

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2305-AOP-R8 AFIN: 47-00991

1. PERMITTING AUTHORITY:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Big River Steel LLC
2027 E. State Hwy 198
Osceola, Arkansas 72370

3. PERMIT WRITER:

Jesse Smith

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Iron and Steel Mills and Ferroalloy Manufacturing
NAICS Code: 33111

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
5/5/2023	Renewal	N/A
8/14/2023	Modification	Emission factors updated for cooling towers and boilers. New natural gas sources. Updated kw rating on some emergency generators and heat input on some natural gas sources.

6. REVIEWER'S NOTES:

Big River Steel LLC owns and operates a steel mill located at 2027 E. State Hwy 198 in Osceola, AR. This steel mill is contiguous to the newer Exploratory Ventures, LLC (EV) steel mill, AFIN: 47-01073, and both are under common control of BRS or its parent company. Thus the EV and BRS steel mills constitute a single stationary source under the Clean Air Act. At the

request of BRS and for administrative convenience, each facility has been issued its own air permit. This permitting action is to renew and modify the facility’s Title V air permit. The permitting modification makes the following changes to the permit:

- Combined BACT limits for EAFs and LMFs at SN-01 and SN-02 as the sources share a common emission point
- Removed NESHAP EEEEE conditions for SN-01 and SN-02 as it was determined the subpart is not applicable to the facility
- Updated the name of the “Coil Coating Line” to “Color Coating Line”
- Updated the heat input of SN-53, SN-102, SN-108a, SN-108b, SN-108c, and SN-108d
- Revised the PM, PM₁₀, and PM_{2.5} emission factor for SN-04, SN-22, SN-26, SN-27, and SN-101
- Addition of new natural gas sources SN-108e and SN-112 through SN-126.
- Update in kW rating for SN-67, SN-67B, and SN-67C
- Revised emission factors for PM₁₀ and PM_{2.5} from cooling tower sources
- Updated gallon per hour rates for multiple existing cooling towers and added four new cooling tower sources.
- Increased throughput of gasoline at SN-100 from 10,000 gallons per month to 500,000 gallons per rolling twelve-month period. NESHAP CCCCC conditions updated due to the change in applicability.
- Addition of material handling units with self-maintaining air cleaner units, SN-127a, SN-127b, and SN-127c.
- Addition of pickling line process with a sedimentation system (SN-128) controlling HCl emissions.

The permitted emission changes to this permit as a result of this modification are as follows: Increase of 44.2 tpy PM, increase of 30.5 tpy PM₁₀, increase of 0.6 tpy PM_{2.5}, increase of 2.2 tpy SO₂, increase of 13.6 tpy VOC, increase of 164.8 tpy CO, increase of 143.3 tpy NO_x, increase of 0.000903 tpy Lead, and increase of 216,882 tpy CO_{2e}.

The PSD regulations mandate that a case-by-case Best Available Control Technology (BACT) analysis be performed on all new or modified affected sources at which a net emissions increase will occur. The following table is a summary of the BACT determinations made in this permit.

For more detailed discussion of BACT see the BACT analysis section of the permit application. The following summarizes the BACT analysis.

BACT Analysis Summary				
Source	Description	Pollutant	Control Technology	BACT Limit
SN-01 and SN-02	EAFs and LMFs	PM	Fabric Filter Fabric Filter	0.0018 gr/dscf (filterable only)

Source	Description	Pollutant	Control Technology	BACT Limit
		PM ₁₀	Fabric Filter	0.0024 gr/dscf
		PM _{2.5}	Fabric Filter Scrap	0.0024 gr/dscf
		Opacity	management plan Scrap	3% as a 6 minute average from baghouse 6% from melt shop
		SO ₂	management plan and good operating practices	0.2 lb/ton of steel produced
		VOC		0.093 lb/ton steel produced
		CO		2.02 lb/ton of steel produced
		NO _x		0.35 lb/ton of steel produced
		Lead	Fabric Filter	0.00056 lb/ton of steel produced
		CO _{2e}	Good operating practices	622,380 tpy CO _{2e}
SN-04	RH Degasser Boiler	PM	Combustion of Natural gas and Good Combustion Practice	0.0075 lb/MMBTU
		PM ₁₀		0.0075 lb/MMBTU
		PM _{2.5}		0.0075 lb/MMBTU
		Opacity		5%
		SO ₂		0.000588 lb/MMBTU
		VOC		0.0054 lb/MMBTU
		CO		0.0824 lb/MMBTU
		NO _x	Low NO _x burners Combustion of clean fuel Good Combustion Practices	0.035 lb/MMBTU
		GHG	Good operating practices Minimum Boiler Efficiency	CO ₂ 117 lb/MMBTU CH ₄ 0.0022 lb/MMBTU N ₂ O 0.0002 lb/MMBTU 75%
SN-22	Pickle Line	PM	Combustion of	0.0075 lb/MMBTU

Source	Description	Pollutant	Control Technology	BACT Limit
	Boiler	PM ₁₀	Natural gas and Good Combustion Practice	0.0075 lb/MMBTU
		PM _{2.5}		0.0075 lb/MMBTU
		Opacity		5%
		SO ₂		0.000588 lb/MMBTU
		VOC		0.0054 lb/MMBTU
		CO		0.0824 lb/MMBTU
		NO _x	Low NO _x burners Combustion of clean fuel Good Combustion Practices	0.035 lb/MMBTU
		GHG	Good operating practices Minimum Boiler Efficiency	CO ₂ 117 lb/MMBTU CH ₄ 0.0022 lb/MMBTU N ₂ O 0.0002 lb/MMBTU 75%
SN-26 and SN-27	Galvanizing Line Boilers 1 and 2	PM	Combustion of Natural gas and Good Combustion Practice	0.0075 lb/MMBTU
		PM ₁₀		0.0075 lb/MMBTU
		PM _{2.5}		0.0075 lb/MMBTU
		Opacity		5%
		SO ₂		0.000588 lb/MMBTU
		VOC		0.0054 lb/MMBTU
		CO		0.0824 lb/MMBTU
		NO _x	Low NO _x burners Combustion of clean fuel Good Combustion Practices	0.035 lb/MMBTU
		GHG	Good operating practices	CO ₂ 117 lb/MMBTU CH ₄ 0.0022 lb/MMBTU N ₂ O 0.0002 lb/MMBTU

Source	Description	Pollutant	Control Technology	BACT Limit
			Minimum Boiler Efficiency	75%
SN-101	Annealing Pickle Line Boiler	PM	Combustion of Natural gas and Good Combustion Practice	0.0075 lb/MMBTU
		PM ₁₀		0.0075 lb/MMBTU
		PM _{2.5}		0.0075 lb/MMBTU
		Opacity		5%
		SO ₂		0.000588 lb/MMBTU
		VOC		0.0054 lb/MMBTU
		CO		0.0824 lb/MMBTU
		NO _x	Low NO _x burners Combustion of clean fuel Good Combustion Practices	0.035 lb/MMBTU
SN-108D	Color Coating Line RTO	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.009 lb/MMBTU
		PM ₁₀		0.009 lb/MMBTU
		PM _{2.5}		0.009 lb/MMBTU
		Opacity		5%
		VOC		0.021 lb/MMBTU
		NO _x		0.85 lb/MMBTU
SN-108E	Color Coating Line Spray Passivation	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM ₁₀		0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.10 lb/MMbtu
		GHG		117 lb CO ₂ e/MMBtu
SN-112	Space Heaters	PM	Good	0.0075 lb/MMBtu

Source	Description	Pollutant	Control Technology	BACT Limit
SN-113 SN-114 SN-115 SN-116 SN-117 SN-118 SN-119		PM ₁₀	combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.08 lb/MMBtu
		GHG		117 lb CO _{2e} /MMBtu
		SN-120		Cold Mill Boiler NGO Line
PM ₁₀	0.0075 lb/MMBtu			
PM _{2.5}	0.0075 lb/MMBtu			
Opacity	5%			
CO	0.0824 lb/MMBtu			
NO _x	0.035 lb/MMBtu			
GHG	117 lb CO _{2e} /MMBtu			
SN-121 SN-122 SN-123	Pots for GL Curing and Melting	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM ₁₀		0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.08 lb/MMBtu
		GHG		117 lb CO _{2e} /MMBtu
SN-124	Stingray Parts Washer SMS Hotmill Rollshop	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM ₁₀		0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.08 lb/MMBtu
		GHG		117 lb CO _{2e} /MMBtu

Source	Description	Pollutant	Control Technology	BACT Limit
SN-125	Cold Mill Boiler	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM ₁₀		0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.035 lb/MMBtu
		GHG		117 lb CO _{2e} /MMBtu
SN-126	Color Coating Line Boiler	PM	Good combustion practices Energy efficient burners Combustion of natural gas	0.0075 lb/MMBtu
		PM ₁₀		0.0075 lb/MMBtu
		PM _{2.5}		0.0075 lb/MMBtu
		Opacity		5%
		CO		0.0824 lb/MMBtu
		NO _x		0.035 lb/MMBtu
		GHG		117 lb CO _{2e} /MMBtu
SN-109b, SN-129, SN-130, SN-131, SN-132	Cooling Towers	PM	Drift Eliminators Low TDS	0.0005 percent drift loss
		PM ₁₀		
		PM _{2.5}		
		Opacity		5%
SN-127a SN-127b SN-127c	SMAC Dust Collectors	PM	Good operating practices	0.002 gr/dscf
		PM ₁₀		0.002 gr/dscf
		PM _{2.5}		0.002 gr/dscf
		Opacity		5%

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility was last inspected on July 19, 2023. There were no areas of concern noted at this time. There are also no current violations noted for the facility on EPA’s echo database.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? Y
If yes, were GHG emission increases significant? Y

b) Is the facility categorized as a major source for PSD? Y

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01 and 02	Particulate	NSPS AAa
01 and 02	HAPs	NESHAP EEEEE
All Boilers	None	NSPS Dc
All Boilers	HAPs	NESHAP DDDDD
SN 53 and SN-105 through SN-108D	VOC	NSPS TT
All	NO _x , CO, PM, PM ₁₀ , PM _{2.5} , SO ₂ , VOC, lead, and greenhouse gasses.	PSD
Generators	Criteria and HAPs	NSPS IIII, and NESHAP ZZZZ
100 and 100a	HAP	NESHAP CCCCC
SN-105 through SN-108D	HAP	NESHAP SSSS
SN-24, SN-24A, SN-50, SN-59, SN-61, and SN-128	HAP	NESHAP CCC

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
N/A		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

The results of dispersion modeling are summarized below.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard (µg/m ³)	Averaging Time	Highest Concentration (µg/m ³)	% of NAAQS
PM ₁₀	125.2	150	24-Hour	51.36	34.3
PM _{2.5}	116.3	12.0	Annual	9.94	82.9
		35	24-Hour	19.34	55.3
CO	1322.8	10,000	8-Hour	408.8	4.1
		40,000	1-Hour	1181.2	3.0
NO _x	724.2	188	1-Hour	177.90	94.7
		100	Annual	16.40	16.4

b) Non-Criteria Pollutants:

Non-Criteria Pollutant evaluation is based on permit 2305-AOP-R0 results as all HAP emission rates have either remained the same or not increased to a level that would significantly impact previous modelling results except for those of Isophorone added in 2305-AOP-R7.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Formaldehyde	15	1.65	0.18548	Yes
Arsenic	0.01	0.0011	0.0045084	No
Cadmium	0.01	0.0011	0.006587	No
HCl	3	0.33	1.0	No
Manganese	0.2	0.022	0.161	No
Mercury	0.01	0.0011	0.061	No
Isophorone	28	3.08	7.0	No

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Pass?
Arsenic	0.1	0.049	Yes
Cadmium	0.1	0.0003	Yes
HCl	30	0.0007	Yes
Manganese	2	0.012	Yes
Mercury	0.1	0.0043	Yes
Isophorone	280	3.16	Yes

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards Y
 If exempt, explain: No H₂S emissions

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
All	All criteria pollutants based on BACT limits				
01 and 02 HAPs	AP-42	Varied	Baghouse	99%+	
Natural Gas HAPs	AP-42	Varied	None		
Pickling Lines HCl	Manufacturer Estimates	Varied	Scrubbers		
100	TANKS 4.0 software				
105 and 106	Vendor Specification	Varied	Mist Eliminator	75%	
108a, 108b, 108c, and 111	AP-42 1.4	Lb/MMBtu: 0.0075 PM/PM ₁₀ /PM _{2.5} 0.000588 SO ₂ 0.10 NO _x 0.0054 VOC 0.0824 CO 4.90E-07 Lead			
108d	Modified AP-42 to account for natural gas and additional formation from RTO destruction	Lb/MMBtu: 0.009 PM/PM ₁₀ /PM _{2.5} 0.000588 SO ₂ 0.85 NO _x 0.0054 VOC 0.45 CO 4.90E-07 Lead			
SN-110a through SN-110e	AP-42 Table 3.4-1	Lb/hp-hr: 0.00023 PM/PM ₁₀ /PM _{2.5} 0.00001 SO ₂ 0.0087 NO _x 0.0003 VOC			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		0.0020 CO 0.000001 H ₂ SO ₄			

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01 and 02	PM, PM ₁₀ , PM _{2.5} ,	5D and 201 or 201A	Initial and annual	NSPS and PSD limit verification
01 and 02	AAa required information (fan motor amps, etc.)	None specified	Initial and annual	NSPS requirement
01 and 02	NO _x , SO ₂ , CO, CO ₂ , VOC	7E, 6C, 3A, 10, 25A	Semi annually to annually	To verify compliance with BACT emission rates
01 and 02	Lead	12	Annually	To verify BACT limits
04, 22, 26, 27, 101, 125, 126	PM _{2.5} , CO, NO _x	202, 10, 7E	Initial and 5 years	Verification of BACT emission limits
03	Flare design	40 CFR 60.18(b) through (f)	Initial only	To verify flare is design is capable of achieving BACT limits
03	CO ₂	Material analysis	Semi Annually	To show compliance with BACT limits
39 51, 58, 60 53 54-56	PM _{2.5} and PM ₁₀	5D and 201 or 201A	Initial	To show compliance with BACT limits
53 105 – 108D	VOC	25A	Initial	NSPS TT Requirement
Cooling Towers	TDS	TDS testing	6 months	Verification of BACT limits
Pickling Line Scrubbers	HCl	26	Initial	Demonstration of Compliance with Applicable provisions of

SN	Pollutants	Test Method	Test Interval	Justification
				NESHAP Subpart CCC

17. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
01 and 02	AAa required monitoring	Fan amps, damper positions, etc.	Vary according to reading	Y
53 108D	RTO temperature	Thermocouple	Continuous (3hr averages)	Y

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
01 and 02	AAa Records	None	Vary	Y
03	Degasser steel throughput	1,500,000 tons per 12 months	Monthly	Y
53 105-108D	Subpart TT Records	None	Vary	Y
Emergency Engines	Hours of operation	100	Monthly	Y
Cooling Towers	TDS readings	Vary per tower	Semi annually	Y
82, 84, 86, 88, 90, 103	Materials received	175,830 79,204 175,830 680,000 680,000 210,240	Monthly	Y
Slag Handling	Tons of slag	650,000	Monthly	Y
100	Gasoline Throughput	Less than 500,000 gallons per rolling twelve-month	Monthly	Y
105-108D	Subpart SSSS Records	None	Vary	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
04, 22, 26, 27, 101, 125, 126	Subpart DDDDD Records	None	Vary	Y

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 and 02 Exhaust Stacks	3%	NSPS/BACT	Daily observations
01 and 02 Meltshop	6%	NSPS/BACT	Daily observations
All natural gas burners	5%	BACT/Department Guidance	Combustion of natural gas only
91	5%	BACT/Department Guidance	Weekly Observation
Rolling Mill sources	5%	BACT/Department Guidance	Weekly Observation on building

20. DELETED CONDITIONS:

Former SC	Justification for removal
SC # 35 through #65	Facility is not subject to NESHAP YYYYYY.

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)							Lead
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs		
							Single	Total	
Water Bath Vaporizer	A-1	0.30	0.02	0.22	4.37	2.39	2.90 E-03	0.004	1.93 E-06
Tundish Dryer	A-1	0.30	0.02	0.21	1.46	3.19	2.90 E-03	0.004	1.93 E-05
Continuous Galvanizing Line Dryer	A-1	0.20	0.02	0.15	2.99	4.26	2.00 E-03	0.003	1.33 E-05
Reformer Furnace (PHG830)	A-1	0.34	0.01	0.25	0.14	0.38	0.003	0.003	-
Laboratory Test Furnace	A-1	6.7 E-04	5.2 E-05	4.8 E-04	0.008	0.009	1.60 E-04	1.60 E-04	-

Source Name	Group A Category	Emissions (tpy)							Lead
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs		
							Single	Total	
Diesel Fuel Tanks	A-3	-	-	0.003	-	-	-	-	-
Engine Oil Tank	A-3	-	-	1.3 E-05	-	-	-	-	-
Steel Cutting	A-7	0.4	-	-	-	-	0.001	0.002	-
Railcar Cutting Operation	A-7	0.4	-	-	-	-	0.001	0.002	-
Tundish Cutting Tool	A-7	0.4	-	-	-	-	0.001	0.002	-
Induced Draft Mechanical Cooling Tower	A-13	0.56	-	-	-	-	-	-	-
HCL Storage Tanks	A-13	-	-	-	-	-	0.02	0.02	-
Air Products Cooling Towers #1 and #2	A-13	1.48	-	-	-	-	-	-	-
Diesel Exhaust Fluid Storage Tank	A-13	-	-	0.004	-	-	0.001	0.001	-

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
2305-AOP-R7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Big River Steel LLC
 Permit #: 2305-AOP-R8
 AFIN: 47-00991

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	<u>2717.9188</u>
Permit Type	Modification	Permit Fee \$	<u>5326.9281</u>

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500

Check if Facility Holds an Active Minor Source or Minor Source General Permit

If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$ 0

Total Permit Fee Chargeable Emissions (tpy) 189.3009289

Initial Title V Permit Fee Chargeable Emissions (tpy)

HAPs not included in VOC or PM:

Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants:

All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensable PM, H2S in TRS, etc.)

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		326.8	371	44.2		
PM ₁₀		433.9	464.4	30.5	30.5	464.4
PM _{2.5}		427.5	428.1	0.6		
SO ₂		401.8	404	2.2	2.2	404
VOC		384.2	397.8	13.6	13.6	397.8
CO		4827.9	4992.7	164.8		
NO _x		1302.8	1446.1	143.3	143.3	1446.1
Lead	<input type="checkbox"/>	1.1641474	1.16505013	0.00090273		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Arsenic	<input checked="" type="checkbox"/>	0.015654	0.0161139	0.0004599	0.0004599	0.0161139
Cadmium	<input type="checkbox"/>	0.021426	0.02385	0.002424		
Formaldehyde	<input type="checkbox"/>	0.5025	0.7001	0.1976		
HCl	<input checked="" type="checkbox"/>	3.5	3.2	-0.3	-0.3	3.2
Manganese	<input type="checkbox"/>	0.803145	0.804128	0.000983		
Mercury	<input checked="" type="checkbox"/>	0.402183	0.402652	0.000469	0.000469	0.402652
H ₂ SO ₄	<input checked="" type="checkbox"/>	2	2	0	0	2
Isophorone	<input type="checkbox"/>	30.6	30.6	0		
MIBK	<input type="checkbox"/>	11.8	11.8	0		
Toluene	<input type="checkbox"/>	11.8	11.8	0		