-hour period has exceeded 0.1 inches or current precipitation obviates the need for control.
 - C. Control measures are also suspended during the non-control season from November through February.
 - D. If an extended period of sub-freezing weather occurs under conditions where there is no snow or ice cover and if roadway surface loadings become excessive, a vacuum sweeper will be called in. Therefore, the implementation of this action will be discretionary by the Manager, Environmental Control

SIP Consent Order No. 27-1993, Exhibit A, Paragraph 4)

*** This requirement is state enforceable only.**

TABLE F-01.11 TAPPING OPERATIONS FROM #25 AND #26 FURNACES FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FG2BOF-TAPPING Tapping Operations include tapping from the #25 and #26 Furnaces. Each furnace has a waste heat boiler hood that collects fumes generated during the oxygen blow, slagging and tapping operations.				
Emission Unit/Process Groups	EG2BOPFURNCE#25, EG2BOPFURNCE#26				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
NA	NA				
B. Pollutant	Maximum Emission Limit				
Particulate	0.10 pounds per 1,000 pounds of exhaust gases calculated on a dry gas basis. (R336.1201(3))				
Opacity	20% (6 minute average) (R336.1201(3))				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	NA				
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> The permittee shall perform a non-certified visible emission observation of the No.2 BOP Furnace No. 25 and Furnace No. 26 tapping emission control systems at least once a week. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) The permittee shall perform a certified Method 9 visible emission observation of the No.2 BOP Furnace No. 25 and Furnace No. 26 tapping emission control systems at least once a month. The permittee shall initiate appropriate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 				
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					

TABLE F-01.11 TAPPING OPERATIONS FROM #25 AND #26 FURNACES FLEXIBLE GROUPING REQUIREMENTS	
1. Parameter to be Tested/ Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 1.8
V. OPERATIONAL PARAMETERS	
NA	
VI. OTHER REQUIREMENTS	
NA	

TABLE F-01.12 COLDCLEANERS					
FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGCOLDCLEANERS Any new cold solvent cleaner placed into operation after 07/01/79 that is exempt from the requirements of R336.1201 pursuant to R336.1281(h) and R336.1285(r)(iv).				
Emission Unit/Process Group	EGCOLDCLEANERS / EGPARTSWASHERS				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
1. A cover shall be installed and the cover shall be closed whenever parts are not being handled in the cleaner. (R336.1707(3)(a))					
2. The cover shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia, the solvent is agitated or the solvent is heated. (R336.1707(3)(a))					
3. A device shall be available for draining cleaned parts. (R336.1707(3)(b))					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
Cleaning Solvents	The permittee shall not use cleaning solvents containing more than 5 percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. (R336.1213(3))				
B. Pollutant	Maximum Emission Limit				
NA	NA				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	NA				
3. Other Monitoring and/or Recordkeeping	<p>1. The identification name/number, air/vapor interface area and type of solvent used (including Reid vapor pressure and VOC content) shall be maintained for each cold cleaner. (R 336.1213(3))</p> <p>2. As noted in Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3))</p> <p>3. If the solvent is heated the solvent temperature shall be monitored and recorded on a monthly basis, during peak operating conditions. (R 336.1213(3))</p>				

**TABLE F-01.12 COLDCLEANERS
 FLEXIBLE GROUPING REQUIREMENTS**

4. As noted in R 336.1707(2), if applicable, the option chosen to comply with R 336.1707(2) shall be recorded. **(R336.1213(3))**

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA

IV. REPORTING

Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A, using the format in Appendix 1.8. (R336.1213(3)(c)(ii))</p> <p>2. Semi-annual reporting of any deviations pursuant to Condition 23 of Part A, using the format in Appendix 1.8. Due May 15 for reporting period July 1 to December 31 and November 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by May 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

1. The permittee may install or construct an unlimited number of new cold cleaners that meet one of the following requirements:
 - a. The air/ vapor interface of the coldcleaner is no more than 10 square feet. **(R336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R336.1285(r)(iv))**
2. Parts shall be drained not less than 15 seconds or until dripping ceases. **(R336.1707(3)(b))**
3. Waste solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere. **(R336.1707(3)(c))**
4. The permittee shall perform routine maintenance on the cold cleaning machine as recommended by the manufacturer. **(R336.1213(3))**
5. Each cold cleaner shall not be operated using a solvent having a Reid vapor pressure of more than 0.6 psia or heated above 120 degrees Fahrenheit, unless at least one of the following is met: **(R336.1707(2))**
 - a. The cold cleaner is designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R336.1707(2)(a))**
 - b. The solvent bath is covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R336.1707(2)(b))**
 - c. The cold cleaner is controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R336.1707(2)(c))**

VI. OTHER REQUIREMENTS

1. The permittee shall maintain written procedures to demonstrate compliance with the requirements of R336.1707. Such procedures shall be posted in an accessible, conspicuous location near each machine. **(R336.1707(4))**

TABLE F-01.12 COLDCLEANERS
FLEXIBLE GROUPING REQUIREMENTS

2. The permittee may construct, reconstruct, modify, install or commence operation of any new or existing emission units under FGCOLDCLEANERS without modifying the RO permit providing it is not defined as a minor or significant modification to the RO permit, as defined by R336.1216(2) and R336.1216(3), respectively, and the following provisions are met:
- a) It is not a major stationary source or major modification as defined in the prevention of significant deterioration regulations in 40 CFR 52.21. **(R336.1278(a))**
 - b) It is not a major offset source or major offset modification as defined in R336.1113(c) and (b), respectfully, for which volatile organic compounds, particulate matter, PM-10, carbon monoxide, nitrogen oxides, sulfur dioxide or lead is a non attainment air contaminant. **(R336.1278(b))**
 - c) It does not have actual emissions of volatile organic compounds, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide or lead above the significance levels as defined in R336.1119. **(R336.1278(c))**
 - d) It is not a major source as defined in the national emission standards for hazardous air pollutants for source categories, 40 CFR 63.2, and it is not subject to the provisions of 40 CFR 63.40 through 63.44. **(R336.1278(d))**

G-1. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-1. Appendices

Appendix 1-1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
HCl	Hydrogen Chloride
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
TAB	Total Annual Benzene
Temp.	Temperature

Appendix 1-2. Schedule of Compliance

The permittee has submitted a compliance plan as detailed below. In addition the permittee will negotiate a Consent Order with MDEQ-AQD to memorialize all outstanding non compliance issues as well as the details of compliance plan outlined below.

The permittee is conducting a continuous environmental compliance assessments since assuming ownership of the facility on May 20, 2003. In the process, the permittee may identify certain areas that will need improvements and will develop repair/modification plans for air emission sources, control devices, and management practices at the facility.

Compliance Plan

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

The permittee will repair / install a baghouse for the B Blast Furnace capable of continuous compliance. The permittee will also repair the electrostatic precipitator (ESP) pollution control of the basic oxygen furnace (BOF) and make improvements to basic oxygen process (BOP) building integrity, and repair of BOP dirty gas main including the roof monitors for the BOF ESP and BOP building roof monitors capable of continuous compliance

Schedule of Compliance

The following schedule of compliance conforms with the provisions of Rule 119(a) and Rule 213(4).

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
EGBLAST-FCE-B, Condition No. V.1	R336.1301, R336.1331, R336.1910	Repair / installation of baghouse for the B Blast Furnace capable of continuous compliance.	Commence engineering study to develop design parameters for emission control improvement options and verify feasibility of baghouse technology.	01/01/2004	Complete
			Complete engineering evaluation of emission control improvement options and control equipment design.	04/30/2004	Complete
			Complete review vendor installation quotes.	04/30/2004	Complete
			U.S. Steel Decision Review Board Meeting to approve appropriation.	07/02/2004	
			U.S. Steel capital appropriation finalized.	07/31/2004	
			Submit revised compliance plan to MDEQ based on final appropriation which will include dates for the final detailed engineering, procurement of the equipment, beginning of on-site construction, completion of construction, shakedown period and compliance.	08/31/2004	
Achieve compliance	12/31/2005				

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
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Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports	
EG2BOF-VESSELS, Condition No. II.B.2 and VI.1	R336.1301, R336.1364(2), R336.1910	Repair of electrostatic precipitator pollution control of the basic oxygen furnace. Improvements to basic oxygen process (BOP) building integrity, and repair of BOP dirty gas main including the roof monitors.	1. Great Lakes Engineering Department developed scope of work based on EQM recommendations to modify/improve ESP controls.	01/01/2004	Complete	
			2. New ESP COM installed in stack and in operation.		Complete	
			3. Initiated weekly Continuous Improvement BOP emission reduction meetings.		Complete	
			4. Contracted UEC Technologies, LLC to evaluate current operating practices and make recommendations.		Complete	
			5. Funding for project to modify/improve ESP control (instrumentation, sensors, monitors, and means to adjust key operating parameters) is approved and project is initiated.		Complete	
			6. Complete building integrity improvements.		Complete	
			7. Complete repairs to Dirty Gas Main.		Complete	
			8. Initiate contract with Environmental Elements to conduct an evaluation of ESP internal components.		09/30/2004	
			9. Complete evaluation of the effectiveness of ESP (reference Line 8 above) and building		12/31/2004	

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
			ventilation improvements .		
			10. Submit revised compliance plan to MDEQ, based on results of ESP effectiveness evaluation, which will include dates for the final detailed engineering, procurement of equipment, beginning of on-site construction, completion of construction, and shakedown period for improvements.	01/31/2005	
			11. Submit revised compliance plan to MDEQ, based on results of building ventilation evaluation, which will include dates for the final detailed engineering, procurement of equipment, beginning of on-site construction, completion of construction, and shakedown period for improvements.	01/31/2005	
			12. Complete project to modify/improve ESP controls (Reference Line 5 above).	05/31/ 2005	
			13. Achieve compliance at ESP stack and roof monitor.	05/22/2006	

Progress Reports

The permittee shall submit certified Progress Reports to the appropriate District Supervisor of the AQD using the MDEQ Report Certification form (EQP 5736). Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. (R 336.1213(4)(b))

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. (R 336.1213(4)(b)(i))

The actual dates that the activities, milestones, or compliance are achieved. (R 336.1213(4)(b)(i))

An explanation of why any dates in the schedule of compliance were not or will not be met. (R 336.1213(4)(b)(ii))

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. (R 336.1213(4)(b)(ii))

Appendix1-3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 1-4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in Table B. Alternative formats must be approved by the AQD District Supervisor.

a. Required Records for Fugitive Dust Sources

- A. Unpaved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Name of Product Applied
 - 5. Amount of Solution / Water Applied
 - 6. Dilution Ratio
 - 7. Road Segment / Lot Identification
- B. Paved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Road Segment / Lot Identification
- C. Storage Piles / Material Handling
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Dilution Ratio
 - 5. Amount of Dust Suppressant / Water Applied
 - 6. Identification of Pile / Material Handling Operation Treated
 - 7. Equipment Used
- D. Optional Records
 - 1. Precipitation
 - 2. Temperature
 - 3. Wind Direction and Velocity

Appendix 1-5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 1-6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
C-7961	No. 2 boiler at No. 3 Boiler House Zug Island	E-01.01, F01.01
C-7962	No. 1 boiler at No. 3 Boiler House Zug Island	E-01.02, F01.01
C-6429 and C-6430, C-11356	Pulse jet baghouse at argon stirring station #1	E-01.03
C-6429 and C-6430	Ladle metallurgy facility	E-01.04
C-10466	Oxygen blowing equipment on vacuum degassing vessel. Vacuum degassing process facility	E-01.05
C-8415	Vacuum degassing process packaged water tube steam boiler at main plant	E-01.06
100-03	Wet kish station system	E-01.07
103-03	Acid fume scrubber for No. 5 pickle line and steel coil welder with cartridge filter dust collector	E-01.08
C-6941, C-6432 & C-6433	Electro galvanizing line with two auxiliary counter current scrubbers	E-01.09
C-8232	Mist eliminator to control the fume exhaust system for electro galvanizing solution storage tanks.	E-01.10
223-98	Hot dip galvanizing line.	E-01.11
256-02	Blast Furnaces A, B, & D	E-01.12, E-01.13, E-01.14, F-01.05
C-6427	Blast Furnace recycle water cooling towers	E-01.15
C-10699, C-10700 & C-10712	Hot metal transfer / desulfurization station and a slag skimmer station to a hot metal transfer station and slag skimmer/desulfurization station (no.1) and skimmer/desulfurization station (2) at No. 2 BOP shop	E-01.16, F-01.07
C-6542	No. 2 BOP baghouse collection system	E-01.17, F-01.07
C-1776, C1777	No. 2 BOP vessels, electrostatic precipitators & baghouse	E-01.18, F-01.07
C-4530, C-4956, & 590-77	No. 2 BOP vessels, tapping emission control system for no. 25 & no. 26 vessel, BOP tapping controls	E-01.18, F-01.07
99-03	Two burnout ovens	F-01.04
59-01	Fume scrubber that controls the ion reactors at electro galvanizing line	F-01.08

The following PTIs were also incorporated into this ROP, through an amendment or modification, after the effective date of the ROP and prior to renewal.

PTI Number	ROP Revision Date	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
219-06	02-27-2007	Galvanizing line	E-01.11

Appendix 1-7. Emission Calculations

B. The permittee shall verify compliance with the sulfur dioxide (SO₂) emission rates for the No. 5 coke battery in accordance with the following equation:

$$\text{SO}_2 \text{ emission rate (lb/hr)} = \text{COG (ft}^3\text{/hr)} * \text{H}_2\text{S (gr/ft}^3\text{)} * (1 \text{ lb} / 7,000 \text{ gr)} * (64 \text{ lb SO}_2 / 34 \text{ lb H}_2\text{S)}$$

Where,

COG = actual volume of coke oven gas consumed in cubic feet per hour

H₂S = actual concentration of hydrogen sulfide in the coke oven gas in grains per cubic foot.

B. Emission Calculation Methodology for FGBLASTFURNACES

Baghouse Emissions

Baghouse emissions are based on the reported manufacturer’s guaranteed emission rates in pounds per dry standard cubic foot, multiplied by the measured exhaust flow rates for each of the three blast furnaces. These values will be used as a default until stack testing is conducted. Baghouse PM₁₀ values are set equal to 100 percent of PM.

Baghouse PM and PM ₁₀ emission rates (lb/ton iron)	=	0.0908 lb per ton of iron produced, for EU-“A” Blast 0.0505 lb per ton of iron produced, for EU-“B” Blast 0.0433 lb per ton of iron produced, for EU-“D” Blast
Annual Baghouse PM and PM ₁₀ emissions (tons/12 month rolling time period as determined at the end of each calendar month)	=	$\sum_{i=1}^{12} \text{BH (lb/ton iron)} \times \text{Iron Produced}_i \text{ (tons)}$ BH = the Baghouse emission rates from above, in lb/ton iron Iron Produced _i = the iron production during calendar month i, in tons

Fugitive (Roof Monitor) Emissions

Fugitive emissions are estimated based on an assumed 96% capture efficiency of the casthouse emission control system (CECS) collection hood. The CECS consists of a collection hood followed by a baghouse. Fugitive emissions, those not collected by the CECS, are vented from the roof monitor vents. Fugitive emission values are based on the calculated/measured baghouse emission rates determined above following the equation listed below using an assumed 98% BHCE. Fugitive PM₁₀ values are set equal to 60 percent of PM.

Roof Monitor PM emission rate (lb/ton iron)	=	0.1892 lb per ton of iron produced, for EU-“A” Blast 0.1052 lb per ton of iron produced, for EU-“B” Blast 0.0902 lb per ton of iron produced, for EU-“D” Blast
Roof Monitor PM ₁₀ emission rate (lb/ton iron)	=	0.1135 lb per ton of iron produced, for EU-“A” Blast 0.0631 lb per ton of iron produced, for EU-“B” Blast 0.0541 lb per ton of iron produced, for EU-“D” Blast
$\text{PM} = \frac{\text{Baghouse PM} \times 0.04}{0.96 \times (1 - 0.98)}$		$\text{PM}_{10} = \frac{\text{Baghouse PM}_{10} \times 0.60 \times 0.04}{0.96 \times (1 - 0.98)}$
Annual Roof Monitor PM and PM ₁₀ emissions (tons/12 month rolling time period as determined at the end of each calendar month)	=	$\sum_{i=1}^{12} \text{RM (lb/ton iron)} \times \text{Iron Produced}_i \text{ (tons)}$ RM = the Roof Monitor emission rate from above, in lb/ton iron Iron Produced _i = the iron production during calendar month i, in tons

Blast Furnace Gas Combustion Emissions

Blast Furnace Gas (BFG) combustion PM and NO_x emissions are based on emission factors. Typical blast furnace gas heating values are approximately 75-90 Btu per cubic foot. These emission factors will be used as a default until stack testing is conducted. Blast Furnace Gas PM₁₀ values are set equal to 100 percent of PM.

Blast Furnace Gas Combustion PM and PM ₁₀ emission rate (lb/MMBtu)	=	0.0322 lb per million British Thermal Units or most recent stove stack test results
Annual Blast Furnace Gas Combustion PM and PM ₁₀ emissions (tons/ 12 month rolling time period as determined at the end of each calendar month)	=	$12 \sum_{i=1} BFG \text{ (lb/MMBtu)} \times BFG \text{ (ft}^3\text{)} \times HV \text{ (Btu/ft}^3\text{)}$ BFG (lb/MMBtu) = the Blast Furnace Gas emission rates from above BFG (ft ³) = the Blast Furnace Gas used during calendar month i HV = the Blast Furnace Gas heating value as measured

Blast Furnace Gas Combustion NO _x emission rate (lb/MMBtu)	=	0.256 lb per million British Thermal Units or most recent stove stack test results
Annual Blast Furnace Combustion NO _x emissions (tons/ 12 month rolling time period as determined at the end of each calendar month)	=	$12 \sum_{i=1} BFG \text{ (lb/MMBtu)} \times BFG \text{ (ft}^3\text{)} \times HV \text{ (Btu/ft}^3\text{)}$ BFG (lb/MMBtu) = the Blast Furnace Gas emission rate from above BFG (ft ³) = the Blast Furnace Gas used during calendar month i HV = the Blast Furnace Gas heating value as measured

Natural Gas Combustion Emissions

Natural Gas (NG) combustion PM and NO_x emissions are based on AP-42 emission factors. Typical natural gas heating values are approximately 1000 Btu per cubic foot. Natural Gas PM₁₀ values emission rates are set equal to 100 percent of PM.

Natural Gas Combustion PM and PM ₁₀ emission rate (lb/MMBtu)	=	0.003 lb per million British Thermal Units
Annual Natural Gas Combustion PM and PM ₁₀ emissions (tons/ 12 month rolling time period as determined at the end of each calendar month)	=	$12 \sum_{i=1} NG \text{ (lb/MMBtu)} \times NG \text{ (ft}^3\text{)} \times 1000 \text{ (Btu/ft}^3\text{)}$ NG (lb/MMBtu) = the Natural Gas emission rate from above NG (ft ³) = the Natural Gas used during calendar month i

Natural Gas Combustion NO _x emission rate (lb/MMBtu)	=	0.140 lb per million British Thermal Units
Annual Natural Gas Combustion NO _x emissions (tons/12 month rolling time period as determined at the end of each calendar month)	=	$12 \sum_{i=1} NG \text{ (lb/MMBtu)} \times NG \text{ (ft}^3\text{)} \times 1000 \text{ (Btu/ft}^3\text{)}$ NG (lb/MMBtu) = the Natural Gas emission rate from above NG (ft ³) = the Natural Gas used during calendar month i

Appendix 1-8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

The permittee must use the following procedures and format for the reporting requirements referenced in Table E-1.08, unless an alternative method is approved by the AQD Livonia District Supervisor.

63.10(d)(5)(ii) / Table E-1.08(IV)(5)

The permittee shall report the actions taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the source's startup, shutdown, and malfunction plan, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after end of the event. The immediate report required under this paragraph shall consist of a telephone call or fax transmission to the AQD District Supervisor within 2 working days after commencing actions inconsistent with the plan, and shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 2

DELRAY CONNECTING RAILROAD
COMPANY
SRN: B3409

LOCATED AT

7109 WEST JEFFERSON
DETROIT, MI 48209

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-2. General Requirements

For the purpose of this Renewable Operating (RO) permit, the **permittee** is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS and DELRAY COONECTING RAILROAD COMPANY, hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
6. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b) Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *

8. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions of the CAA. Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d. As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
16. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
18. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))

- b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))
 - c. If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d. If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- a) The date, location, time, and method of sampling or measurements.
 - b) The dates analyses of the samples were performed.
 - c) The company or entity that performed the analyses of the samples.
 - d) The analytical techniques or methods used.
 - e) The results of the analyses.
 - f) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- a) For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - b) For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c) For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d) Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e) Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
- a) The applicable requirements are included and are specifically identified in the permit.

- b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:

- a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
- b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
- c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
- d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:

- a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
- b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
- c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
- d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
- e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))

33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - 1) June 21, 1999,
 - 2) Three years after the date on which a regulated substance is first listed under 68.130, or
 - 3) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-2. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

C-2. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/ Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGCOKESCREEN	Coke Screening Operations	4/01/94	NA	NA	E-02.01
EGCOKEHANDLING	Coke Handling Operations	4/01/94	NA	NA	E-02.02

D-2. Flexible Groupings Summary Table

Flexible Grouping ID	Emission Unit/Process Groups Included in Flexible Grouping	Requirement Table No.
FGCOKESCREENHANDLING	EGCOKESCREEN, EGCOKEHANDLING	F-02.01

E-2. Emission Unit/Process Group Requirements

The tables in Part E outline the applicable requirements for each emission unit/process group listed in the Emission Unit/Process Group Summary Table. The permittee is subject to the requirements for each emission unit/process group in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each emission unit/process group shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables E-02.01- E-02.02 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the emission unit/process group, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE E-02.01 COKE SCREENING OPERATION					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGCOKESCREEN Process under Delray Connecting Railroad Company. The Coke Screening Operation includes the screen machine; conveyors: unscreened coke, furnace coke (30"Wx60'L), nut coke (36"Wx80'L), and coke breeze (36"Wx125'L).				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Coke		The permittee shall not process more than 150,000 tons per year of material per 12 month rolling time period as determined at the end of each calendar month. (R336.1205, 40 CFR 52.21(c) and (d))			
B. Pollutant		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and shall be make it available to AQD upon request: Monthly record of the amount of coke processed per 12 month rolling time period as determined at the end of each calendar month. (R336.1201(3), R336.1213(3))			
3. Other Monitoring and/or Recordkeeping		1. The permittee shall perform a non-certified visible emission observation of the coke screening operation at least once a week during coke screening activity The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 2. The permittee shall perform a Method 9 certified visible emission observation of the coke screening operations at least once per month during coke screening activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					

TABLE E-02.01 COKE SCREENING OPERATION EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 2.8</p>
V. OPERATIONAL PARAMETERS	
The permittee shall not operate the Coke Screening Operation unless the stacking conveyors for screened coke breeze, furnace coke, and nut coke have the covers installed, fastened on them securely, and maintained in good working order. (R336.1371)	
VI. OTHER REQUIREMENTS	
NA	

TABLE E-02.02 COKE HANDLING and STORAGE SYSTEM EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGCOKEHANDLING Process under Delray Connecting Railroad Company. The Coke Handling Operation includes the coke handling & storage; roadway & parking lot emissions.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
NA	NA				
B. Pollutant	Maximum Emission Limit				
Visible emissions	Visible emissions from any roadway, parking lot, or storage pile, including any material handling activity at a storage pile shall not exceed five percent (5%) opacity as determined using the Reference Test Method 9D. (R336.1205, R336.1301, R336.1303, R336.1901, 40 CFR 52.21(c) and (d))				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	NA				
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> The permittee shall perform a non- certified visible emission observation of the coke handling and storage operations at least once a week during coke handling and storing activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) The permittee shall perform a Method 9 certified visible emission observation of the coke handling and storage operations at least once a month during coke handling and storing activity using Reference Method 9d. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 				
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/	NA				

TABLE E-02.02 COKE HANDLING and STORAGE SYSTEM EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
Recorded	
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 2.8</p>
V. OPERATIONAL PARAMETERS	
NA	
VI. OTHER REQUIREMENTS	
NA	

F-2. Flexible Grouping Requirements

The tables in Part F outline the applicable requirements for each flexible grouping listed in the Flexible Groupings Summary Table. The permittee is subject to the requirements for each flexible grouping in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each flexible grouping shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Table F-02.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the flexible grouping, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE F-02.01 COKE SCREENING and HANDLING FACILITY FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING		FGCOKESCREENHANDLING			
Emission Unit/Process Groups		EGCOKESCREEN, EGCOKEHANDLING			
I. DESIGN PARAMETERS					
A. Pollution Control Equipment		Cover for conveyors.			
B. Stack/Vent Parameters		NA			
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material			Maximum Usage Rate		
NA			NA		
B. Pollutants			Maximum Emission Limit		
NA			NA		
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record the treatment information for the fugitive dust sources using the format specified in Appendix 2.4. (SIP Consent Order No. 8-1993, Exhibit A, Paragraph D (Note) and ADDENDUM) , (R 336.1213(3))			
3. Other Monitoring and/or Recordkeeping		NA			
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Parameter to be Tested/Recorded		NA			
2. Method/Analysis		NA			
3. Frequency and Schedule of Testing/Recordkeeping		NA			
IV. REPORTING					
Reports and Schedules		1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))			

**TABLE F-02.01 COKE SCREENING and HANDLING FACILITY
 FLEXIBLE GROUPING REQUIREMENTS**

4. The permittee shall submit to on a quarterly basis to AQD a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement as specified in Exhibits A or B of SIP No. 8-1993, Revised 9/9/94, was not met. This report shall for each instance explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected.
(SIP No. 8-1993, Revised 9/9/94, Paragraph 11)

See Appendix 2.8

V. OPERATIONAL PARAMETERS

1. The permittee shall not process any asbestos or asbestos containing waste materials, as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations in the EGCOKESCREEN and EGCOKEHANDLING. **(40 CFR, Part 61, Subpart M, R336.1201(3))**
2. The permittee shall not operate EGCOKESCREEN and EGCOKEHANDLING unless the approved fugitive dust control plan (Plan) has been implemented and is maintained. Alternate formats or revisions to the approved Plan must be approved by the AQD District Supervisor. **(R336.1371, R336.1201(3))**
3. The paved roads must be flushed with water twice per week, paved lots must be flushed with water monthly, and paved open areas must be flushed with water four times per year. **(R336.1371)**

VI. OTHER REQUIREMENTS

The permittee shall comply with the following source descriptions and control measures:

A. Control Methods:

1. Paved Roads - Paved roads are vacuum swept twice weekly.
2. Unpaved Roads - Unpaved road C-D will be treated with asphalt emulsion, petroleum resin, or acrylic cement, once every two months. Unpaved road E-F will be treated once every three months.
3. Paved Parking Lots – Paved lots will be vacuum swept once each week.
4. Unpaved Parking Lots - Unpaved lots will be treated with asphalt emulsion, petroleum resin, or acrylic cement, once every two months.

B. Cleaning Equipment Description:

1. Vacuum Sweeper – Ford, CT 8000, Tandem Axle Truck with Vac All, Industrial Wet Vac Unit. Sweeper description:
 - a. Two gutter brooms with sprays.
 - b. Two four foot nozzles.
 - c. Deflector broom (parallel to frame of truck)
 - d. Anterior spray bar, width of truck.
 - e. Water injection collar on vacuum nozzle.
2. Dust Suppressant – Tandem axle truck with eight foot spray bar on back of truck.
 - a. Dilution ratio – 7:1 (water:chemical)
 - b. Application rate – 0.1 gallons concentrate/sq. yd.
 - c. Rate – 0 to 400 GPM at 0 to 100 psi.

**TABLE F-02.01 COKE SCREENING and HANDLING FACILITY
FLEXIBLE GROUPING REQUIREMENTS**

C. Other Considerations:

1. All techniques to be implemented as scheduled during the months of April through November. During the months of November through March, treatment will be weather and need dependent.

(SIP Consent Order No. 8-1993, Exhibit A, Paragraph 3)

*** This requirement is state enforceable only.**

G-2. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-2. Appendices

Appendix 2.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature

Appendix 2.2. Schedule of Compliance

The permittee has certified that this source is in compliance with all applicable requirements as of the date of issuance of this RO Permit and the permittee shall continue to comply with all applicable requirements listed in this RO Permit. A detailed Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 2.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 2.4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in Table B. Alternative formats must be approved by the AQD District Supervisor.

2.4.1 Required Records for Fugitive Dust Sources

- A. Unpaved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Name of Product Applied
 - 5. Amount of Solution / Water Applied
 - 6. Dilution Ratio
 - 7. Road Segment / Lot Identification

- B. Paved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Road Segment / Lot Identification

- C. Storage Piles / Material Handling
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Dilution Ratio
 - 5. Amount of Dust Suppressant / Water Applied
 - 6. Identification of Pile / Material Handling Operation Treated
 - 7. Equipment Used

- D. Optional Records
 - 1. Precipitation
 - 2. Temperature
 - 3. Wind Direction and Velocity

Appendix 2.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 2.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
304-99	Coke Screening Operation and Coke Handling Operation	E-02.01, E-02.02, FG-02.01

Appendix 2.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 2.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 3

INTERNATIONAL MILL SERVICE, INC.
SRN: N7019

LOCATED AT

NO. 1 QUALITY DRIVE
ECORSE, MI 48218

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-3. General Requirements

For the purpose of this Renewable Operating (RO) permit, the **permittee** is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS and INTERNATIONAL MILL SERVICES, INC., hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
6. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
8. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions

of the CAA. Any terms and conditions based on applicable requirements which are designated as “state only” are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a) Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c) Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d) As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
16. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
18. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a) If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - b) If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))

- c) If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d) If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- a) The date, location, time, and method of sampling or measurements.
 - b) The dates analyses of the samples were performed.
 - c) The company or entity that performed the analyses of the samples.
 - d) The analytical techniques or methods used.
 - e) The results of the analyses.
 - f) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- a) For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - b) For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c) For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d) Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e) Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
- a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:
 - a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
 - b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
 - c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
 - d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:
 - a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
 - b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
 - c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
 - e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - a) June 21, 1999,
 - b) Three years after the date on which a regulated substance is first listed under 68.130, or
 - c) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-3. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any terms and conditions contained in this RO permit.

C-3. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/ Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGSLABSCARFING	Slab Scarfing Operation	01/01/92	NA	NA	E-03.01

D-3. Flexible Groupings Summary Table

At the time of RO Permit issuance, the AQD has determined that there are no flexible groupings identified for this source.

E-3. Emission Unit/Process Group Requirements

The tables in Part E outline the applicable requirements for each emission unit/process group listed in the Emission Unit/Process Group Summary Table. The permittee is subject to the requirements for each emission unit/process group in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each emission unit/process group shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables E-03.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the emission unit/process group, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE E-03.01 SLAB SCARFING MACHINE OPERATIONS					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGSLABSCARFING The Slab Scarfing Machine under International Mill Services, Inc has a design capacity of 300,000 lbs./hour, natural gas fired at 2,400 scf/hour located at the 80-inch hot mill facility.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVSLABSCARFER	95	72	NA	NA	R336.1901
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Natural gas		The permittee shall not use more than 2,400 cubic feet of natural gas per operating hour in EGSLABSCARFING based on a rolling 12-month period. (R336.1331)			
B. Pollutant		Maximum Emission Limit			
Particulate Matter		1) 0.004 grain per dry standard cubic foot of exhaust gases per hourly average. 2) 3.77 pounds per hour. 3) 14.45 tons per year. (R336.1205, R336.1331(1)(c))			
Opacity		25% (R336.1359)			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and shall be made available to AQD upon request: 1. Monthly record of the amount of natural gas in cubic feet per hour per 12month rolling time period as determined at the end of each calendar month. 2. The total hours of operation per day. 3. The total hours of operation per 12 month rolling time period as determined at the end of each calendar month.			
		4. The permittee shall record the pressure drop across the slab scarfer machine fabric filter collector weekly. A pressure drop between 5 and 9 shall be considered normal which can be changed upon approval by the AQD District			

TABLE E-03.01 SLAB SCARFING MACHINE OPERATIONS EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R336.1213(3))
3. Other Monitoring and/or Recordkeeping	1. The permittee shall perform a non- certified visible emission observation of the baghouse stack at least once a month during slab scarfing activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3)) 2. The permittee shall perform a Method 9 certified visible emission observation of the baghouse stack at least once every four months during slab scarfing activity using Reference Method 9A. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 3.8
V. OPERATIONAL PARAMETERS	
1. The permittee shall not operate EGSLABSCARFER for more than 21 hours per day nor 7,665 hours per year. (R336.1205, R336.1331, R336.1901*) 2. The permittee shall equip and maintain EGSLABSCARFER with a baghouse. (R336.1205, R336.1331, R336.1901*) 3. The permittee shall not operate EGSLABSCARFER unless a gauge which measures the pressure drop across the baghouse is installed and operating properly. (R336.1205, R336.1331, R336.1901*) 4. The permittee shall maintain a minimum pressure drop of 4 inches water gauge across the baghouse for the EGSLABSCARFER. (R336.1205, R336.1331, R336.1901*)	
VI. OTHER REQUIREMENTS	
NA	

* This requirement is state enforceable only.

F-3. Flexible Grouping Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific applicable requirements which apply to the flexible groupings at this source. Therefore, the permittee is subject to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

G-3. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-3. Appendices

Appendix 3.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature

Appendix 3.2. Schedule of Compliance

The permittee has certified that this source is in compliance with all applicable requirements as of the date of issuance of this RO Permit and the permittee shall continue to comply with all applicable requirements listed in this RO Permit. A detailed Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 3.4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 3.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 3.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
271-01	Slab Scarfing Machine	E-03.01

Appendix 3.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 3.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 4

GREAT LAKES RECOVERY SYSTEM,
INC.
SRN:

LOCATED AT

NO. 1 QUALITY DRIVE
ECORSE, MI 48218

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-4. General Requirements

For the purpose of this Renewable Operating (RO) permit, the **permittee** is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS and GREAT LAKES RECOVERY SYSTEM, INC., hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
6. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
8. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions

of the CAA. Any terms and conditions based on applicable requirements which are designated as “state only” are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d. As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
16. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
18. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))

- c. If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d. If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- a) The date, location, time, and method of sampling or measurements.
 - b) The dates analyses of the samples were performed.
 - c) The company or entity that performed the analyses of the samples.
 - d) The analytical techniques or methods used.
 - e) The results of the analyses.
 - f) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- a) For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - b) For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c) For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d) Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e) Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
- a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:
 - a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
 - b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
 - c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
 - d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:
 - a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
 - b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
 - c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
 - e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - 1) June 21, 1999,
 - 2) Three years after the date on which a regulated substance is first listed under 68.130, or
 - 3) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-4. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any terms and conditions contained in this RO permit.

C-4. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/ Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGROTARYDRUMDRIER	Rotary Drum Drier, Pug Millss 1 & 2	01/01/96	Baghouse	NA	FG-04.01
EBRIQUETTING	Briquette Screen, Silo Farm Transfer System	01/01/96	Baghouse	NA	FG-04.01

D-4. Flexible Groupings Summary Table

Flexible Grouping ID	Emission Unit/Process Groups Included in Flexible Grouping	Requirement Table No.
FGBRIQUETTINGFACILITY	EGROTARYDRUMDRIER, EGBRIQUETTING	F-04.01

E-4. Emission Unit/Process Group Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific applicable requirements which apply to the emission unit/process groups at this source. Therefore, the permittee is subject to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

F-4. Flexible Grouping Requirements

The tables in Part F outline the applicable requirements for each flexible grouping listed in the Flexible Groupings Summary Table. The permittee is subject to the requirements for each flexible grouping in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each flexible grouping shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables F-04.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the flexible grouping, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE F-04.01 BRIQUETTING FACILITY OPERATIONS					
FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGBRIQUETTING FACILITY The Briquetting Facility under Great Lakes Recovery System, Inc is composed of rotary drum drier with a cyclone and baghouse, pug mills 1 & 2 with baghouses, briquette screen with baghouse, and silo farm transfer system with baghouse located at the Main Plant area.				
Emission Unit/Process Groups	EGROTARYDRUMDRIER, EGBRIQUETTING				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Cyclone and Baghouse				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVDRIERBAGHOUSE	50	40	NA	NA	R 336.1201(3)
C. Other Design Parameters	NA				
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material	Maximum Usage Rate				
Natural gas	The heat input to the natural gas fired rotary drum drier shall not exceed 43 million British Thermal Units (BTUs) per hour. This is based on a maximum natural gas usage of 43,000 standard cubic feet per hour, with a nominal heating value of 1,000 BTUs per standard cubic foot. (R 336.1201(3))				
B. Pollutants	Maximum Emission Limit				
1. Carbon monoxide (CO) from the drier	a) 0.24 pound per million BTUs heat input b) 10.4 pounds per hour c) 45.8 tons per year (R 336.1201(3))				
2. Nitrogen Oxides (NOx) from the drier	a) 0.14 pound per million BTUs heat input b) 6 pounds per hour c) 26.4 tons per year (R 336.1201(3))				
3. Particulate Matter from the drier controlled by baghouse	a) 0.03 pound per 1,000 pounds of dry exhaust gas b) 2.5 pounds per hour c) 10.95 tons per year (R 336.1201(3))				
4. Visible emissions from the baghouse dust collectors	6-minute average of 5% opacity (R 336.1201(3))				
5. Visible emissions from the any roadway, parking lot, or storage pile, including any material handling activity at a storage pile.	5% opacity (R 336.1201(3))				
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					

**TABLE F-04.01 BRIQUETTING FACILITY OPERATIONS
 FLEXIBLE GROUPING REQUIREMENTS**

In Addition to General Requirements in Part A

1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA
2. Process Monitoring System and Recordkeeping	The permittee shall keep records of the following information on a daily basis: <ol style="list-style-type: none"> 1. Total amount of natural gas consumption of the drier. 2. Total material throughput in the drier. 3. Total hours the drier is operated. 4. Total natural gas consumption of the drier based on a twelve-month rolling time period as determined at the end of each calendar month. <p style="text-align: right;">(R 336.1213(3))</p>
3. Other Monitoring and/or Recordkeeping	<ol style="list-style-type: none"> 1. The permittee shall conduct visible emission readings by a certified observer of Method 9 visible emissions from the drier stack at least once per week during operation. (R336.1213(3)) 2. The permittee shall conduct visible emission readings by a certified observer of Method 9 visible emissions from the roadway, parking lot, storage pile including any material handling activity at the storage pile at least once per month during operation. Visible emission readings shall be done using the reference test method 9D described in Section 5525(j) of the Michigan Public Act 451 of 1994. (R336.1213(3), R336.1201(3)) 3. The permittee shall keep records as specified in the fugitive dust control program stated in VI(3)(A-D) of this Table. These records shall be kept on file at the facility for a period of at least two years following the date of such records and shall be made available to AQD upon request. (R336.1213(3), R336.1201(3))

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	<ol style="list-style-type: none"> 1. Particulate Matter. 2. Nitrogen Oxide (NOx) 3. Carbon Monoxide (CO)
2. Method/Analysis	<ol style="list-style-type: none"> 1. Method 17 2. Method 7E 3. Approved Method Or other approved method
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct a particulate emission, nitrogen oxide, and carbon monoxide emission rate test from drier stack once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R336.1213(3))

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> 1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year.
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**TABLE F-04.01 BRIQUETTING FACILITY OPERATIONS
 FLEXIBLE GROUPING REQUIREMENTS**

(R336.1213(4)(c))

See Appendix 4.8

V. OPERATIONAL PARAMETERS

1. The permittee shall operate the briquetting facility with the pug mill baghouse, silo farm transfer system baghouse and briquetting screen baghouse dust collector installed, exhaust gases vented into the building and operating properly. **(R336.1201(3))**
2. The permittee shall not operate the drier unless the cyclone and baghouse dust collector are installed and operating properly. **(R336.1201(3))**
3. The permittee shall equip and maintain the rotary drier baghouse with a pressure differential gauge which measures pressure drop across the baghouse. **(R336.1201(3))**

VI. OTHER REQUIREMENTS

1. The permittee shall not use any asbestos containing waste materials, as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations (40 CFR, Part 61, Subpart M) in the briquetting plant. **(R336.1201(3))**
2. In the event of verified odor complaints relative to operation of the briquetting facility, the permittee shall submit to AQD and to implement an acceptable odor abatement program for the permanent resolution of the odor problem within 30 days of notification by AQD. **(R336.1201(3))**
3. The permittee shall not operate the steel mill waste recycling/briquetting plant unless the program for continuous fugitive emissions control for all road ways, the plant yard, all material storage piles, and all material handling operations specified below has been implemented and is being maintained.
 - A. Paved Roads
 - a. Vacuum sweeping, once per day, weather permitting.
 - b. Speed control – 5 mph (POST SIGN).
 - B. Paved Lot
 - a. Vacuum sweeping once per month or more often as necessary.
 - b. Speed control – 5 mph (POST SIGN).
 - C. Storage Piles
 - a. Non-working piles shall be tarped or water sprayed as necessary.
 - b. Working piles with airborne emissions that exceed 5% opacity at or near the pile surface shall be treated with water.
 - c. Loading operation – minimize drop height to less than two feet where possible.
 - d. Speed control – 5 mph (POST SIGN).
 - D. Miscellaneous
 - a. Dumping operation – limit drop height to less than two feet where possible.
 - b. Spilled material – daily cleaning.
 - c. If there are any conveying operations associated with the outside storage piles then exit points must be enclosed or water sprayed.
 - d. Trackout – daily cleaning.
 - e. Front end loader – limit free fall height to less than two feet where possible.
 - f. Transportation of material – Tarp loads or other approved measures.
 - g. A daily written log of the frequency and type of fugitive dust control treatment implemented and associated weather conditions.

(R336.1201(3))

*** This requirement is state enforceable only.**

G-4. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-4. Appendices

Appendix 4.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature

Appendix 4.2. Schedule of Compliance

The permittee has certified that this source is in compliance with all applicable requirements as of the date of issuance of this RO Permit and the permittee shall continue to comply with all applicable requirements listed in this RO Permit. A detailed Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 4.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 4.4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 4.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 4.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
C11118 through 11127	Briquetting Facility	FG-04.01

Appendix 4.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 4.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 5

United States Steel Corporation - Operator
EDISON ENERGY SERVICES - Owner
SRN:

LOCATED AT

ZUG ISLAND, RIVER ROUGE
MI 48218

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-5. General Requirements

For the purpose of this Renewable Operating (RO) permit, the permittee is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS - Operator and EDISON ENERGY SERVICES - Owner, hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
3. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
4. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
5. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
6. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
7. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
8. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions

of the CAA. Any terms and conditions based on applicable requirements which are designated as “state only” are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d. As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
21. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
22. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
23. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
24. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
25. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
26. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))

- c. If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d. If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
27. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
28. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

29. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- a) The date, location, time, and method of sampling or measurements.
 - b) The dates analyses of the samples were performed.
 - c) The company or entity that performed the analyses of the samples.
 - d) The analytical techniques or methods used.
 - e) The results of the analyses.
 - f) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- a) For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - b) For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c) For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d) Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e) Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
- a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:
 - a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
 - b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
 - c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
 - d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:
 - a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
 - b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
 - c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
 - e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - 1) June 21, 1999,
 - 2) Three years after the date on which a regulated substance is first listed under 68.130, or
 - 3) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-5. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any terms and conditions contained in this RO permit.

C-5. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/ Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGSTORAGEBIN	Pulverized Coal/Air Collection System	10/01/96	Baghouse	NA	FG-05.01
EGAIRTRANSPORT	Storage Bin and Air Transport System	10/01/96	Baghouse	NA	FG-05.01

D-5. Flexible Groupings Summary Table

Flexible Grouping ID	Emission Unit/Process Groups Included in Flexible Grouping	Requirement Table No.
FGPULVCOALTRANSPOR T	EGSTORAGEBIN, EGAIRTRANSPORT	F-05.01

E-5. Emission Unit/Process Group Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific applicable requirements which apply to the emission unit/process groups at this source. Therefore, the permittee is subject to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

F-5. Flexible Grouping Requirements

The tables in Part F outline the applicable requirements for each flexible grouping listed in the Flexible Groupings Summary Table. The permittee is subject to the requirements for each flexible grouping in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each flexible grouping shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables F-05.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the flexible grouping, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE F-05.01 PULVERIZED COAL TRANSPORT SYSTEM FLEXIBLE GROUPING REQUIREMENTS					
FLEXIBLE GROUPING	FGPULVCOALTRANSPORT Pulverized coal transport system comprising of pulverized coal/air collection system, storage bin and air transport system. Edison Energy Services				
Emission Unit/Process Groups	EGSTORAGEBIN, EGAIRTRANSPORT				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Fabric filter dust collector				
B. Stack/Vent Parameters	Horizontally constructed.				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVTRANSPORTSYSDUSTCOL	202	19.44	NA	NA	R336.1201(3)
SVSILODUSTCOLLECTOR	170	25.44	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Coal		The permittee shall not deliver more than 925,000 tons of coal to the blast furnaces per year based on a twelve-month rolling average as determined at the end of each calendar month. R336.1201(3)			
B. Pollutants		Maximum Emission Limit			
Particulate Matter from the transport system discharge fabric filter dust collector.		1. 21.9 milligrams per cubic meter of exhaust air corrected to 70F and 29.92 inches Hg. 2. 0.26 pounds per hour 3. 1.15 tons per year. R336.1201(3)			
Particulate Matter from the pulverized coal silo and injection vessel fabric filter dust collector.		1. 21.9 milligrams per cubic meter of exhaust air corrected to 70F and 29.92 inches Hg. 2. 0.14 pounds per hour 3. 0.59 tons per year. R336.1201(3)			
Visible Emissions from pulverized coal transport system		5% R336.1201(3)			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall keep a written record of the following and made available to AQD upon request: 1. Amount of coal processed on a 12-month rolling average recorded at the end of each calendar month. (R336.1213(3))			
		2. The 12-month rolling average of coal consumption recorded at the end of each calendar month. (R336.1201(3), R336.1213(3))			

**TABLE F-05.01 PULVERIZED COAL TRANSPORT SYSTEM
 FLEXIBLE GROUPING REQUIREMENTS**

	<p>3. The permittee shall record the pressure drop across the transport system discharge fabric filter dust collector daily. A pressure drop between 0.0" and 3.5" shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R336.1213(3))</p> <p>4. The permittee shall record the pressure drop across the pulverized coal silo and injection vessel fabric filter dust collector daily. A pressure drop between 0.0" and 3.5" shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range which is not a deviation. (R336.1213(3))</p>
<p>3. Other Monitoring and/or Recordkeeping</p>	<p>1. The permittee shall perform a non-certified visible emission observation of the pulverized coal transport system at least once a week during source operations. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action. (R336.1213(3))</p> <p>2. The permittee shall perform a certified Method 9 visible emission observation of the pulverized coal transport system at least once a month during source operations. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

<p>1. Parameter to be Tested/Recorded</p>	<p>Particulate Matter</p>
<p>2. Method/Analysis</p>	<p>Method 17 or other approved method</p>
<p>3. Frequency and Schedule of Testing/Recordkeeping</p>	<p>The permittee shall conduct the particulate emission test from the transport system discharge fabric filter dust collector, and the pulverized coal silo and injection vessel fabric filter dust collector during operation once every five years or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))</p>

IV. REPORTING

<p>Reports and Schedules</p>	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p>
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**TABLE F-05.01 PULVERIZED COAL TRANSPORT SYSTEM
 FLEXIBLE GROUPING REQUIREMENTS**

	3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) See Appendix 5.8
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V. OPERATIONAL PARAMETERS

1. The permittee shall not supply coal to the pulverized coal silo unless a gauge which measures the pressure drop across the transport system discharge fabric filter dust collector and activates an alarm when the pressure drop exceeds a normal operating value is installed and operating properly.
(R336.1201(3))

2. The permittee shall not operate the coal injection system unless a gauge which measures the pressure drop across the pulverized coal silo and injection vessel fabric filter dust collector collector and activates an alarm when the pressure drop exceeds a normal operating value is installed and operating properly.
(R336.1201(3))

VI. OTHER REQUIREMENTS

NA

* This requirement is state enforceable only.

G-5. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-5. Appendices

Appendix 5.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature

Appendix 5.2. Schedule of Compliance

The permittee has certified that this source is in compliance with all applicable requirements as of the date of issuance of this RO Permit and the permittee shall continue to comply with all applicable requirements listed in this RO Permit. A detailed Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 5.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 5.4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 5.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 5.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
C10989 AND 10990	Pulverized Coal Transport System	FG-05.01

Appendix 5.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 5.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 6

AKJ INDUSTRIES, INC..
SRN:

LOCATED AT

ZUG ISLAND, RIVER ROUGE
MI 48218

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-6. General Requirements

For the purpose of this Renewable Operating (RO) permit, the **permittee** is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS and AKJ INDUSTRIES, INC., hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
1. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
2. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
3. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
4. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
5. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
6. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions

of the CAA. Any terms and conditions based on applicable requirements which are designated as “state only” are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d. As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
16. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
18. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - b. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - c. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))

- d. If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - e. If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
 20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
 - a) The date, location, time, and method of sampling or measurements.
 - b) The dates analyses of the samples were performed.
 - c) The company or entity that performed the analyses of the samples.
 - d) The analytical techniques or methods used.
 - e) The results of the analyses.
 - f) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
 - b. For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - c. For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - d. For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d) Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e) Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
- a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:
 - a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
 - b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
 - c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
 - d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:
 - a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
 - b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
 - c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
 - e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))

33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - 1) June 21, 1999,
 - 2) Three years after the date on which a regulated substance is first listed under 68.130, or
 - 3) The date on which a regulated substance is first present above a threshold quantity in a process.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-6. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any terms and conditions contained in this RO permit.

C-6. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/ Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGTARDECANTER	Tar Decanter Sludge Recycling Process	07/01/95	NA	NA	EG-06.01

D-6. Flexible Groupings Summary Table

At the time of RO permit issuance, the AQD has determined that there are no flexible groupings identified for this source.

E-6. Emission Unit/Process Group Requirements

The tables in Part E outline the applicable requirements for each emission unit/process group listed in the Emission Unit/Process Group Summary Table. The permittee is subject to the requirements for each emission unit/process group in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each emission unit/process group shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables E-06.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the emission unit/process group, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE E-06.01 TAR DECANTER SLUDGE RECYCLING PROCESS					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGTARDECANTER The Tar Decanter Sludge Recycling Process is operated by AKJ Industries, Inc. Heavy tar sludges settle to the bottom of the tar decanters. The decanter is scraped continuously bringing the sludge to an exit on the tank where it is deposited in metal hoppers supplied by AKJ. These hoppers are transported via forklift to an AKJ facility and the sludge is emptied into a batch tank for liquefying and homogenizing with diluent until it is flowable. The recycled product is sprayed onto United States Steel's coal belt.				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	NA				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
SVVENT1	14	2	NA	NA	R336.1201(3)
SVVENT2	14	2	NA	NA	R336.1201(3)
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Tar Sludges		The permittee shall not process more than 5,364,000 gallons per year based on a 12-month rolling time period as determined at the end of each calendar month. (R336.1201(3))			
B. Pollutant		Maximum Emission Limit			
VOC		1) 0.7 pounds per hour. 2) 1.46 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. (R336.1201(3))			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3)) In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping		NA			
2. Process Monitoring System and Recordkeeping		The permittee shall record and keep the following information and shall be made available to AQD upon request: 1. Record of the amount of tar sludge processed 12-month rolling time period as determined at the end of each calendar month. 2. The total hours of operation per 12 month rolling time period as determined at the end of each calendar month. (R336.1213(3))			
3. Other Monitoring and/or Recordkeeping		NA			
B. TESTING/RECORDKEEPING (R 336.1213(3))					

TABLE E-06.01 TAR DECANter SLUDGE RECYCLING PROCESS EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
In Addition to General Requirements in Part A	
1. Parameter to be Tested/Recorded	VOC (R336.1213(3))
2. Method/Analysis	Method 25 or other approved method (R336.1213(3))
3. Frequency and Schedule of Testing/Recordkeeping	The permittee shall conduct a VOC emission test once every five years or more frequently upon request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. If stack test would be extremely difficult if not impossible due to 2" stack diameter, the permittee can propose acceptable compliance method to AQD. (R336.1213(3))
IV. REPORTING	
Reports and Schedules	<ol style="list-style-type: none"> Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c)) <p>See Appendix 6.8</p>
V. OPERATIONAL PARAMETERS	
NA	
VI. OTHER REQUIREMENTS	
NA	

F-6. Flexible Grouping Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific applicable requirements which apply to the flexible groupings at this source. Therefore, the permittee is to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

G-6. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-6. Appendices

Appendix 6.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature
VOC	Volatile Organic Compound

Appendix 6.2. Schedule of Compliance

The permittee has certified that this source is in compliance with all applicable requirements as of the date of issuance of this RO Permit and the permittee shall continue to comply with all applicable requirements listed in this RO Permit. A detailed Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 6.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 6.4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 6.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 6.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
C-11837, 271-97	Tar Decanter Sludge Recycling Process	EG-06.01

Appendix 6.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 6.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 7

United States Steel Corporation - Operator
DTE ENERGY SERVICES - Owner
SRN: A7809

LOCATED AT

ZUG ISLAND, RIVER ROUGE
MI 48218

Permit Number: 199600132d

Effective Date: March 1, 2005

Revision Date: January 10, 2006, June 1, 2006, October 11, 2006,
March 6, 2007

Expiration Date: March 1, 2010

A-7. General Requirements

For the purpose of this Renewable Operating (RO) permit, the **permittee** is defined as any person who owns or operates a process or process equipment at a stationary source for which a RO permit has been issued. This permit is issued to UNITED STATES STEEL CORPORATION - GREAT LAKES WORKS - Operator and DTE Energy Services - Owner, hereinafter the permittee for this RO permit. The department is defined in R 336.1104(d) as the Director of the Department of Environmental Quality or his or her designee.

Enforceability

All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. Those requirements which are enforceable by the state only are designated by an asterisk. (R 336.1213(5))

General Conditions

1. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this RO permit shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this RO permit. (R 336.1213(1)(f))
2. Except as provided in subrules 2, 3, and 4 of R 336.1301, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of R 336.1301(a) or (b) unless otherwise specified in this RO permit. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301(1) in pertinent part)
 - a) A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b) A limit specified by an applicable federal new source performance standard.
2. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
3. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)
4. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001(1). (R 336.2001)
5. A change in ownership or operational control of a stationary source covered by a RO permit shall be made pursuant to R 336.1216(1). (R 336.1219(3))
6. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property. (R 336.1901(a)) *
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901 (b)) *
7. The permittee shall comply with all conditions of this RO permit. Any permit noncompliance constitutes a violation of Act 451 of 1994, as amended, Part 55, (Air Pollution Control) and is grounds for enforcement action, for permit revocation or revision, or for denial of the renewal of the RO permit. All terms and conditions of this RO permit that are designated as federally enforceable are enforceable by the Administrator of the EPA and by citizens under the provisions

of the CAA. Any terms and conditions based on applicable requirements which are designated as “state only” are not enforceable by the EPA or citizens pursuant to the CAA. (R 336.1213(1)(a))

9. 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 conditions of this RO permit. (R 336.1213(1)(b))
10. This RO permit may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Pursuant to R 336.1215 and R 336.1216 the permittee may make changes at a stationary source at his/her own risk. (R 336.1213(1)(c))
11. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the RO permit or to determine compliance with this RO permit. Upon request, a person shall also furnish to the department copies of any records that are required to be kept as a term or condition of this RO permit. (R 336.1213(1)(e))
12. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities (R 336.1213(1)(d)):
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
 - c. Inspect, at reasonable times, any of the following:
 - i) Any stationary source.
 - ii) Any process.
 - iii) Any process equipment, including monitoring and air pollution control equipment.
 - iv) Any work practices or operations regulated or required under the Renewable Operating Permit.
 - d. As authorized by Section 5526 of the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
13. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Part 5522 of Act 451, P.A. 1994. (R 336.1213(1)(g))
14. This RO permit does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))
15. For renewal of this RO permit, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the RO permit. (R 336.1210(7))
16. For modifications to this RO permit, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in R 336.1216. (R 336.1210(8)).
17. For changes to any process or process equipment covered by this RO Permit that do not require a revision of the RO Permit pursuant to R 336.1216, the permittee must comply with R 336.1215. (R 336.1215 and R 336.1216).
18. A RO permit shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the permit, but not if the effective date of the new applicable requirement is later than the RO Permit expiration date. (R 336.1217(2)(a)(i))
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. (R 336.1217(2)(a)(ii))

- c. If the department determines the permit contains a material mistake, that information required by any applicable requirement was omitted, or that inaccurate statements were made in establishing emission limits or the terms or conditions of the permit. (R 336.1217(2)(a)(iii))
 - d. If the department determines the permit must be revised to ensure compliance with the applicable requirements. (R 336.1217(2)(a)(iv))
19. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3) and R 336.2003(1))
20. Any required test results shall be submitted to AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(4))

Recordkeeping and Reporting

21. Records of any periodic emission or parametric monitoring required by Parts B, E and F and Appendices of this RO Permit, shall include the following information specified in R 336.1213(3)(b)(i), where appropriate (R 336.1213(3)(b)):
- g) The date, location, time, and method of sampling or measurements.
 - h) The dates analyses of the samples were performed.
 - i) The company or entity that performed the analyses of the samples.
 - j) The analytical techniques or methods used.
 - k) The results of the analyses.
 - l) The related process operating conditions or parameters that existed at the time of sampling or measurement.
22. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the RO Permit. (R 336.1213(1)(e) and R 336.1213(3)(b)(ii))
23. Semiannually for the term of the permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement in this RO Permit, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from permit requirements during the reporting period shall be clearly identified in the reports. (R 336.1213(3)(c)(i))
24. The permittee shall promptly report any deviations from permit requirements and certify the reports. The prompt reporting of deviations from permit requirements is defined in R 336.1213(3)(c)(ii) as follows, unless otherwise described in this RO Permit (R 336.1213(3)(c)):
- a. For deviations that exceed the emissions allowed under the RO Permit, prompt reporting means reporting consistent with the requirements of R 336.1912 as detailed in Condition 26. All reports submitted pursuant to this paragraph shall be promptly certified as specified in R 336.1213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the RO Permit and which are not reported pursuant to R 336.1912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the RO Permit, prompt reporting means the reporting of all deviations in the semiannual reports required by R 336.1213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

For reports required pursuant to R 336.1213(3)(c)(ii), prompt certification of the reports is described in R 336.1213(3)(c)(iii) as either of the following (R 336.1213(3)(c)):

- d. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - e. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the permit were submitted to the department pursuant to R 336.1213(3)(c)(ii), a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to R 336.1213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
25. Except for the alternate certification schedule provided in R 336.1213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this RO Permit shall contain a certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
 26. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in R 336.1912, to the appropriate District Office of the AQD. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under R 336.1912, must be submitted to the appropriate District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in R 336.1912(5) and shall be certified by a Responsible Official in a manner consistent with the Clean Air Act. (R 336.1912)
 27. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in R 336.1212(7) for each emission unit/process group utilizing the emissions inventory forms provided by the department. (R 336.1212(7))

Compliance Reporting and Certification

28. A responsible official shall certify to the appropriate District Office of the AQD and the EPA, that the stationary source is and has been in compliance with all terms and conditions contained in the RO permit except for deviations that have been or are being reported to the appropriate District Office of the AQD pursuant to Condition 24. This certification shall include all the information specified in R 336.1213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. (R 336.1213(4)(c))
29. The certification of compliance shall be submitted annually for the term of this RO permit as detailed in the requirement tables, or more frequently if specified in an applicable requirement or in this RO permit. (R 336.1213(4)(c))

Permit Shield

30. Compliance with the conditions of the RO Permit shall be considered compliance with any applicable requirements as of the date of RO issuance, if either of the following provisions is satisfied (R 336.1213(6)(a)(i) and (ii)):
 - a) The applicable requirements are included and are specifically identified in the permit.
 - b) The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part G of this RO Permit have been identified as non-applicable to this RO Permit and are included in the permit shield.

31. Nothing in this RO permit shall alter or affect any of the following:

- a) The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the Act. (R 336.1213(6)(b)(i))
- b) The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this permit issuance. (R 336.1213(6)(b)(ii))
- c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
- d) The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

32. The permit shield shall not apply to provisions incorporated into this permit through procedures for any of the following:

- a) Changes for operational flexibility made pursuant to R 336.1215. (R 336.1215(5))
- b) Administrative amendments made pursuant to R 336.1216(1)(a)(i-iv) until the changes have been approved by the department. (R 336.1216(1)(b)(iii))
- c) Administrative amendments made pursuant to R 336.1216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
- d) Minor permit modifications made pursuant to R 336.1216(2). (R 336.1216(2)(f))
- e) State-only modifications made pursuant to R 336.1216(4) until the changes have been approved by the department. (R 336.1216(4)(e))

33. Expiration of this RO permit results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months before the expiration date of the RO permit, but the department fails to take final action before the end of the permit term, the existing RO permit does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original permit term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Stratospheric Ozone Protection

34. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
35. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using HCFC-22 refrigerant.

Risk Management Plan

36. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under section 112(r)(1).
37. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - 1) June 21, 1999,
 - 2) Three years after the date on which a regulated substance is first listed under 68.130, or
 - 3) The date on which a regulated substance is first present above a threshold quantity in a process.
38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r), as detailed in Conditions 28 and 29 of this RO Permit. (40 CFR Part 68)

B-7. Source-Wide Requirements

At the time of RO Permit issuance, the AQD has determined that there are no additional specific source-wide applicable requirements which apply to all emission unit/process groups at this stationary source. Therefore, the permittee is subject to the General Requirements in Part A and any terms and conditions contained in this RO permit.

C-7. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGCOKE-BATTERY	No. 5 Coke Battery has eighty-five, six meter high ovens for making furnace coke including the following process devices: 1 Pushing emission control system (PECS) baghouse 1 Coal handling baghouse 1 Coke screening process 1 Quench tower 1 By-Products gas flare	4-12-1970 / 11-24-1992	Baghouses, Quench Tower, Coke screening completely enclosed in building and a chemical dust suppressant system	NA	E-07.01
EGCOKE-BYPRODUCT	The No. 3 By Products Plant includes the exhausters that draw the gases off the No. 5 coke oven battery and all the process vessels required to separate the phenols, tars, light oils, and ammonia from the coke oven gas. This occurs by passing the gas and fluids through a series of process decanters, condensers, heat exchangers, stills, and storage tanks. Light oil loading operations	4-12-1970 / 11-24-1992	Flare	SVCOKE-UNDERFIRE SVCOKE-SCRN BGHS SVCOKE-QUENCHTWR SVCOKE-PECS BGHS SVCOKE-COG FLARE SVCOKE-COAL BGHS	E-07.02
EGZUGISLAND-FUG-DUST-DTE	Fugitive dust control plan for miscellaneous sources at the Zug Island Facility. DTE Energy Services area of responsibility	NA	NA	NA	F-07-01

D-7. Flexible Groupings Summary Table

Flexible Grouping ID	Emission Unit/Process Groups Included in Flexible Grouping	Requirement Table No.
FGZUGISLAND-FUG-DUST-DTE	EGZUGISLAND-FUG-DUST-DTE	F-07.01

E-7. Emission Unit/Process Group Requirements

The tables in Part E outline the applicable requirements for each emission unit/process group listed in the Emission Unit/Process Group Summary Table. The permittee is subject to the requirements for each emission unit/process group in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each emission unit/process group shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Tables E-07.01 through E-07.02 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the emission unit/process group, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

TABLE E-07.01 No. 5 COKE OVEN BATTERY EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGCOKE-BATTERY No. 5 Coke Battery has eighty-five, six meter high ovens (tall, by-product coke oven battery) for making furnace coke including the following process devices: 1 Pushing emission control system (PECS) baghouse 1 Coal handling baghouse 1 Coke screening process 1 Quench tower				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Baghouse, Coke screening completely enclosed in building and a chemical dust suppressant system				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
Material charged to No. 5 coke battery		1. 125,000 tons of dry coal per month 2. 1,300,000 tons of dry coal per year. (R336.1201(3))			
B. Pollutant		Maximum Emission Limit			
1. Particulate from No. 5 Coke Battery		1. 113.4 pounds per hour 2. 497 tons per year (R336.1201(3))			
1a. Particulate from No. 5 coke battery charging operation, door leakage and quenching operation		1. 85.5 pounds per hour 2. 374.3 tons per year Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, door leakage, and quenching operation will be determined based upon compliance with the standards contained in Conditions V1, V2, and V9 of this Table E-01.21. (R336.1201(3))			
1b. Particulate from No. 5 coke battery pushing emission control system baghouse		1. 0.02 pound per ton of coke 2. 9.7 tons per year 3. 0.02 pound per ton of coke pushed (40 CFR Part 63 Subpart CCCCC, 63.7290(a)(2)) (R336.1201(3))			
1c. Particulate from No. 5 coke battery combustion stack		1. 25.7 pounds per hour 2. 112.6 tons per year 3. 0.012 gr/dscf (excluding sulfates) (R336.1201(3))			
2. Sulfur Dioxide from the No. 5 Coke Battery		1. 544.6 pounds per hour, based on a 3-hour average 2. 2033 tons per year. Emission rates will be calculated in accordance with the method outlined in Appendix 7. (R336.1201(3))			
2a. Sulfur Dioxide due to No. 5		1. 0.11 pounds per hour			

TABLE E-07.01 No. 5 COKE OVEN BATTERY EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
coke battery charging operation	2. 0.46 tons per year Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, will be determined based upon compliance with the standards contained in Condition V11 and the standards contained in Condition V1 of this Table-01.21. (R336.1201(3))
2b. Sulfur Dioxide from to No. 5 coke battery combustion stack	1. 544.5 pounds per hour, based on a 3-hour average 2. 2033 tons per year Emission rates will be calculated according to the method outlined in Appendix 7. (R336.1201(3))
3. Nitrogen Oxides from the No. 5 Coke Battery (when firing rich gas – a mixture of approximately 15% blast furnace gas and 85% coke oven gas)	1. 563.7 pounds per hour 2. 493.8 tons per year. (R336.1201(3))
3a. Nitrogen Oxides from the No. 5 Coke Battery (when firing lean gas – a mixture of approximately 90% blast furnace gas and 10% coke oven gas)	1. 132.9 pounds per hour 2. 581.9 tons per year (R336.1201(3))
3b. Nitrogen Oxides from the No. 5 Coke Battery	959.5 tons per year (R336.1201(3))
3c. Nitrogen Oxides due the No. 5 Coke Battery charging operation and door leakage	1. 0.16 pounds per hour 2. 0.7 tons per year Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, and door leakage, will be determined based upon compliance with the standards contained in Conditions V1 and V2 and with Condition V11 of this Table E-01.21. (R336.1201(3))
3d. Nitrogen Oxides from the No. 5 Coke Battery combustion stack when firing rich gas	1. 563.5 pounds per hour 2. 493.6 tons per year (R336.1201(3))
3e. Nitrogen Oxides from the No. 5 Coke Battery combustion stack when firing lean gas	1. 132.7 pounds per hour 2. 581.2 tons per year (R336.1201(3))
4. Carbon Monoxide from the No. 5 Coke Battery (when firing rich gas – a mixture of approximately 15% blast furnace gas and 85% coke oven gas)	1. 455.2 pounds per hour, based on 8-hour average 2. 398.8 tons per year (R336.1201(3))
4a. Carbon Monoxides from the No. 5 Coke Battery (when firing lean gas – a mixture of approximately 90% blast furnace gas and 10% coke oven gas)	1. 989.9 pounds per hour, based on an 8-hour average 2. 4335 tons per year (R336.1201(3))
4b. Carbon Monoxides from the No. 5 Coke Battery charging operation, door leakage and pushing operation	1. 17.9 pounds per hour 2. 78.0 tons per year Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, door leakage, and quenching operation will be determined based upon compliance with the standards

TABLE E-07.01 No. 5 COKE OVEN BATTERY EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	<p>contained in Special Conditions V1, V2, V4, and II(B)(1b)(1) &(2) and with II.1 of this Table E-01.21.</p> <p style="text-align: right;">(R336.1201(3))</p>
4c. Carbon Monoxides from the No. 5 Coke Battery combustion stack when firing rich gas	<p>1. 437.3 pounds per hour, based on an 8-hour average 2. 383.2 tons per year</p> <p style="text-align: right;">(R336.1201(3))</p>
4d. Carbon Monoxides from the No. 5 Coke Battery when firing lean gas	<p>1. 972 pounds per hour, based on an 8-hour average 2. 4,257 tons per year</p> <p style="text-align: right;">(R336.1201(3))</p>
5. Volatile organic compound	<p>1. 43.1 pounds per hour 2. 189 tons per year</p> <p style="text-align: right;">(R336.1201(3))</p>
6. Ammonia	<p>1. 15.30 pounds per hour 2. 67.2 tons per year</p> <p style="text-align: right;">(R336.1201(3))</p>
7. Benzene	<p>1. 1.53 pounds per hour 2. 6.7 tons per year</p> <p style="text-align: right;">(R336.1201(3))</p> <p>Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, door leakage, pushing operation, quenching, standpipes and charging lids will be determined based upon compliance with the standards contained in Conditions V1, V2, V4, V6, V7, V10 and II(B)(1b)(1)&(2) and Condition II.1 of this Table E-01.21.</p> <p style="text-align: right;">(R336.1213(3))</p>
8. Total Benzene Soluble Organics	<p>1. 0.13 pounds per hour 2. 0.57 tons per year</p> <p>Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, door leakage, pushing operation, quenching, standpipes and charging lids will be determined based upon compliance with the standards contained in Conditions V1, V2, V4, V6, V7, V10 and II(B)(1b)(1)&(2) and Condition II.1 of this Table E-01.21.</p> <p style="text-align: right;">(R336.1201(3))</p>
9. Benzo-a-Pyrene	<p>1. 0.0013 pounds per hour 2. 0.0057 tons per year</p> <p>Compliance with this emission limitation which is based upon the LAER requirements for particulate control from the charging operation, door leakage, pushing operation, quenching, standpipes and charging lids will be determined based upon compliance with the standards contained in Conditions V1, V2, V4, V6, V7, V10 and II(B)(1b)(1)&(2) and Condition II.1 of this Table E-01.21.</p> <p style="text-align: right;">(R336.1201(3))</p>
10. Fugitive visible emissions during the pushing and travel operations on the No. 5 coke battery	<p>20% determined instantaneously. Instantaneous readings shall not be averaged and shall be taken at 15-second intervals for the duration of the pushing and travel operations. The observer shall be positioned in accordance with the provisions of reference test method 9B.</p> <p style="text-align: right;">(R336.1201(3), (R336.1031))</p>
11. Opacity from any battery stack	<p>1. Daily average of 15 percent opacity for a battery on a normal coking cycle. 2. Daily average of 20 percent opacity for a battery on batterywide extended cooking.</p> <p style="text-align: right;">(40 CFR Part 63 Subpart CCCCC, 63.7296(a) and (b))</p>
III. COMPLIANCE EVALUATION	
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))	
A. MONITORING/RECORDKEEPING (R 336.1213(3))	

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

In Addition To General Requirements in Part A

<p>1. Continuous Emission Monitoring (CEM) System and Recordkeeping</p>	<p>Continuous Opacity Monitor (COM)</p>
<p>2. Process Monitoring System and Recordkeeping</p>	<p>The permittee shall record and keep the file for a period of at least five years of the following information and shall be made available in an acceptable format to AQD upon request:</p> <p>No. 5 coke battery</p> <ol style="list-style-type: none"> 1. Daily heat input. 2. Daily fuel usage. 3. Daily BTU content of the fuel 4. The volatile matter content of the coke 5. Percentage of rich gas firing based on a 12-month rolling period calculated at the end of each calendar month. 6. Opacity data from the continuous opacity monitor for the No. 5 coke battery combustion stack. 7. Computerized summary of both raw, and reduced, opacity data 8. Daily production rate and coal charging rate. 9. Summary of leak data for fugitive emission points. (R 336.1201(3), R 336.1213(3)) 10. Pressure drop across No. 5 coke battery pushing emission control system baghouse, recorded daily. A pressure drop of between 1 and 8 inches of water column shall be considered normal which can be changed upon approval by the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceeds the normal range which is not a deviation. (R336.1213(3)) 11. Annual coke oven gas consumption as it relates the BTU of the heat input to the No. 5 coke battery on a 12 – month rolling period. (R336.1213(3)) 12. Permittee shall monitor and record the opacity emissions from No. 5 Coke Battery Combustion Stack on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division (AQD). (R 336.1213(3)) 13. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS-1 of Appendix B, 40 CFR Part 60. (40 CFR 60 Appendix B) , (40 CFR 60.13), (R 336.1213(3)), (R 336.2150) 14. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, “Performance Audits Procedures for Opacity Monitors”, or a procedure acceptable to AQD. (R 336.1213(3))
<p>3. Other Monitoring and/or Recordkeeping</p>	<ol style="list-style-type: none"> 1. The permittee shall perform a non-certified visible emission observation of the No. 5 coke battery combustion stack and the No. 5 coke battery pushing emission control system baghouse at least once week during processing activity. The permittee shall initiate appropriate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. (R336.1213(3))

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

2. The permittee shall perform a Method 9 certified visible emission observation of the No. 5 coke battery combustion stack and the No. 5 coke battery pushing emission control system baghouse at least once a month during processing activity. The permittee shall initiate corrective action upon observation of visible emissions exceeding the applicable visible emission limits of this permit and shall keep a written record of each required observation and corrective action taken. **(R336.1213(3))**
3. A daily performance test shall be conducted each day, 7 days per week by certified Method 303 observer to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, and charging operations in this permit. Each performance test shall be conducted according to the procedures and requirements of Method 303 or 303A or Methods 9 and 22 where applicable. Each performance test is to be conducted by a certified observer. The certified observer shall conduct each performance test according to the requirements of 40 CFR Part 63, subpart L including 40 CFR 63.309(c). The procedures in 40 CFR 63.309(d) shall be used to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, and charging operations in this permit. **(40 CFR Part 63, Subpart L, 63.309)**
4. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the No. 5 coke battery pushing emission control system baghouse, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions as warranted, but not less frequently than at least once every month and shall keep a written record of each inspection and corrective action taken if any. **(R336.1213(3))**
5. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the baffles in the No. 5 coke battery quench tower, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and as soon as practicable after observing visible emissions or fallouts as warranted, but not less frequently than at least once every month and shall keep a written record of each inspection and corrective action taken if any. **(R336.1213(3))**
6. The permittee shall comply with the work practice standards for fugitive pushing emissions requirement as specified in 40 CFR Part 63 Subpart CCCCC, 63.7291(a). **(40 CFR Part 63 Subpart CCCCC, 63.7291(a))**
7. The permittee shall comply with the continuous compliance monitoring requirements as specified in 40 CFR Part 63 Subpart CCCCC, 63.7330. **(40 CFR Part 63 Subpart CCCCC, 63.7330)**
8. The permittee shall install, operate, and maintain each bag leak detection system for each baghouse applied to pushing emissions and other requirements as specified in 40 CFR Part 63 Subpart CCCCC, 63.7331(a).

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

(40 CFR Part 63 Subpart CCCCC, 63.7331(a))	
	<p>9. The permittee shall monitor and collect data to demonstrate continuous compliance at all times the affected sources when operating as specified in 40 CFR Part 63 Subpart CCCCC, 63.7332. (40 CFR Part 63 Subpart CCCCC, 63.7332)</p> <p>10. The permittee shall demonstrate continuous compliance with the emission limitations that apply to the affected sources as specified in 40 CFR Part 63 Subpart CCCCC, 63.7333(a), (e) and (f). (40 CFR Part 63 Subpart CCCCC, 63.7333(a), (e) and (f))</p> <p>11. The permittee shall demonstrate continuous compliance with the work practice standards that apply to the affected sources as specified in 40 CFR Part 63 Subpart CCCCC, 63.7334(a), (d) and (e). (40 CFR Part 63 Subpart CCCCC, 63.7334(a), (d) and (e))</p> <p>12. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements that apply to the affected sources as specified in 40 CFR Part 63 Subpart CCCCC, 63.7335(a), (b), (c) and (d). (40 CFR Part 63 Subpart CCCCC, 63.7335(a), (b), (c) and (d))</p> <p>13. The permittee shall demonstrate continuous compliance with other requirements that apply to the affected sources as specified in 40 CFR Part 63 Subpart CCCCC, 63.7336(a), and (b). (40 CFR Part 63 Subpart CCCCC, 63.7336(a), and (b))</p> <p>14. The permittee must keep the records that are required to the source as specified in 40 CFR Part 63 Subpart CCCCC, 63.7342(a) to (d). (40 CFR Part 63 Subpart CCCCC, 63.7342(a) to (d))</p> <p>15. The permittee shall monitor and keep records, in a satisfactory manner, of the amount of chemical dust suppressant used in the coke screening building, on a monthly basis. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R336.1301, R336.1910)</p> <p>16. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month records of the time and duration of each chemical dust suppressant system malfunction and a description of corrective action taken. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R336.1301, R336.1910)</p>
B. TESTING/RECORDKEEPING (R 336.1213(3)) In Addition to General Requirements in Part A	
1. Parameter to be Tested/ Recorded	<p>A. From the No. 5 coke battery combustion stack</p> <p>Particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide emission rates (R336.1213(3))</p>
	<p>B. From the No. 5 coke battery pushing emission control system baghouse</p>

TABLE E-07.01 No. 5 COKE OVEN BATTERY EMISSION UNIT/PROCESS GROUP REQUIREMENTS	
	Particulate emission rates (R336.1213(3)) C. From the No. 5 coke battery quench tower. Total dissolved solids content of the quench water (R336.1213(3))
2. Method/Analysis	Appropriate EPA Reference Test Method (R336.1213(3))
3. Frequency and Schedule of Testing/Recordkeeping	A. Within one year of issuance of this Renewable Operating Permit, the permittee shall conduct a particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide emission test from the No. 5 coke battery combustion stack and shall conduct the same emission tests every two and half years thereafter or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R336.1213(3)) B. Within one year of issuance of this Renewable Operating Permit, the permittee shall conduct a particulate emission test from the No. 5 coke battery pushing emission control system baghouse and shall conduct the same emission tests every two and half years thereafter or more frequently upon the request of AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to AQD for approval. The final plan must be approved by the AQD prior to testing. (R336.1213(3)) C. The permittee shall conduct test of the total dissolved solids content of the quench water using the test methods for coke oven quench towers as stipulated in R336.2033. (R336.1213(3)) D. The permittee shall conduct test of the hydrogen sulfide content of the fuel gases fired in the No. 5 coke battery at least once every 6 months. (R336.1213(3)) E. The permittee shall conduct performance tests or other initial compliance demonstrations as specified in 40 CFR Part 63 Subpart CCCCC, 63.7320 (a), (b), and (c). (40 CFR Part 63 Subpart CCCCC, 63.7320)(a),(b) and (c)) F. The permittee shall comply with test requirements, follow test methods, procedures to demonstrate initial compliance as specified in 40 CFR Part 63 Subpart CCCCC, 63.7321 to 63.7328. (40 CFR Part 63 Subpart CCCCC, 63.7321 to 63.7328))
IV. REPORTING	
Reports and Schedules	1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) 2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) 3. Annual certification of compliance pursuant to Conditions 28 and 29 of

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
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- Part A. Due annually by March 15 for the previous calendar year.
(R336.1213(4)(c))
4. The permittee must submit all of the notifications that apply to the source at the specified dates as specified in 40 CFR Part 63 Subpart CCCCC, 63.7336(a) to (e).
(40 CFR Part 63 Subpart CCCCC, 63.7334(a) to (e))
 5. The permittee must submit all of the notifications that apply to the source at the specified dates as specified in 40 CFR Part 63 Subpart CCCCC, 63.7340(a) to (e).
(40 CFR Part 63 Subpart CCCCC, 63.7340(a) to (e))
 6. The permittee must submit all of the specified reports that are required from the source and at schedules as specified in 40 CFR Part 63 Subpart CCCCC, 63.7341(a) to (e).
(40 CFR Part 63 Subpart CCCCC, 63.7341(a) to (e))
 7. The results of the certification (PS-1) and all annual audits of the COMS shall be submitted to the AQD within 30 days of completion.
(R 336.1213(3))
 8. The permittee shall submit, within 30 days following the end of each calendar quarter, an Excess Emission Report (EER) and Summary Report in an acceptable format to the AQD. This report shall be submitted for all COMS. The EER shall include each excursion, the magnitudes of the excess emissions of the excursion, the cause of the excess emissions (if known), periods of monitoring system downtime, any corrective action taken, and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, permittee shall report that fact.
(40 CFR 60.7), (R 336.2170)
- See Appendix 1.8**

V. OPERATIONAL PARAMETERS

1. There shall be no visible emissions from the charging of coal to the No. 5 coke battery except that a visible emission may be emitted for a period or periods aggregating 55 seconds during any five consecutive charges.
(R336.1201(3))
2. There shall be no visible emissions from the push side doors, the coke side doors, nor the leveling doors on the No. 5 coke battery except that a visible emission may be emitted from no more than five percent (5%) of all doors, not including the last oven charged. The total number of doors on the No. 5 coke battery shall be based upon two doors per oven.
(R336.1201(3))
3. Pushing emissions from the No. 5 coke battery shall be captured by a belted duct collection system connected to a baghouse. The baghouse outlet emission rate shall not exceed 0.02 pounds of particulate per ton of coke.
(R336.1201(3))
4. Visible emissions at the outlet of the baghouse serving No. 5 coke battery pushing emission control system shall not exceed fifteen percent opacity on a six reading average during the pushing operation.
(R336.1201(3))

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

5. Coke shall not be pushed from an oven in the No. 5 coke battery unless the pushing emission control system is installed, connected and operated properly. **(R336.1201(3), (R336.1910))**
6. There shall be no visible emissions from the standpipes on the No. 5 coke battery except that a visible emission may be emitted from no more than four percent of all standpipes. **(R336.1201(3))**
7. There shall be no visible emissions from the charging lids on the No. 5 coke battery except that a visible emission may be emitted from no more than one percent of all charging lids. **(R336.1201(3))**
8. The baffles in the No. 5 coke battery quench tower shall be kept in a good state of repair. **(R336.1201(3))**
9. Total dissolved solids content of the No. 5 coke battery quench tower shall be less than 800 milligrams per liter. **(R336.1201(3))**
10. The permittee shall not use waste water recycled from the by product recovery plant in the No. 5 coke battery quench tower. **(R336.1201(3))**
11. The maximum H₂S content of the fuel gases fired in the No. 5 coke battery shall not exceed 2.64 grains per dry standard cubic foot, based on a 3-hour average. **(R336.1201(3))**
12. The maximum heat input to the No. 5 coke battery shall not exceed 9.2×10^9 BTU per day when fired solely on coke gas oven gas. This value is based upon a coke oven gas heating value of 500 BTU per cubic foot. **(R336.1201(3))**
13. Annual coke oven gas consumption shall not account for more than 2.85×10^{12} BTU of the heat input to the No. 5 coke battery. **(R336.1201(3))**
14. The volatile matter in the coke produced by the No. 5 coke battery, based upon a daily composite sample, shall not exceed 0.94 percent by weight on an annual basis. **(R336.1201(3))**
15. The permittee shall not fire rich gas (a mixture of approximately 15% blast furnace gas and 85% coke oven gas) in the No. 5 coke battery more than 20% of the time based on a 12-month rolling period calculated at the end of each calendar month. **(R336.1201(3))**
16. The permittee shall not operate the No. 5 coke battery fuel gas flare unless the automatic ignition system is installed and operating properly. **(R336.1201(3)), (R336.1910)**
17. Raw coke oven gas, that has not been processed in the by-products plant, shall not be vented to the flare. **(R336.1201(3))**
18. The permittee shall monitor and record the quantity of coke oven gas vented to the fuel gas flare and the hours of operation of the flare on a daily basis, in a manner and instrumentation acceptable to the AQD. **(R336.1201(3)), (R336.1910)**
19. The permittee shall equip, operate and maintain the No. 5 coke battery over pressure bleeder stacks with a combustion flare including an automatic ignition system. **(R336.1201(3)), (R336.1910)**
20. There shall be no emission of coke oven gas from the bleeder stacks except during emergency malfunctions involving oven pressure of the No. 5 coke battery. All malfunctions involving operation of the bleeder stack system shall be reported to the AQD District Supervisor no later than 9:00 am of the next working day. **(R336.1201(3))**
21. The permittee shall not allow to be discharged to the atmosphere coke oven emissions from a by-product coke oven

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
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battery that exceed any of the following emission limitations:

a) For coke oven doors:

1. 4.3 percent leaking coke oven doors, as determined by the procedures in 63.309(d)(1).
40 CFR Part 63, Subpart L, 63.304(b)(2)(i)
2. 0.4 percent leaking topside port lids, as determined by the procedures in 63.309(d)(1).
40 CFR Part 63, Subpart L, 63.304(b)(2)(ii)
3. 2.5 percent leaking offtake system(s), as determined by the procedures in 63.309(d)(1).
40 CFR Part 63, Subpart L, 63.304(b)(2)(iii)
4. 12 seconds of visible emissions per charge, as determined by the procedures in 63.309(d)(2).
40 CFR Part 63, Subpart L, 63.304(b)(2)(iv)

22. The permittee shall operate and maintain the Bypass/Bleeder Stack Flare system complete with electronic ignitors installed in accordance with the design requirements listed in 40 CFR Part 63, Subpart L, Section 63.307.
40 CFR Part 63, Subpart L, 63.307(a)(1) and 307(b)
23. The No. 5 coke oven battery is designed such that any coke gas vented from the collection main passes through the Bypass/Bleeder stack flare system.
40 CFR Part 63, Subpart L, 63.307(a)(2)
24. Each flare shall be operated with no visible emissions, as determined by the methods specified in 63.309(h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
40 CFR Part 63, Subpart L, 63.307(c)
25. The permittee shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303.
40 CFR Part 63, Subpart L, 63.308(a)
26. When leak is observed in the collecting main, the permittee shall record the time and date a leak is first observe, the time and date the leak is temporarily sealed, and the time and date of repair.
40 CFR Part 63, Subpart L, 63.308(b)
27. The permittee shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of leaks.
40 CFR Part 63, Subpart L, 63.308(c)
28. At all times, including periods of startup, shutdown and malfunction, the permittee shall operate the coke oven battery and the required pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions to levels required under CFR Part 63, Subpart L.
40 CFR Part 63, Subpart L, 63.310(a)
29. The permittee shall develop a written startup, shutdown and malfunction plan and shall implement the plan by operating the coke oven battery in accordance with the plan during periods of startup, shutdown or malfunction and by correcting malfunctions as soon as practicable in accordance with the plan.
40 CFR Part 63, Subpart L, 63.310(b) and (c)
30. Notification of a startup, shutdown or malfunction shall be made to the certified observer if the observer is at the facility during occurrence, or to the enforcement agency in writing within 24 hours of the occurrence first being documented by a company employee, in order for any observation occurring during startup, shutdown, or malfunction to not be in any compliance determinations as specified in 40 CFR Section 63.309(i).
40 CFR Part 63, Subpart L, 63.310(d)
31. A written report describing the circumstances of the occurrence and actions taken that might be considered inconsistent with the startup, shutdown or malfunction shall be submitted to the AQD within 14 days of a startup, shutdown or malfunction.
40 CFR Part 63, Subpart L, 63.310(e)
32. The permittee shall maintain a record of internal reports which form the basis of every malfunction notification under

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
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- 40 CFR Section 63.310(f). **40 CFR Part 63, Subpart L, 63.310(f)**
33. The permittee shall submit semiannual compliance certifications in accordance with 40 CFR Section 63.311(d). **40 CFR Part 63, Subpart L, 63.311(d)**
34. The permittee shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the USEPA as soon as practicable but no later than 24 hours of the event. The permittee shall submit a follow-up written report within 30 days. **40 CFR Part 63, Subpart L, 63.311(e)**
35. The permittee shall maintain files on-site at all time of all required information in a permanent form suitable for inspection at an on-site location for at least 1 year, and thereafter will maintain such files for 5 years from the date of creation at a location so that the files are accessible within working days. Such records include a copy of the work practice plan, records related to the implementation of the work practice plan, design drawings and engineering specifications for the bypass/bleeder stack flare system, and records regarding the basis of each malfunction notification. **40 CFR Part 63, Subpart L, 63.311(f)**
36. The permittee shall maintain records required to be maintained and reports required to be filed under 40 CFR Part 63 Subpart L be made available to the authorized collective bargaining representative of the employees at the coke battery for inspection and copying in accordance with the provisions of 40 CFR Section 63.311(g). **40 CFR Part 63, Subpart L, 63.311(g)**
37. The permittee shall not cause or permit any standpipe lid to be open for decarbonization on any coke oven which is more than 3 ovens ahead of the oven being pushed. **(R336.1354)**
38. The permittee shall not cause or permit to be discharged into the outer air any visible emission from the coke oven gas collector main, except when spooning the main or when the emergency relief valve opens. **(R336.1355)**
39. The permittee shall install, calibrate, and maintain a continuous opacity monitor on the No. 5 coke battery combustion stack. The continuous opacity monitor shall meet the design, performance, and installation requirements set forth in USEPA, Performance Specification 1 – Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources (40CFR 60, Appendix B). Applicant shall perform daily zero and span checks and shall annually certify and calibrate the continuous emission monitor in accordance with the procedures set forth in either EPA Publication No. 340/1-83/010, Performance Audit Procedures for Opacity Monitors, or 600/8-87/025, Performance Audit Procedures for Opacity Monitors, as applicable, and all amendments thereto. **(R336.1201(3))**
40. The permittee shall comply with the work practice standards for soaking as specified in 40 CFR Part 63 Subpart CCCCC, 63.7294(a). **(40 CFR Part 63 Subpart CCCCC, 63.7294(a))**
41. The permittee shall comply with the work practice standards for quenching as specified in 40 CFR Part 63 Subpart CCCCC, 63.7295(a) and (b). **(40 CFR Part 63 Subpart CCCCC, 63.7295(a) and (b))**
42. The permittee shall comply with the operation and maintenance requirements for the coke battery as specified in 40 CFR Part 63 Subpart CCCCC, 63.7300(b). **(40 CFR Part 63 Subpart CCCCC, 63.7300(b))**
43. The permittee shall comply with the operation and maintenance requirements for the pushing emission control system (PECS) baghouse as specified in 40 CFR Part 63 Subpart CCCCC, 63.7300(c). **(40 CFR Part 63 Subpart CCCCC, 63.7300(c))**

VI. OTHER REQUIREMENTS

1. The permittee shall implement and maintain the approved malfunction abatement/preventive maintenance program for the No. 5 coke battery. Alternate formats or revisions to the approved Plan must be approved by the AQD District Supervisor. **(R336.1201(3))**

**TABLE E-07.01 No. 5 COKE OVEN BATTERY
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2. The permittee shall implement and maintain a computerized summary of both raw, and reduced, opacity data and make it available AQD upon request. **(R336.1201(3), (R336.1213(3))**
3. The permittee shall, upon request of the AQD, promptly take all steps necessary to prevent and correct any adverse impacts, caused by the permitted activity, on the environment or human health or welfare which is the result of non-compliance with any condition of this permit. **(R336.1201(3))**
4. The permittee shall furnish to the AQD District Supervisor, within 21 days of receipt of request, any information within the permittee's control which is relevant to the emissions from the No. 5 coke battery. **(R336.1201(3))**
5. After a determination by and written notification from, the Chief, AQD, that emissions from the No. 5 coke battery are causing unreasonable interference with the common public right to live free from foul or noxious odors, the permittee shall take immediate action to abate the source of the odors. The permittee shall submit an abatement program for permanent resolution of this problem within 30 days of notification by AQD. **(R336.1201(3))**
6. The permittee shall implement the approved minimization of fugitive emissions plan. Alternate formats or revisions to the approved Plan must be approved by the AQD District Supervisor. **(R336.1201(3))**
7. The permittee shall implement the approved comprehensive hydrogen sulfide emission abatement program for the coke battery operations. Alternate formats or revisions to the approved Program must be approved by the AQD District Supervisor. **(R336.1201(3))**
8. The permittee shall implement the approved comprehensive hydrogen sulfide emission abatement program for the Zug Island Facility. Alternate formats or revisions to the approved Program must be approved by the AQD District Supervisor. **(R336.1201(3))**
9. The permittee shall implement recommendations of the study report completed in April 1999, focused on measuring coal bulk density, coke mass temperatures, and flue temperatures to determine methods to further reduce pushing and travel emissions from the No. 5 coke oven battery.
(CO No. 0035-97, Section E, Paragraph 24(a), (b), and (c)), R336.1901*)
10. The permittee shall make available to the surrounding communities the results of any risk assessment performed by the USEPA to determine the appropriate level of any emission standards under section 112(f) of the Clean Air Act, within reasonable time after any such risk assessment is published by USEPA. **(40 CFR Part 63, Subpart L, 63.304(d))**
11. If required by 40 CFR 63.306(c), the permittee shall implement the written emission control work practice plan which addresses all applicable plan components identified in 40 CFR Section 63.306(b) submitted to the USEPA prior to November 15, 1993. **(40 CFR Part 63, Subpart L, 63.306)**
12. The permittee shall comply with the general compliance requirements as specified in 40 CFR Part 63 Subpart CCCCC, 63.7310(a). **(40 CFR Part 63 Subpart CCCCC, 63.7310(a))**
13. The permittee shall develop and implement a written Start-up, Shutdown, and Malfunction Plan as specified in 40 CFR Part 63 Subpart CCCCC, 63.7310(c). **(40 CFR Part 63 Subpart CCCCC, 63.7310(c))**

TABLE E-07.02 No. 3 BY PRODUCTS PLANT					
EMISSION UNIT/PROCESS GROUP REQUIREMENTS					
EMISSION GROUP	EGCOKE-BYPRODUCT The No. 3 By Products Plant includes the exhausters that draw the gases off the No. 5 coke oven battery, the process vessels required to separate the phenols, tars, light oils, and ammonia from the coke oven gas, associated light oil loading operations, and coke oven gas flare. This occurs by passing the gas and fluids through a series of process decanters, condensers, heat exchangers, stills, and storage tanks. VESSELS referred to in this Table represents all of the following: <ul style="list-style-type: none"> - Tar Storage Tanks - Tar Intercepting Sump - Light Oil Storage Tanks - Light Oil Sump - Excess Ammonia Liquor Storage Tanks - Process Vessels include: <ul style="list-style-type: none"> - Tar Decanters - Flushing Liquor Circulation Tank - Light Oil Condenser - Light Oil Decanter - Wash Oil Decanter - Wash Oil Circulation Tank 				
Flexible Grouping ID	NA				
I. DESIGN PARAMETERS					
A. Pollution Control Equipment	Flare				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA
C. Other Design Parameters					
NA					
II. MATERIAL USAGE/EMISSION LIMITS					
A. Material		Maximum Usage Rate			
NA		NA			
B. Pollutant		Maximum Emission Limit			
NA		NA			
III. COMPLIANCE EVALUATION					
Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))					
A. MONITORING/RECORDKEEPING (R 336.1213(3))					
In Addition To General Requirements in Part A					
1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA				
2. Process Monitoring System and Recordkeeping	The permittee shall record and maintain the following information regarding the semiannual monitoring of the gas blanketing system: <ol style="list-style-type: none"> 1. The date of the inspection and the name of the inspector. 2. A brief description of each visible defect. 				
	<ol style="list-style-type: none"> 3. The presence of any leaks including the date of attempted and actual repair and method of repair of the leak. 				

**TABLE E-07.02 No. 3 BY PRODUCTS PLANT
 EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	4. Brief description of system abnormalities found. 40 CFR Part 61, Subpart L, Section 61.138(b)
3. Other Monitoring and/or Recordkeeping	<p>1. Permittee shall conduct regular inspections for the purpose of determining the operational condition of the flare at least once every six month. A log of the inspection, cause(s) of malfunction or failure, repairs made and corrective actions taken shall be kept and maintained on file for a period of at least five years. (R336.1213(3))</p> <p>2. The permittee shall maintain records including information regarding equipment leaks, equipment identification numbers for all equipment in benzene service, a list of difficult to monitor valves, and information regarding any exemptions. Such records shall be maintained in a readily accessible location and be readily available to AQD upon request. 40 CFR Part 61, Subpart V, Section 61.246(c) through (j)</p> <p>3. The permittee shall maintain in a readily available location for a period not less than two years, records regarding waste streams subject to Subpart FF that include the information required by Section 61.356(b). 40 CFR, Part 61, Subpart FF, Section 61.356(a) and (b)</p>

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	Benzene Leaks (R336.1213(3))
2. Method/Analysis	By product plant equipment leak monitoring by Method 21 or other approved method (R 336.1213(3))
3. Frequency and Schedule of Testing/Recordkeeping	<p>1. Monthly for pump seals</p> <p>2. Quarterly for flanges, valves and exhausters.</p> <p>3. Semi annually for blanketing system.</p> <p>4. Annually for difficult to monitor equipment.</p> <p>Frequency of leak tests as requirements of 40 CFR Part 61, Subpart V – National Standards for Equipment Leaks shall prevail over the above indicated frequency if lesser. (R336.1213(3))</p>

IV. REPORTING

Reports and Schedules	<p>1. Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii))</p> <p>2. Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i))</p> <p>3. Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(c))</p> <p>4. Reports containing information regarding source leaks, control system abnormalities, and equipment leaks and other information specified in Section 61.138(f) shall be submitted semiannually. The permittee shall submit the reports in January and July of each year. 40 CFR Part 61, Subpart L, Section 61.138(f) and (g)</p> <p>5. Reports containing information regarding source leaks, control system abnormalities, and equipment leaks and other information specified in Section 61.242, 61.245, 61.246, and 61.247 shall be submitted semiannually. The permittee shall submit the reports in January and July of each year.</p>
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**TABLE E-07.02 No. 3 BY PRODUCTS PLANT
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

	<p style="text-align: center;">40 CFR Part 61, Subpart V, Section 61.247(a) and (c)</p> <p>6. Reports containing information including the process unit identification, the number of leaks in pumps and valves for each month of the reporting period, an explanation of any delay of repairs, dates of process unit shutdowns, any changes that have occurred since the initial report, and the results of any performance tests or monitoring to determine compliance with no detectable emissions shall be submitted semiannually. The permittee shall submit the reports in January and July of each year.</p> <p style="text-align: center;">40 CFR Part 61, Subpart V, Section 61.247(b)</p> <p>7. Previous Total Annual Benzene (TAB) calculations for the No. 3 By Products Plant have been less than 1Mg/yr. The permittee will review the TAB each year and shall submit an updated TAB report whenever there is a change in the process generating the waste stream that could cause the TAB to increase to 1 Mg/yr or more.</p> <p style="text-align: center;">40 CFR, Part 61, Subpart FF, Section 61.357(b)</p> <p style="text-align: center;">See Appendix 1.8</p>
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V. OPERATIONAL PARAMETERS

1. The permittee shall eliminate hydrogen sulfide emissions generated in the final cooler stage of the By-Products Plant by operating and maintaining the contact final cooler with a non-contact final cooler facility.
(CO No. 90-2, Section 5A, Paragraph a), (R336.1901*)
2. The permittee shall reduce hydrogen sulfide emissions generated at the tar decanter vessels located in the By-Products Plant by maintaining a good seal of the vessels and maintaining gas pressure relief through the raw gas system.
(CO No. 90-2, Section 5A, Paragraph b), (R336.1901*)
3. The permittee shall enclose and seal all opening on each VESSELS in the coke By-Product Plant.
40 CFR Part 61, Subpart L, Section 61.132(a)(1) and (d)
4. The permittee shall maintain and operate a closed, positive pressure gas blanketing system utilizing coke oven gas for all the VESSELS.
40 CFR Part 61, Subpart L, Section 61.132(a)(2) and (d)
5. The permittee shall visually inspect the connections and seals on the gas blanketing system (control system) including the ductworks for evidence of visible defects such as gaps or tears by Method 21 on a semi annual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access latch.
40 CFR Part 61, Subpart L, Section 61.132(b) and (d)
6. When leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
40 CFR Part 61, Subpart L, Section 61.132(b)(3) and (d)
7. The permittee shall conduct a maintenance inspection of the control system (gas blanketing system) on an annual basis for system abnormalities. The permittee shall make a first attempt at repair within 5 days, and final repairs within 15 days of leak detection.
40 CFR Part 61, Subpart L, Section 61.132(c) and (d)
8. The permittee shall enclose and seal the liquid surface in the light oil sump to form a close system to contain emissions in accordance with 40 CFR 61.133. The permittee shall monitor the connections and seals by method 21 and shall visually inspects the source semiannually and at any other time when the cover is removed. The permittee shall make a first attempt at repair within 5 days, and final repairs within 15 days of leak detection.
40 CFR Part 61, Subpart L, Section 61.133
9. No (zero) emissions are allowed from naphthalene processing, final coolers and final-cooler cooling towers at the coke

**TABLE E-07.02 No. 3 BY PRODUCTS PLANT
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

by-product recovery plant. **40 CFR Part 61, Subpart L, Section 61.134**

10. Each piece of equipment in benzene service which is subject to 40 CFR Part 61 Subpart L shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.

40 CFR Part 61, Subpart L, Section 61.135(c)

11. The permittee shall monitor each exhauster quarterly to detect leaks by Method 21.

40 CFR Part 61, Subpart L, Section 61.135(d)

12. The permittee shall demonstrate compliance with the requirements of 61.132 through 61.135 for each new and existing source at the By Products Plant.

40 CFR Part 61, Subpart L, Section 61.132 through 61.135

13. The permittee shall comply with the requirements in 61.245, Test Methods and Procedures of 40 CFR Part 61, Subpart V.

40 CFR Part 61, Subpart L, Section 61.137

VI. OTHER REQUIREMENTS

1. The permittee shall record and keep in a readily accessible location information pertaining to the design of the control equipment (including schematics, design specifications, and information regarding changes in the design specifications) installed to comply with Sections 61.132 through 61.134.

40 CFR Part 61, Subpart L, Section 61.138(a)

2. The permittee shall demonstrate compliance with the requirements of 40 CFR Part 61, Subpart V – National Emission Standards for Equipment Leaks (Fugitive Emission Sources) 61.242-1 to 61.242-11.

40 CFR Part 61, Subpart V, Section 61.242-1(a)

3. Each piece of equipment subject to 40 CFR Part 61, Subpart V shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

40 CFR Part 61, Subpart V, Section 61.242-1(d)

4. Each pump in benzene service shall be monitored monthly to detect leaks by Method 21. Permittee however may employ any of the alternative compliance mechanisms at Sections 61.242-1(c), 61.242-2(d), (e), or (f) in lieu of monthly leak detection monitoring.

40 CFR Part 61, Subpart V, Section 61.242-2 (a)(1)

5. Each pump in benzene service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

40 CFR Part 61, Subpart V, Section 61.242-2 (a)(2)

6. When a leak is detected, the permittee shall repair the leak (leak indication by: Method 21 reading greater than or equal to 10,000 ppm or indications of liquid dripping from pump seal) within 5 days of detection, and repairs any leaks as soon as practicable but no later than 15 days after detection.

40 CFR Part 61, Subpart V, Section 61.242-2 (b) and (c)

7. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by Method 21 reading of less than 500 ppm above background. Pressure relief devices in gas/vapor service shall be returned to a condition of no detectable emissions as soon as practicable following a pressure release but no later than 5 days after such release. Method 21 monitoring is performed on the pressure relief device in gas/vapor service within 5 days of a pressure release to confirm that it is operating with no detectable emissions.

40 CFR Part 61, Subpart V, Section 61.242-4

8. Each sampling connection system shall be equipped with a closed-purge system or closed vent system.

40 CFR Part 61, Subpart V, Section 61.242-5

TABLE E-07.02 No. 3 BY PRODUCTS PLANT
EMISSION UNIT/PROCESS GROUP REQUIREMENTS

9. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve such that the open end is sealed at all times except during operations requiring process fluid flow through the valve or line. Second valves shall be operated such that the process fluid valve is closed before the second valve.
40 CFR Part 61, Subpart V, Section 61.242-6
10. Each valve in benzene service shall be monitored monthly to detect leaks by Method 21. If a leak is detected (reading of 10,000 ppm or greater), a first attempt at repair shall be made within 5 days and final repairs are to be made as soon as practicable but no later than 15 days after the leak is detected. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
40 CFR Part 61, Subpart V, Section 61.242-7(a) through (e)
11. The permittee shall check pressure relief devices in liquid service and flanges and other connectors during the monthly Method 21 leak monitoring of valves. If evidence of a potential leak is found by visual, audible, olfactory or other method, Method 21 monitoring shall be performed within 5 days. If such monitoring detects a leak (instrument reading of 10,000 ppm or greater) the permittee shall make a first attempt at repair within 5 days and final repair is made as soon as practicable but not later than 15 days after detection.
40 CFR Part 61, Subpart V, Section 61.242-8
12. Delay of repair for which leaks have been detected will be allowed if the repair is technically infeasible without process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
40 CFR Part 61, Subpart V, Section 61.242-10
13. The permittee shall comply with the test methods and procedures requirements set forth in Section 61.245. Monitoring shall comply with Method 21 of 40 CFR Part 60, Appendix A utilizing calibrated instrumentation, and employing the techniques described in Section 61.245(b) and (c).
40 CFR Part 61, Subpart V, Section 61.245(a) through (c)
14. The permittee shall determine what equipment are in benzene service as each piece of equipment within the process unit is presumed to be in benzene service unless the permittee demonstrates that the piece of equipment is not in benzene service.
40 CFR Part 61, Subpart V, Section 61.245(d)
15. When leak is detected at any pump, valve, pressure relief device in liquid service, flange and other connector, or exhauster, the permittee shall attached to the leaking equipment a weatherproof and readily visible identification, marked with the equipment identification number. Any such identification tag on a valve shall not be removed until the valve has been monitored for 2 successive months and no leak has been detected. Any such identification tag can be removed from any other equipment after the leak has been repaired.
40 CFR Part 61, Subpart V, Section 61.246(b)
16. If the permit elects to comply with the alternative standards for valves (Section 61.243-1 or 2), the permittee shall notify the AQD of such election 90 days before implementing the alternative standard.
40 CFR Part 61, Subpart V, Section 61.247(d)
17. The permittee need not apply for approval of construction or modification under 40 CFR Sections 61.05(a) and 61.07 for a new source that is not part of the construction of a new process unit, provided the new source complies with Section 61.242 and the appropriate information regarding the new source is provided in the next semiannual report.
40 CFR Part 61, Subpart V, Section 61.247(e)
18. The permittee shall determine the Total Annual Benzene (TAB) quantity in accordance with 40 CFR, Part 61, Subpart FF, Section 61.355(a)(1), (a)(2), (a)(6), (b), and (c).
40 CFR, Part 61, Subpart FF, Section 61.355(a)(1),(a)(2), (a)(6), (b), and (c)

**TABLE E-07.02 No. 3 BY PRODUCTS PLANT
EMISSION UNIT/PROCESS GROUP REQUIREMENTS**

19. Previous TAB calculations for the No. 3 By Products Plant have been less than 1Mg/yr. The permittee shall comply with the recordkeeping requirements of 61.356 and reporting requirements of 61.357. The permittee shall repeat the determination of TAB quantity whenever there is a change in the process generating the waste that could cause the TAB to increase to 1Mg/yr or more. **40 CFR, Part 61, Subpart FF, Section 61.355(a)(5)**

* **This requirement is state enforceable only.**

F-7. Flexible Grouping Requirements

The tables in Part F outline the applicable requirements for each flexible grouping listed in the Flexible Groupings Summary Table. The permittee is subject to the requirements for each flexible grouping in addition to the General Requirements in Part A and any other terms and conditions contained in this RO Permit.

Each flexible grouping shall meet the design parameters, material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements listed in Table F-07.01 as well as other terms and conditions specified in this RO Permit to assure compliance with all applicable requirements. The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited in the tables. The underlying applicable requirements for the material usage/emission limitations, monitoring, recordkeeping, reporting and testing requirements, operational parameters, and any other requirements are identified in parentheses. If a specific requirement type does not exist for the flexible grouping, NA (not applicable) has been used in the table. Those requirements which are enforceable by the state only are designated by an asterisk.

**TABLE F-07.01 ZUG ISLAND FACILITY FUGITIVE DUST-DTE ENERGY SERVICES
 AREA OF RESPONSIBILITY
 FLEXIBLE GROUPING REQUIREMENTS**

FLEXIBLE GROUPING	FGZUGISLAND-FUG-DUST-DTE
Emission Unit/Process Groups	EGZUGISLAND-FUG-DUST-DTE

I. DESIGN PARAMETERS

A. Pollution Control Equipment	Application of dust suppressant. SIP No. 27-1993 Fugitive Dust Control Plan				
B. Stack/Vent Parameters	NA				
Stack/Vent ID	a. Minimum Height (feet)	b. Maximum Exhaust Dimension (inches)	c. Temp. (°F)	d. Air Flow Rate (acfm)	Applicable Requirement
NA	NA	NA	NA	NA	NA

C. Other Design Parameters

NA

II. MATERIAL USAGE/EMISSION LIMITS

A. Material	Maximum Usage Rate
NA	NA
B. Pollutants	Maximum Emission Limit
NA	NA

III. COMPLIANCE EVALUATION

Records of all of the following shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

**A. MONITORING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Continuous Emission Monitoring (CEM) System and Recordkeeping	NA
2. Process Monitoring System and Recordkeeping	The permittee shall record the treatment information for the fugitive dust sources using the format specified in Appendix 4. (SIP Consent Order No. 27-1993, Exhibit A, Paragraph J (2) and ADDENDUM) , (R 336.1213(3))
3. Other Monitoring and/or Recordkeeping	NA

**B. TESTING/RECORDKEEPING (R 336.1213(3))
 In Addition to General Requirements in Part A**

1. Parameter to be Tested/Recorded	NA
2. Method/Analysis	NA
3. Frequency and Schedule of Testing/Recordkeeping	NA

IV. REPORTING

Reports and Schedules	<ol style="list-style-type: none"> Prompt reporting of deviations pursuant to Condition 24 of Part A. (R336.1213(3)(c)(ii)) Semiannual reporting of deviations pursuant to Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R336.1213(3)(c)(i)) Annual certification of compliance pursuant to Conditions 28 and 29 of Part A. Due annually by March 15 for the previous calendar year. (R336.1213(4)(e)) The permittee shall submit to on a quarterly basis to AQD a report
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**TABLE F-07.01 ZUG ISLAND FACILITY FUGITIVE DUST-DTE ENERGY SERVICES
 AREA OF RESPONSIBILITY
 FLEXIBLE GROUPING REQUIREMENTS**

identifying each day in which any emission limit, operational requirement, or recordkeeping requirement as specified in Exhibits A or B of SIP No. 27-1993 was not met. This report shall for each instance explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **SIP No. 27-1993, Paragraph 11**

See Appendix 1 8

V. OPERATIONAL PARAMETERS

The permittee shall comply with the following source descriptions and control measures:

A. UNPAVED ROADS (In Coke and Byproducts Plant Areas)

1. All unpaved roads will be treated with asphalt emulsion, petroleum resin, an acrylic cement, calcium chloride or magnesium chloride.
2. Road Pro or an equivalent effective asphalt emulsion, petroleum resin or acrylic cement will be used as the chemical dust suppressant at a dilution ration of 7 parts water/1 part suppressant and application rate of 0.83 gallon solution / sq. yard. For calcium chloride or magnesium chloride, the permittee shall use the dilution ration and application rate that is appropriate according to manufacturer recommendations.
3. Application Intensity – One (1) gallon of suppressant solution per 100 square feet of surface.
4. The unpaved roads listed in Table 13 will be treated once every month, unless weather conditions preclude treatment. All unpaved roads not listed in Table 13 will be treated once per quarter, unless weather conditions preclude treatment.

B. UNLOADING OR LOADING OF OPEN STORAGE PILES (Applicable to Coal, Coke and Breeze)

1. Self unloading boats have an adjustable stacker type unloading conveyor. These booms will be made to track or follow pile tops closely.
2. Conveyor stacker booms are operated such that the drop height is less than five (5) feet.
3. Clam shell crane buckets are lowered to within five (5) feet of the pile before material discharge is permitted.
4. All scheduled coal vessels are equipped with water sprays at the discharge end of the unloading boom which consists of serrated head water sprays to spray the entire width of the unloading boom transfer belt.
5. Pile reclaim is by front end loader to large dump trucks. The loader bucket is lowered to within 12” of the truck top before the bucket is tilted.
6. There are two principal coal dump stations. One has two enclosed sides, the other has three enclosed sides.
7. During periods of high winds (two instantaneous readings greater than 35 mph within one hour, as measured by a calibrated anemometer on site) unloading of coal boats, transport of coal to field storage and reclamation of coal there from, will be discontinued. Operations may resume within 15 minutes after wind speeds have lowered below this level.
8. Water sprays are located at discharge end of stacker booms (see Attachment 5). Depending on the amount of moisture added during coal loading, up to ten gallons per ton may be applied.
9. The above plan elements will be suspended when precipitation in any form during the previous 24-hour period has exceeded 0.1 inches or current precipitation obviates the need for control on the material being loaded or unloaded.
10. Inspections of loading and unloading operations are made by the Environmental Control Inspector 5 days a week during the control season of March through October and once a week during the balance of the year.

C. STORAGE PILES (Applicable to Coal, Coke and Breeze)

**TABLE F-07.01 ZUG ISLAND FACILITY FUGITIVE DUST-DTE ENERGY SERVICES
AREA OF RESPONSIBILITY
FLEXIBLE GROUPING REQUIREMENTS**

1. A chemical dust suppressant is applied to temporary roadways used or created by equipment reclaiming coal from field storage.
2. When coal is reclaimed from storage, the open exposed face is treated with a chemical dust suppressant, except for the actual working face. The working face will not exceed an area greater than 120 linear or horizontal feet.
3. If a bulk material spills, the loader operator pushes the material back into the main pile. Also, suppressant is used in the active area of loading/unloading to minimize the potential for fugitive dust generation. Should a material spill on a road surface, the spilled material is readily removed by the industrial vacuum sweeper.
4. Areas listed in E. 1., 2., and 3. above will be treated with a chemical dust suppressant once a month during the control season.
5. Soil Sement or an equivalent acrylic cement or bonding agent is used as the chemical dust suppressant (See Attachment 1).
6. A 1 to 20 dilution ratio will be used. The application intensity will be 0.2 gal/square yard.
7. Suppressant application will be suspended during the non-control season from November through February.
8. Weekly visual inspections are made of the sprayed storage piles by the Environmental Control Inspector. The inspector's observations include the barrier thickness on the storage pile surface and an overall visual inspection of the suppressant surface quality. If the surface quality of the suppressant exhibits the potential to allow for a visible emission (i.e. emissions producing a 10% opacity), additional suppressant compound will be applied.
9. Daily inspection, five days per week, of the raw material storage and transportation areas, including the working face area, will be made by Environmental Control personnel during the months of March through October. Inspections for the months of November through February will be made on a weekly basis. A log of inspections and records will be retained on file for at least two(2) years from the date of inspection.

D. OUTDOOR CONVEYING TRANSFER POINTS

1. Conveyor belt speeds are limited to 700 fpm.
2. Conveyor areas are inspected and cleaned daily.
3. Clean up along the conveyors is performed routinely and any raw materials that are cleaned up are shoveled directly onto the belt.
4. One or more of the following techniques is employed in every external conveyor installation:
 - a. Enclosure of transfer points.
 - b. Usage of belt wipers or scrappers.
 - c. 210 degree corrugated steel covers.
 - d. Transfer drop heights limited to 4-5 feet.
5. Disposal of belt cleaner collectates: Most conveyor belt cleaners have collecting chutes that direct the removed materials to the primary receiving hopper. Where this is not possible, the material is discharged to a pile and the pile is combined with the transferred material. In all cases raw materials are recombined for forward flow with the bulk material being conveyed.
6. Conveyor speeds are limited by the physical configuration of the units drive train and the size of the motor employed. With the recent reconfiguration of the plant, all conveyors are capable of handling twice the required amounts of material. No inspections are required to assure proper belt speeds.
7. Conveyor areas are monitored by shift supervision on a frequent basis and a housekeeping inspection is made each week. Any spillage is scheduled for cleanup as soon as it is found, but not later than the weekly inspection.

E. TRANSPORTATION OF BULK MATERIALS

1. Material transported in trucks that are in the category of >1% to <5% silt are loaded with 6" freeboard or are adequately wetted and stable.
 - a. Breeze – average moisture – 19%

**TABLE F-07.01 ZUG ISLAND FACILITY FUGITIVE DUST-DTE ENERGY SERVICES
AREA OF RESPONSIBILITY
FLEXIBLE GROUPING REQUIREMENTS**

2. Truck bodies are inspected to insure integrity.
3. Vehicles are limited to speeds less than 15 mph.
4. Vehicle exhaust are directed upwards.
5. Materials in the category of >5% to <20% silt are wet or transported in covered trucks.
 - a. Coal Pile 1 - 8% moisture
 - b. Coal Pile 2 - 8% moisture
 - c. Coal Pile 3 - 8% moisture
 - d. Coal Pile 4 - 8% moisture
6. When precipitation in any form during the previous 24 hour period has exceeded 0.1 inches or current precipitation obviates the need for control of the material being transported, wet suppression is suspended.
7. During the non-control season from November to March, wet suppression of materials is suspended.

H INSPECTION PROCEDURES

1. The Environmental Control Department will select 4 random trucks for inspection. These observations will be made on a monthly basis and shall record the following information:
 - a. Date
 - b. Truck Identification
 - c. Contents
 - d. Adequate freeboard
2. Truck bodies will be inspected by the trucking contractor and the Environmental Control Department with the following frequency:
 - i. Permanently assigned trucks – semiannually
 - ii. Temporary or contract trucks – upon entry to site and every 6 months thereafterInspection reports will be prepared and retained on file for a period of 12 months following the date of inspection. Any permanently assigned truck found defective will be promptly scheduled for repair or replacement. Any temporary contract truck found defective will be promptly repaired or removed from the site.
3. Vehicle Speeds – The maximum posted and permitted speed on Great Lakes Steel property is 15 mph. This speed is monitored and controlled by the mobile division of the Great Lakes Security Department.
4. Vehicle Exhaust – Truck exhausts will be reexamined to confirm their vertical discharge. Contract trucks will be inspected upon arrival at the plant. These inspections and the resulting records will be prepared and retained as in H.2 above.

I. RECORDKEEPING AND REPORTING REQUIREMENTS

1. A journal log book is kept and retained for a period of at least 2 years after the final entry. Records shall include:
 - a. Date
 - b. Time
 - c. Weather conditions
 - d. Observations of roadway and lot conditions
 - e. Observations of spills or reports of such
 - f. Observations of loading and unloading operations
 - g. Control activities:
 - 1 – Recently completed activities
 - 2 – Actions requiring implementation
 - h. Dates of arrival of boat or train shipments
2. Records of dust suppressant applications made pursuant to paragraph E.1 and E.2 above will be maintained by Great Lakes Steel Environmental Control Department and will be retained for a period of at least 2 years.

**TABLE F-07.01 ZUG ISLAND FACILITY FUGITIVE DUST-DTE ENERGY SERVICES
AREA OF RESPONSIBILITY
FLEXIBLE GROUPING REQUIREMENTS**

J. SPECIAL CONSIDERATIONS

1. Most of the raw materials are received in self unloading boats. The booms from these boats are normally kept close to a pile top. However, occasionally wave action causes a boat to rock gently and results in boom rise and fall. To avoid boom damage under these conditions a greater vertical separation is maintained between the boom and pile top, and as a result, drop heights of 20 feet may occur at these times. Under more normal conditions, a drop height of 5 feet or less can be maintained. This height of 5 feet or less is also maintained for stacker booms.
2. All materials hauled from Zug Island are transported in contractor trucks. Although control of fugitive emissions from contractor trucks leaving Zug Island is rightfully the responsibility of each contractor, a requirement for 6" of freeboard will be included in all new truck hauling contracts.

(SIP Consent Order No. 27-1993, Exhibit A, Paragraph 3)

VI. OTHER REQUIREMENTS

1. Conditions under which cleaning or water suppression maybe suspended:
 - A. When daytime temperatures are below 32 degrees F and/or freezing on roadway surfaces poses a hazard.
 - B. When precipitation in any form during the previous 24-hour period has exceeded 0.1 inches or current precipitation obviates the need for control.
 - C. Control measures are also suspended during the non-control season from November through February.
 - D. If an extended period of sub-freezing weather occurs under conditions where there is no snow or ice cover and if roadway surface loadings become excessive, a vacuum sweeper will be called in. Therefore, the implementation of this action will be discretionary by the Manager, Environmental Control

SIP Consent Order No. 27-1993, Exhibit A, Paragraph 4)

*** This requirement is state enforceable only.**

G-7. Non-Applicable Requirements

At the time of RO Permit issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in Part A (Conditions 30 through 33) of this RO Permit pursuant to R 336.1213(6)(a)(ii).

H-7. Appendices

Appendix 7.1. Abbreviations Used in This Permit

The following is an alphabetical listing of all abbreviations/acronyms used in this RO Permit.

acfm	Actual cubic feet per minute
AQD	Air Quality Division
CAA	Federal Clean Air Act
CEM	Continuous Emission Monitor(ing)
CFR	Code of Federal Regulations
DEQ	Michigan Department of Environmental Quality
EPA	United States Environmental Protection Agency
°F	Degree Fahrenheit
HCFC	Hydrochlorofluorocarbon
ID	Identification (Number)
MVAC	Motor vehicle air conditioner
NA	Not applicable
RMP	Risk Management Plan
RO	Renewable Operating
SRN	State Registration Number
Temp.	Temperature
VOC	Volatile Organic Compound

Appendix 7.2. Schedule of Compliance

The permittee has submitted a compliance plan as detailed below. In addition the permittee will negotiate a Consent Order with MDEQ-AQD to memorialize all outstanding non compliance issues as well as the details of compliance plan outlined below.

The permittee is conducting a continuous environmental compliance assessment since assuming ownership of the facility on May 20, 2003. In the process, the permittee may identify certain areas that will need improvements and will develop repair/modification plans for air emission sources, control devices, and management practices at the facility.

Compliance Plan

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

The permittee will also repair / install mist impingement baffles for the quench tower at the No. 5 Coke Battery capable of continuous compliance.

Schedule of Compliance

The following schedule of compliance conforms with the provisions of Rule 119(a) and Rule 213(4).

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
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Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
EGCOKE-BATTERY, Condition No. V.8	R336.1201(3), R336.1910	Repair / installation of mist impingement baffles for the quench tower at the No. 5 Coke Battery capable of continuous compliance.	Conduct study and engineering design of the baffles.	01/01/2004	Complete
			Place order for the baffles.	04/15/2004	Complete
			Begin on-site construction.	08/02/2004	
			Complete construction and achieve compliance.	09/30/2004	

Progress Reports

The permittee shall submit certified Progress Reports to the appropriate District Supervisor of the AQD using the MDEQ Report Certification form (EQP 5736). Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. (R 336.1213(4)(b))

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. (R 336.1213(4)(b)(i))

The actual dates that the activities, milestones, or compliance are achieved. (R 336.1213(4)(b)(i))

An explanation of why any dates in the schedule of compliance were not or will not be met. (R 336.1213(4)(b)(ii))

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. (R 336.1213(4)(b)(ii))

Appendix 7.3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 7.4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in Table B. Alternative formats must be approved by the AQD District Supervisor.

Required Records for Fugitive Dust Sources

- A. Unpaved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Name of Product Applied
 - 5. Amount of Solution / Water Applied
 - 6. Dilution Ratio
 - 7. Road Segment / Lot Identification

- B. Storage Piles / Material Handling
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial
 - 4. Dilution Ratio
 - 5. Amount of Dust Suppressant / Water Applied
 - 6. Identification of Pile / Material Handling Operation Treated
 - 7. Equipment Used

- C. Optional Records
 - 1. Precipitation
 - 2. Temperature
 - 3. Wind Direction and Velocity

Appendix 7.5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Requirement Tables. Therefore, this appendix is not applicable.

Appendix 7.6. Permits to Install/Operate

The following table lists the Permits to Install and/or Operate which relate to the identified Emission Units or Flexible Groupings:

Permit to Install/Operate Number	Description of Equipment	Corresponding Emission Unit or Flexible Grouping ID
C-6426 & C-7070, 414-96	Rebuild No. 5 coke oven battery. Coke by-product plant	E-07.01 and E-07.02

Appendix 7.7. Emission Calculations

There are no specific emission calculations to be used for this Section of this RO permit. Therefore, this appendix is not applicable.

Appendix 7.8. Reporting

A. Annual and Deviation Certification Reporting

The permittee shall use the DEQ Report Certification form (EQP 5736) and DEQ Deviation Report form (EQP 5737) for the annual and deviation certification reporting referenced in Section IV of the Requirement Tables. Alternative formats must meet the provisions of R 336.1213(4)(c) and R 336.1213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Requirement Tables. Therefore, Part B of this appendix is not applicable.