MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

August 18, 2016

PERMIT TO INSTALL
120-16

ISSUED TO
AK Steel Dearborn Works

LOCATED AT
4001 Miller Road
Dearborn, Michigan

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
A8640

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: **July 21, 2016**	
DATE PERMIT TO INSTALL APPROVED: **August 18, 2016**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. 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 Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department 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 condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. 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)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUSCALEBREAKER	Coil straightener and scale breaker	02/04/08	NA
EUNPKLTANKS	Steel pickling line tank farm	02/04/08	NA
EUNPKLLINE	Steel pickling process line	02/04/08	NA
EUNTANDMILL	Tandem cold rolling mill	02/04/08	NA
EUPKLTMBLDGHEAT	Pickling line and tandem mill building heaters	02/04/08	FGPLTCMHDGLHEAT
EUHDGLCLEANER	Hot dip galvanizing line (HDGL) pre-cleaning process	02/04/08	FGHDGLVOC
EUHDGLH2OHEATER	HDGL water heaters	02/04/08	FGHDGLSCR
EUHDGLANNEAL	HDGL annealing furnace	02/04/08	FGHDGLSCR
EUHDGLDRYER	HDGL natural gas fired dryer	02/04/08	FGPLTCMHDGLHEAT
EUHDGLSKINPASS	HDGL skin pass process (temper rolling mill)	02/04/08	FGHDGLVOC
EUHDGLES_OILING	HDGL electro-static oiling process	02/04/08	FGHDGLVOC
EUHDGLBLDGHEAT	HDGL building heaters	02/04/08	FGPLTCMHDGLHEAT
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

The following conditions apply to: EUSCALEBREAKER

DESCRIPTION: Coil straightener and scale breaker

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: scale breaker baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10 (filterable)	0.005 gr/dscf	Test Protocol*	EUSCALEBREAKER	SC V.1	R 336.1205(1)(a)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the scale breaker process unless the baghouse is installed, maintained, and operated in a satisfactory manner. **(R 336.1205(3), R 336.1301, R 336.1331(c))**

2. The permittee shall not operate EUSCALEBREAKER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for operation of the scalebreaker baghouse is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(3), R 336.1301, R 336.1331(c) R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. At least once every ROP permit term the permittee shall verify PM10 emission rates from EUSCALEBREAKER by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Permittee shall periodically inspect the baghouse to determine the operational and physical condition of the baghouse at least once per quarter. The baghouse shall be inspected as necessary immediately after a malfunction or failure of the baghouse or the process equipment to determine the reason for the malfunction or failure. Written records of each inspection and corrective action taken, if any, shall be maintained. **(R336.1910)**

2. The permittee shall perform a non-certified visible emission observation of the baghouse stack at least once a month during processing activity and keep a written record the results of the observation. The permittee shall initiate corrective action upon observation of visible emissions and shall keep a written record of each required observation and corrective action taken. **(R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCS_SBBH	48	110	R 336.1201 (3)

IX. OTHER REQUIREMENTS

NA

Footnotes:

[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EUNPKLTANKS

DESCRIPTION: Steel pickling line tank farm

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Packed column scrubber using water to control hydrogen chloride (HCl) emissions from the pickling line tank farm

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall maintain and implement an Operation and Maintenance Plan (OMP) for the EUNPKLTANKS hydrogen chloride (HCl) storage tanks scrubber. **(40 CFR 63.1160(b)(2))**

2. The permittee shall not operate EUNPKLTANKS to load or unload tanks containing hydrochloric acid containing materials unless the water scrubber is installed, maintained, and operated in a satisfactory manner during such periods. **(R 336.1205(3), R 336.1225, 40 CFR 63.1159(b))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each EUNPKLTANKS hydrochloric acid storage vessel. **(40 CFR 63.1159(b))**

2. Loading and unloading in EUNPKLTANKS 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 63.1159(b))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep a record of the liquid flow to the EUNPKLTANKS scrubber, daily. **(40 CFR 63.1162(a)(2), (R 336.1201(3))**

2. The permittee shall monitor and record the pressure drop across the EUNPKLTANKS scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance. **(R336.1225, R336.1910, 40 CFR 63.1162(c))**

3. The permittee shall inspect, and keep records of inspection findings for each EUNPKLTANKS hydrogen chloride (HCl) storage vessel semiannually to determine that the closed-vent system and the air pollution control device are installed and operating when required. **(R336.1225, 40 CFR 63.1162(c))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVNPKLTNKSCRUB	18	25	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:

[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EUNPKLLINE

DESCRIPTION: Steel pickling process line

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Packed column scrubber using water to control hydrogen chloride (HCl) emissions from the process equipment.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. hydrogen chloride (HCl) (CAS No. 7647010)	6 ppmv from scrubber stack. Or A mass emission rate that corresponds to a control efficiency of at least 99 percent reduction based upon inlet concentration	Test Protocol*	EUNPKLLINE	SC V.1	R 336.1225, 40 CFR 63.1158(a)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate unless the packed column scrubber is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1225, R 336.1910, 40 CFR Part 63 Subpart CCC)**

2. The permittee shall maintain and implement the site-specific operating parameter values for a minimum scrubber makeup water flow rate and recirculation water flow rate established from conducted EUNPKLLINE performance tests as required by 40 CFR Part 63.1161(b). The permittee shall determine the average make up water flow rate and recirculation water flow rate during each performance test and shall maintain and implement that number as the minimum scrubber makeup water flow rate and recirculation water flow rate until the next performance test and a new number is established. **(R 336.1201(3), 40 CFR 63.1161(b))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. At least once every two and a half years verification of the HCl emission rate from the EUNPKLLINE pickling line process water scrubber stack SVNPKLINESCRUB, by testing at owner's expense, in accordance with Department requirements, will be required. 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. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. **(R 336.1225, 40 CFR 63.1161(a), 40 CFR 63.1162(a)(2))**

2. The permittee shall conduct the performance test for the EUNPKLLINE pickling process and control device to either measure simultaneously the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or measure the concentration of HCl in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard). **(R 336.1201(3))**

3. Compliance with the applicable SC I.1 concentration standard or collection efficiency standard shall be determined by the average of three consecutive runs. Each run shall be conducted under conditions representative of normal process operations. (**40 CFR 63.7(3), (R 336.1201(3))**

4. During the EUNPKLLINE performance test, the permittee shall establish site-specific operating parameter values for the minimum scrubber makeup water flow rate and, if the scrubber operates with recirculation, the minimum recirculation water flow rate. (**40 CFR 63.1161(b))**

5. During the EUNPKLLINE performance test, the permittee shall monitor each operating parameter continuously and record them with sufficient frequency to establish a representative average value for that parameter, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to verify compliance with the emission concentration or collection efficiency per S.C. I.1. (**40 CFR 63.1161(b))**

6. The permittee may conduct multiple performance tests to establish alternative compliant operating parameter values. Also, an owner or operator may reestablish compliant operating parameter values as part of any EUNPKLLINE performance test that is conducted subsequent to the initial test or tests. **(40 CFR 63.1161(b))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall install, operate, and maintain systems for the measurement and recording of the EUNPKLLINE scrubber makeup water flow rate and, if required, recirculation water flow rate. These flow rates must be monitored continuously and recorded at least once per shift while the scrubber is operating. Operation of the wet scrubber with excursions of scrubber makeup water flow rate and recirculation water flow rate less than the minimum values established during the EUNPKLLINE performance test or tests will require initiation of corrective action as specified by the maintenance requirements in 40 CFR 63.1160(b)(2). **(40 CFR 63.1162(a)(2))**

2. The permittee shall keep a record of the following information for EUNPKLLINE:
   a) Operating parameters for the scrubbers established from the initial test conducted. **(40 CFR 63.1162(a)(4))**
   b) Occurrence and duration of each malfunction of the pickling operation. **(40 CFR 63.1165(a)(1))**
   c) Occurrence and duration of each malfunction of the scrubber(s). **(40 CFR 63.1165(a)(2))**
   d) All maintenance performed on the scrubber(s). **(40 CFR 63.1165(a)(3))**
   e) Actions taken during periods of malfunction to minimize emissions in accordance with §63.1159(c) and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) **(40 CFR 63.1165(a)(4))**
   f) 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, EUNPKLLINE performance test measurements (including initial and any subsequent performance tests)and measurements as may be necessary to determine the conditions of the initial test or subsequent tests. **(40 CFR 63.1165(a)(5))**
   g) All results of initial or subsequent EUNPKLLINE performance tests. **(40 CFR 63.1165(a)(6))**
   h) All documentation supporting initial notifications and notifications of EUNPKLLINE compliance status required by 40 CFR Part 63.9. **(40 CFR 63.1165(a)(9))**
   i) The permittee shall keep and maintain the following records for EUNPKLLINE for five years from date of each record of:
      1) Scrubber makeup water flow rate and recirculation water flow rate.
      2) Calibration and manufacturer certification that monitoring devices are accurate to within 5 percent.
      3) Each maintenance inspection and repair, replacement, or other corrective actions **(40 CFR 63.1165(a)(10) and (b)(i, ii, iii)**
   j) The permittee shall comply with the operation and maintenance requirements prescribed under 40 CFR § 63.6(e) of NESHAP Subpart A for the EUNPKLLINE pickling line and scrubber control device. **(40 CFR 63.1160(b)(1))**

VII. REPORTING

1. Permittee shall report the results of any performance test as part of the notification of compliance status as required in 40 CFR 63.1163. **(40 CFR 63.1164(a))**

2. No less than 60 days prior to testing, 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 63.1163(d))**

3. The permittee shall report EUNPKLLINE malfunctions in the following manner:
   Reporting malfunctions. The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded shall be stated in a semiannual report. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1159(c), including actions taken to correct a malfunction. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half. **(40 CFR 63.1164(c))**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVNPKLINESCRUB	30	110	R 336.1225

IX. OTHER REQUIREMENTS

1. The permittee shall monitor emissions and operating and maintenance information for EUNPKLLINE in accordance with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and CCC. The permittee shall keep records of all source emissions and operating and maintenance information on file at the facility and make them available to the Department upon request. **(40 CFR Part 63 Subparts A & CCC)**

2. The permittee shall maintain and implement a written Operation and Maintenance Plan (OMP) for the EUNPKLLINE pickle line scrubbers. The OMP for the pickle line scrubbers must be consistent with good maintenance practices and 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, 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 (if applicable).
      E. Adjustment of damper settings for consistency with the required air flow.
   v. Require an alternate means of scrubber inspection, if the scrubber is not equipped with a viewport or access hatch allowing visual inspection.
   vi. Require the initiation of the applicable corrective action procedures specified in the OMP within one (1) working day of the detection of an operating problem and the completion of all corrective actions as soon as practicable.
   vii. Require the maintenance of records containing the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, the date of the repair, replacement, or other corrective action, and the signature of the responsible maintenance official. **(40 CFR 63.1160(b)(2), 40 CFR 63.1164(c), 40 CFR 63.6(e)(3), R 336.1201(3))**

3. Permittee may develop and implement alternative monitoring requirements for EUNPKLLINE subject to approval by the AQD District Supervisor. **(40 CFR 63.1162(a)(6))**

4. The permittee shall operate and maintain at all times each EUNPKLLINE emission source, including associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.1159(c), 40 CFR 63.6(e)(1)(i))**

Footnotes:
[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EUNTANDMILL

DESCRIPTION: Tandem cold rolling mill

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Oil mist eliminator

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10 (filterable)	0.004 gr/dscf	Test Protocol*	EUNTANDMILL	SC V.1	R 336.1331, R 336.1205(3)
2. VOC	0.9 pph	Test Protocol*	EUNTANDMILL	SC VI.3	R 336.1225, R 336.1205(3), R 336.1702(c)

*Test Protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUNTANDMILL unless the mist eliminator is installed, maintained, and operated properly in order to reduce oil mist from the process. **(40 CFR 52.21(b)(3), R 336.1331, R 336.1205(3) R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. At least once every ROP permit term verification of the PM10 emission rate from the EUNTANDMILL mist eliminator stack, by testing at owner's expense, in accordance with Department requirements, will be required. No less than 30 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 336.1213, R 336.2001)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monthly records of the amount of rolling oil used in the EUNTANDMILL process. **(R 336.1205(3), R 336.1225)**

2. The permittee shall keep records of the VOC content for each rolling oil used in the EUNTANDMILL tandem mill rolling process. **(R 336.1205(3), R 336.1225)**

3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month records of VOC emission calculations for EUNTANDMILL based on the amounts of each rolling oil used and VOC content of each oil. 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. **(R 336.1201(3), R 336.1702)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVNEWTCM_ME	114	95	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EUHDGLCLEANER

DESCRIPTION: Hot dip galvanizing line (HDGL) pre-cleaning process

Flexible Group ID: FGFGHDGLVOC

POLLUTION CONTROL EQUIPMENT: Water scrubber to remove caustic

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM10 (caustic) (filterable)	0.441 pph	Test Protocol*	EUHDGLCLEANER	SC V.1	R 336.1331

*Test Protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the EUHDGLCLEANER HDGL pre-cleaning process unless the water scrubber is installed and operating properly. A minimum water flow rate, as determined during performance testing, shall be maintained. The permittee shall install a flow monitor to measure the water flow rate to the EUHDGLCLEANER scrubber and a means to continuously monitor pressure drop across the scrubber. **(R 336.1201(3), R 336.1205)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall implement and maintain a malfunction abatement plan (MAP) for the EUHDGLCLEANER HDGL line, including the pre-cleaning process equipment and the associated emission control system (water scrubber) and operate in accordance with the plan. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(3), R 336.1301, R 336.1331(c) R 336.1911), (R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. At least once every ROP permit term the permittee shall conduct a particulate matter emission test from the EUHDGLCLEANER water scrubber stack, while in operation to control the caustic cleaning operation. No less than 30 days prior to testing, a complete stack test protocol must be submitted to the AQD District Office for approval. 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 Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of the following EUHDGLCLEANER information and shall make these records available to the AQD upon request:
   a) The water flow rate reading of the water scrubber on a daily basis. **(R 336.1201(3))**

2. The permittee shall monitor and maintain, on a continuous basis, a water flow rate to the EUHDGLCLEANER scrubber of no less than the values determined during the initial stack testing that demonstrates compliance with the PM10 emission limit in this table. Records shall be kept of the scrubber water flow rate according to S.C. VI.1. **(R 336.1201(3))**

3. The permittee shall monitor, on a continuous basis, and record once per shift, the pressure drop across the EUHDGLCLEANER scrubber while the scrubber is operating in order to identify changes that may indicate a need for maintenance. The pressure drop should be within the manufacturer's acceptable range, as identified in the malfunction abatement plan. **(R 336.1225, R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHDGLCLEANER	30	140	R 336.1225

IX. OTHER REQUIREMENTS

NA

Footnotes:

[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGPLTCMHDGLHEAT	PLTCM AND HDGL BUILDINGS GAS FIRED HEATERS AND CLIMATE CONTROL	EUPKLTMBLDGHEAT, EUHDGLBLDGHEAT, EUHDGLDRYER
FGHDGLSCR	GAS-FIRED ANNEALING FURNACE AND WATER HEATERS	EUHDGLH2OHEATER, EUHDGLANNEAL
FGHDGLVOC	HDGL SOURCES OF VOC EMISSIONS	EUHDGLCLEANER EUHDGLSKINPASS EUHDGLES_OILING

The following conditions apply to: FGPLTCMHDGLHEAT

DESCRIPTION: PLTCM AND HDGL BUILDINGS GAS FIRED HEATERS AND CLIMATE CONTROL

Emission Units: EUPKLTMBLDGHEAT, EUHDGLBLDGHEAT, EUHDGLDRYER

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	1.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLTCMHDGLHEAT	SC VI.1	R 336.1201(3)
2. PM-10	1.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLTCMHDGLHEAT	SC VI.1	R 336.1201(3)
3. NOx	21.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGPLTCMHDGLHEAT	SC VI.1	R 336.1201(3)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Natural Gas	438 MMcf	12-month rolling time period as determined at the end of each calendar month	FGPLTCMHDGLHEAT	SC VI.2	R 336.1201(3)

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall calculate and record by the end of each calendar month the following from FGPLTCMHDGLHEAT:
   a) emissions of PM monthly and 12-month rolling time period
   b) emissions of PM-10 monthly and 12-month rolling time period
   c) emissions of NOx monthly and 12-month rolling time period

The permittee shall calculate in a satisfactory manner, the annual NOx emissions from FGPLTCMHDGLHEAT, using the current U. S. EPA Compilation of Air Pollutant Emission Factors (AP-42) or other emission factors approved by the Department such as those used in the MAERS. **(R 336.1205(3))**

2. The permittee shall keep monthly and 12-month rolling records of the amount of combined natural gas fired in EUHDGLDRYER, EUPKLTMBLDGHEAT, and EUHDGLBLDGHEAT. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: FGHDGLSCR

DESCRIPTION: GAS-FIRED ANNEALING FURNACE AND WATER HEATERS

Emission Units: EUHDGLH2OHEATER, EUHDGLANNEAL

POLLUTION CONTROL EQUIPMENT: Selective Catalytic Reduction control device; EUHDGLH2OHEATER natural gas combustion emissions are ducted uncontrolled (downstream of the SCR) to SVHDGL_SCR.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	3.21 pph	Test Protocol*	FGHDGLSCR	SC V.1	R 336.1205(1)(a)
2. NOx	14.1 tpy	12-month rolling time period as determined at the end of each calendar month	FGHDGLSCR	SC VI.3	R 336.1205(1)(a)
3. PM10	3.6 tpy	12-month rolling time period as determined at the end of each calendar month	FGHDGLSCR	SC VI.3	R 336.1205(1)(a)
4. ammonia (NH_3) CAS No. 7664417	2.19 pph	Test Protocol*	FGHDGLSCR	SC V.1	R 336.1225

*Test Protocol shall specify averaging time.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The SCR unit shall be equipped with an automatic urea feed injection system. **(R 336.1201(3), R 336.1205)**

2. The permittee shall not operate the natural gas combustion sources of EUHDGLANNEAL unless the SCR is installed and operating properly. **(R 336.1201(3), R 336.1205)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall implement and maintain a preventative maintenance (PM) and malfunction abatement plan (MAP) for the SCR control unit. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(3), R 336.1301, R 336.1331(c) R 336.1911), (R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. At least once every ROP permit term the permittee shall verify NOx and ammonia emission rates from SVHDGL_SCR when FGHDGLSCR SCR, EUHDGLANNEAL, and EUHDGLH2OHEATER are in operation by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall record the following information and shall keep them on file for at least five years and make them available to the AQD upon request:
   a) Occurrence of abnormal functions of the automatic control system of the automatic urea feed injection system of the SCR.
   b) The amount of urea used per day.
   (R 336.1201(3))

2. The permittee shall keep a monthly record of the total amount of natural gas fired in EUHDGLH2OHEATER and EUHDGLANNEAL. **(R 336.1205(3))**

3. The permittee shall calculate and record, by the end of each calendar month, the following from FGHDGLSCR:
   a) emissions of PM10, monthly and 12-month rolling time period.
   b) emissions of NOx, monthly and 12-month rolling time period.

   The combined NOx emissions from EUHDGLANNEAL and EUHDGLH2OHEATER shall be calculated based on the data reported under SC V.1. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHDGL_SCR	48	140	R 336.1804, R 336.1805

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: FGHDGLVOC

DESCRIPTION: HDGL SOURCES OF VOC EMISSIONS

Emission Units: EUHDGLCLEANER, EUHDGLSKINPASS, EUHDGLES_OILING

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	10.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGHDGLVOC	SC VI.3	R 336.1201(3), R 336.1702

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep, in a satisfactory manner, records of the monthly usage, in gallons or pounds, of each VOC containing material used in all of the FGHDGLVOC emission units. **(R 336.1201(3))**

2. The permittee shall keep, in a satisfactory manner, records of the VOC content (in lb VOC/gallon or lb VOC/lb material) of each material used in all of the FGHDGLVOC emission units. **(R 336.1201(3))**

3. The permittee shall determine compliance with emission limit in SC I.1 by calculating VOC emissions based upon usages recorded in SC VI.1 and the VOC content recorded in SC VI.2, at the end of each calendar month. **(R 336.1201(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).