

PUBLIC NOTICE

The Iowa Department of Natural Resources (DNR) is proposing to renew the Title V Operating Permit for Arconic US, LLC. This facility is located at 4879 State Street, Riverdale, IA 52722. DNR is currently reviewing an application for renewal submitted by Arconic US, LLC to operate their existing aluminum sheet, plate and foil facility.

Arconic US, LLC is required to obtain a Title V Operating Permit pursuant to 567 Iowa Administrative Code (IAC) 24.101. This facility has the potential to emit the following air pollutants annually:

PM-2.5 (particulate matter 2.5 microns or less in diameter): 735.24 tons
PM-10 (particulate matter ten microns or less in diameter): 1,092.49 tons
Particulate Matter: 1,275.46 tons
Sulfur Dioxide: 290.85 tons
Nitrogen Oxides: 1,141.45 tons
Volatile Organic Compounds: 838.15 tons
Carbon Monoxide: 783.17 tons
Lead: 0.43 tons
Hazardous Air Pollutants: 1,104.75 tons

Based on the information provided in the Title V Operating Permit renewal application, the DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.

A copy of the Public Notice is available for public inspection at the:

Bettendorf Public Library
2950 Learning Campus Drive
Bettendorf, IA 52722
Phone: 563-344-4175

These documents are also available on the Air Quality Bureau's website at:
www.iowadnr.gov/titlev-draft

For additional information or for a copy of the draft permit or fact sheet contact:

Derek Wedemeier
Iowa Department of Natural Resources - Air Quality Bureau
6200 Park, Ste #200
Des Moines, Iowa 50321
Phone: (515) 725-9520
E-mail: Derek.Wedemeier@dnr.iowa.gov

A complete record of the permit review, including the renewal application and the draft permit, is available for public inspection Monday-Friday, 8:00 a.m. - 4:30 p.m., at the DNR address shown above.

The public comment period for the draft permit will run from May 7, 2026 through June 6, 2026. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown above. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.

Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown above.

DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

Individuals with disabilities or limited English proficiency are encouraged to participate in all DNR activities, including submitting public comments. If a reasonable accommodation or language services are needed to participate, contact the Air Quality Bureau staff member listed or Relay Iowa TTY Service at 800-735-7942 in advance to advise them of your specific needs. DNR's language access and disability nondiscrimination plans are available at <https://www.iowadnr.gov/about/nondiscrimination-accessibility-language-access>.

**Iowa Department of Natural Resources
Draft Title V Operating Permit**

Name of Permitted Facility: Arconic US, LLC
Facility Location: 4879 State St., Riverdale, IA 52722
Air Quality Operating Permit Number: 03-TV-025R4
Expiration Date: **DATE**
Permit Renewal Application Deadline: **DATE**

EIQ Number: 92-0132
Facility File Number: 82-01-002

Responsible Official

Name: Jeffrey Weida
Title: Vice President, Manufacturing
Mailing Address: P.O. Box 3567, Bettendorf, IA 52722
Phone #: (563) 459-2287

Permit Contact Person for the Facility

Name: Jeremy Niemeier
Title: Environmental Manager
Mailing Address: 4879 State St, Bettendorf, IA 52722
Phone #: (563) 459-2619

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit. Two Title V Permits exist for Arconic and Veolia Water (facility No. 82-02-052). These two facilities are considered one stationary source. This is the permit for Arconic US, LLC, Inc. The second permit has been issued for Veolia Water (10-TV-007R2-M001, issued 11/28/2023).

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
g/kW-hr.....	grams per kilowatt hour
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
Kg/l.....	kilograms per liter
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY	tons per year
USEPA.....	United States Environmental Protection Agency
GF.....	A grandfathered unit that does not require a construction permit
NA.....	Not Applicable
TEQ.....	Toxicity Equivalent

Pollutants

D/F.....	Dioxin/Furan
PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
PM _{2.5}	particulate matter two point five microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO	carbon monoxide
HAP.....	hazardous air pollutant
NMHC.....	non methane hydrocarbons

I. Facility Description and Equipment List

Facility Name: Arconic US, LLC

Permit Number: 03-TV-025R4

Facility Description: Aluminum Sheet, Plate, and Foil Manufacturing (SIC 3353)

Equipment List

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
S-063	CAUSTDIP	Caustic Dip	05-A-860-S3
S-185	CFRN03	CAA Furnace #3	Grandfathered (GF)
S-142	CFRN18	CAA Furnace #18	GF
S-141	CFRN19	CAA Furnace #19	GF
S-140	CFRN20	CAA Furnace #20	GF
S-139	CFRN21	CAA Furnace #21	GF
S-138	CFRN25	CAA Furnace #25	Not Applicable (NA)
S-137	CFRN26	CAA Furnace #26	NA
S-136	CFRN27	CAA Furnace #27	GF
S-135	CFRN28	CAA Furnace #28	GF
S-134	CFRN29	CAA Furnace #29	GF
S-157	CFRN50	CAA Furnace #50	GF
	CFRN51	CAA Furnace #51	GF
S-156	CFRN52	CAA Furnace #52	GF
S-155	CFRN53	CAA Furnace #53	GF
S-154	CFRN54	CAA Furnace #54	GF
FUG-GP	CFRN03	CAA Furnace #3 (chamber)	GF
	CFRN18	CAA Furnace #18 (chamber)	GF
	CFRN19	CAA Furnace #19 (chamber)	GF
	CFRN20	CAA Furnace #20 (chamber)	GF
	CFRN21	CAA Furnace #21 (chamber)	GF
	CFRN25	CAA Furnace #25 (chamber)	NA
	CFRN26	CAA Furnace #26 (chamber)	NA
	CFRN27	CAA Furnace #27 (chamber)	GF
	CFRN28	CAA Furnace #28 (chamber)	GF
	CFRN29	CAA Furnace #29 (chamber)	GF
	CFRN50	CAA Furnace #50 (chamber)	GF
	CFRN51	CAA Furnace #51 (chamber)	GF
	CFRN52	CAA Furnace #52 (chamber)	GF
	CFRN53	CAA Furnace #53 (chamber)	GF
	CFRN54	CAA Furnace #54 (chamber)	GF
	CLAR08	Clarifier Emissions	NA
	CMIL01	#1 Cold Mill	NA
	CMIL03	#3 Cold Mill	GF
FUG_GP_P	General Plant	GF	

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
FUG-GP	FUG_GP_V1	Stores/Off Site Consumption	GF
	FUG_GP_V2	Stores/Off Site Consumption	GF
	FUG_GP_V3	Stores/Off Site Consumption	GF
	TFRN14	#14 Heat Treat Furnace	GF
	ELUBE01	Electrostatic Lube-Treatment Line	11-A-700-P1
	ELUBE02	Electrostatic Lube-14 Slitter	
	MARKR01	Marker-Treatment Line	
	MARKR02	Marker-14 Slitter	
	MARKR03	Marker 88" Line	
FUG-GP-1	MARKR04	#1-84 Marker	24-A-139
S-287	CMIL01	#1 Cold Mill	89-A-032-S1
S-165	CMIL03	#3 Cold Mill	GF
S-436	DFRN05	Pig Drying Furnace	20-A-025-S1
FUG-IP	FILT02	#2 In-Line Fluxer Filter Box	85-A-067P-S3
	FILT03	#3 In-Line Fluxer Filter Box	87-A-045P-S3
	FILT04	#4 In-Line Fluxer Filter Box	89-A-177P-S3
	FILT05	#5 In-Line Fluxer Filter Box	20-A-028
	FILT10	#10 Filter Box	23-A-172-S1
	FILT15	#15 In-Line Fluxer Filter Box	07-A-091
	FILT16	#16 In-Line Fluxer Filter Box	07-A-092
	FILT17	#17 In-Line Fluxer Filter Box	02-A-233-S2
	FILT18	#18 In-Line Fluxer Filter Box	02-A-234-S2
		FUG_IP_P	Fugitives – Ingot Plant
FUG-B7XX	FUG-B7XX	Fugitives – Plain Foil & Foil IPS	GF
S-448	FIREPUMP01	Fire Pump 01 (600 hp)	NA
S-449	FIREPUMP02	Fire Pump 02 (600 hp)	NA
S-144	GFRN16	#16 Aging Furnace	GF
S-143	GFRN17	# 17 Aging Furnace	GF
S-125	GFRN31	60" Ager #31	GF
S-126	GFRN32	210" Ager #32	GF
S-339	GWAST01	Ground Water Air Stripping Tower	NA
S-272	HFRN02	#2 Holding Furnace	92-A-619P-S1
S-284	HFRN03	#3 Holding Furnace	92-A-620P-S1
S-291	HFRN04	#4 Holding Furnace	92-A-621P-S1
S-437	HFRN05	#5 Holding Furnace	20-A-026
S-441	HFRN10	#10 Holding Furnace	23-A-171-S1
S-047	HFRN15	#15 Holding Furnace	92-A-624-S3
S-050	HFRN16	#16 Holding Furnace	92-A-625-S6
S-052	HFRN17	#17 Holding Furnace	92-A-626-S3
S-057	HFRN18	#18 Holding Furnace	92-A-627-S3
S-352	HFRN50	#50 Holding Furnace	NA
	CRUC50	Crucibles (3 units): #50 Holding Furnace	
S-353	HFRN60	#60 Holding Furnace	NA
	CRUC60	Crucibles (3 units): #60 Holding Furnace	
S-446	HFRN70	#70 Holding Furnace	NA
S-447	HFRN80	#80 Holding Furnace	NA

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
FUG-HL	HMIL10	100" 5 Stand Hot Mill	NA
	HMIL14	144" Hot Mill	GF
	HMIL16	160" Hot Mill	GF
	HMIL22	220" Hot Mill	GF
	HMILPH	PAHTS 144" Taper Mill	GF
	PFRN01	Preheat Furnace #1	GF
	PFRN02	Preheat Furnace #2	GF
	PFRN03	Preheat Furnace #3	GF
	PFRN04	Preheat Furnace #4	GF
	PFRN12	Preheat Furnace #12	NA
	PFRN13	Preheat Furnace #13	NA
	PFRN16	Preheat Furnace #16	NA
	PFRN17	Preheat Furnace #17	NA
	PFRN18	Preheat Furnace #18	GF
	PFRN19	Preheat Furnace # 19	NA
	PFRN20	Preheat Furnace # 20	NA
	PFRN21	Preheat Furnace # 21	NA
	PFRN22	Preheat Furnace #22	NA
	PFRN23	Preheat Furnace #23	GF
	PFRN24	Preheat Furnace #24	NA
	PFRN25	Preheat Furnace #25	NA
	PFRN26	Preheat Furnace #26	NA
PFRN27	Preheat Furnace #27	NA	
	FUG_HL_P	Fugitive Hot Line	NA
S-450	HHT16	Emergency Generator 16 HHT	NA
S-288	HMIL10	100" 5 Stand Hot Mill - N	88-A-158-P2
S-289		100" 5 Stand Hot Mill - S	88-A-159-P2
S-344	HMIL14	144" Hot Mill Stack	11-A-687-P
S-349	HMIL16	160" Hot Mill Stack	11-A-688-P
S-119	HMIL22	220" Hot Mill Stack	GF
S-120			
S-071	HMILPH	PAHTS 144" Taper Mill	GF
S-314	LHLT05	Lime Storage for Blowdown Treatment	94-A-546-S3
S-271	MFRN02	#2 Melting Furnace	85-A-065P-S1
S-283	MFRN03	#3 Melting Furnace	87-A-043P-S1
S-290	MFRN04	#4 Melting Furnace	89-A-175P-S1
S-438	MFRN05	#5 Melting Furnace	20-A-027-S1
S-439	MFRN10	#10 Melting Furnace	23-A-170-S1
S-440			
S-048	MFRN15	#15 Melting Furnace	08-A-297-S1
S-049	MFRN16	#16 Melting Furnace	GF
S-053	MFRN17	#17 Melting Furnace	GF
S-056	MFRN18	#18 Melting Furnace	GF
S-350	MFRN50	#50 Melting Furnace	06-A-567-S2
S-351	MFRN60	#60 Melting Furnace	06-A-568-S1
S-443	MFRN70	#70 Melting Furnace	23-A-174
S-444	MFRN80	#80 Melting Furnace	23-A-175

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
S-097	MMCH03	#3 Mill Machine	05-A-479
S-098		#3 Mill Machine	79-A-008-S2
S-300	OCOM01	Ingot Plant Standby Diesel Generator	90-A-392
S-315	OCOM02	MIS Standby Diesel Engine/Generator	97-A-144-S1
S-319	OCOM06	High Pressure Water System Pump Engine	97-A-141-S1
S-320	OCOM07	High Pressure Water System Pump Engine	97-A-142-S1
S-335	OCOM10	High Pressure Water System Backup Generator	98-A-1009-S1
S-364	OCOM20	Emergency Generator	11-A-697-P1
S-408	OCOM21	Emergency Generator	12-A-328
S-435	OCOM22	#17 HHT Line Emergency Generator	NA
S-316	OCOM03	Security Communication Backup Generator	NA
S-318	OCOM05	Building 808 Phone Backup Generator	NA
S-321	OCOM08	Low Pressure Water System Pump	NA
S-324	OCOM09	Ingot Plant Phone Backup Generator	NA
S-093	PFRN01	Preheat Furnace #1	GF
S-095			
S-094	PFRN02	Preheat Furnace #2	GF
S-278	PFRN12	Preheat Furnace #12	NA
S-279			
S-275	PFRN13	Preheat Furnace #13	NA
S-276			
S-115	PFRN16	Preheat Furnace #16	NA
S-116			
S-113	PFRN17	Preheat Furnace #17	NA
S-114			
S-111	PFRN18	Preheat Furnace #18	GF
S-112			
S-109	PFRN19	Preheat Furnace #19	NA
S-110			
S-107	PFRN20	Preheat Furnace #20	NA
S-108			
S-105	PFRN21	Preheat Furnace #21	NA
S-106			
S-103	PFRN22	Preheat Furnace #22	NA
S-104			
S-102	PFRN23	Preheat Furnace #23	GF
S-101	PFRN24	Preheat Furnace #24	NA
S-100			
S-294	PFRN25	Preheat Furnace #25	NA
S-295			
S-296	PFRN26	Preheat Furnace #26	NA
S-297			
S-325	PFRN27	Preheat Furnace #27	NA
S-326			
S-345	PFRN03	Preheat Furnace #3	05-A-477-S2
S-346			06-A-017-S1
S-347	PFRN04	Preheat Furnace #4	05-A-478-S2

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
S-348	PFRN04	Preheat Furnace #4	06-A-018-S1
S-118	PFRN14	Preheat Furnace #14	97-A-251-S1
S-117	PFRN15	Preheat Furnace #15	97-A-250-S1
S-356	PPFRN01	#1 Pusher Preheat Furnace	11-A-689-P1
S-131	PNTS01	Maintenance Paint Booth	97-A-140-S3
S-007	RFRN01	Reheat Furnace #1	GF
S-014	RFRN08	Reheat Furnace #8	GF
S-015	RFRN09	Reheat Furnace #9	GF
S-016	RFRN10	Reheat Furnace #10	GF
S-017	RFRN11	Reheat Furnace #11	GF
S-018	RFRN12	Reheat Furnace #12	GF
S-019	RFRN13	Reheat Furnace #13	GF
S-020	RFRN14	Reheat Furnace #14	GF
S-021	RFRN15	Reheat Furnace #15	GF
S-074	RFRN20	Reheat Furnace #20	GF
S-073	RFRN21	Reheat Furnace #21	GF
S-072	RFRN22	Reheat Furnace #22	GF
S-070	RFRN24	Reheat Furnace #24	GF
HR-P	ROADP	Paved Haul Roads	NA
HR-UP	ROADUP	Unpaved Haul Roads	NA
S-099	SCLP03	#3 Scalper	01-A-216
S-261	SCLP04	#4 Scalper	79-A-186-S1
S-262			79-A-187-S1
S-298	SHLT01	Scrap Conveyor System Exhaust	90-A-363-S1
S-338	SKIM	Skim House	01-A-217
FUG-R214	SKIM-R214	Fugitives from Dumping/Loading Skim	06-A-569
S-068	TFRN10	#10 Heat Treat Furnace	GF
S-069	TFRN11	#11 Heat Treat Furnace	GF
S-259	TFRN12	#12 Heat Treat Furnace Line	NA
S-172	TFRN86	86" Continuous Heat Treat Furnace	GF
S-176			
S-177			
S-178			
S-179			
S-180			
S-327	TFRN14	#14 Heat Treat Furnace	95-A-638
S-328			
S-329			
S-330			
S-333	TFRN15	#15 Heat Treat Furnace	95-A-812-S1
S-340	TFRN16	#16 Heat Treat Furnace	01-A-879
S-362	TFRN88	88" Continuous Heat Treat Line	11-A-695-P3
S-363	ATL01	Automotive Treatment Line	11-A-696-P2
T-141	TNKA0141	Storage Tank (2,000 gallons)	95-A-436
T-142	TNKA0142	Storage Tank (2,000 gallons) Diesel Fuel	95-A-437
T-223	TNKA0223	Storage Tank (30,000 gallons) Oily Waste	99-A-969-S1
S-323	TTST12	Truck Maintenance Engine Exhaust	97-A-145-S1

Emission Point	Emission Unit	Emission Unit Description	Construction Permit Number
S-133	WWRK02	Sawdust Collector	NA
S-405	BOIL01	Natural Gas Fired Boiler	12-A-313-P2
S-406	BOIL02	Natural Gas Fired Boiler	12-A-314-P2
S-407	BOIL03	Natural Gas Fired Boiler	12-A-315-P2
S-400	PHeat01	Process Heater-Oil House	12-A-316-P2
S-401	PHeat02-05	4 Process Heaters-Oil House	12-A-317-P2
S-403	PHeat06-09	4 Process Heaters-Oil House	12-A-319-P2
S-357	CFRN60	#60 Controlled Atmosphere Annealing Furnace	11-A-690-P1
S-358	CFRN61	#61 Controlled Atmosphere Annealing Furnace	11-A-691-P1
S-359	CFRN62	#62 Controlled Atmosphere Annealing Furnace	11-A-692-P1
S-360	CFRN63	#63 Controlled Atmosphere Annealing Furnace	11-A-693-P1
S-361	CFRN64	#64 Controlled Atmosphere Annealing Furnace	11-A-694-P1
S-366	CFRN64	#64 Controlled Atmosphere Annealing Furnace	13-A-116-P
S-CT-88	CT-88	88 Line Cooling Towers 1 through 4	11-A-698-P1
SpHt1	SpHt1	Direct Fired Space Heaters	12-A-321-P1
SpHt2	SpHt2	Direct Fired Space Heaters	12-A-322-P2
MUA	MUA	Make-up Air Heaters & Conversion Burners	12-A-324-P1
S-409-428	HtFurn01-20	Gas Heaters/Furnaces	12-A-325-P1
IRHt	IRHt	Radiant Gas Heaters	12-A-326-P1
S-429-432	WtrHt	Water Heaters	12-A-327-P1
EP-CT-HHT17	CT-HHT17	#17 HHT Line Cooling Towers (4 Cells)	17-A-478-S3
S-433	TFRN17	#17 Horizontal Heat Treat Furnace	17-A-477
S-442	GEN10	Emergency Generator for Ingot Cooling Water Pumps	23-A-173-S1

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
CLSCRUB02	Eductor Chlorine Scrubber
CNCRSH	Aerosol Can Crusher
CT-805A	Ingot Casting Cooling Tower #1
CT-805B	Ingot Casting Cooling Tower #2
CT-805C	Ingot Casting Cooling Tower #3
CT-805D	Ingot Casting Cooling Tower #4
CT-816T	Cooling Tower
CT-914A	Plate Mill Heat Treat Cooling Tower #1
CT-914B	Plate Mill Heat Treat Cooling Tower #2
DFRN02	Pig Drying Furnace (R214 Process) natural gas fired, 1 MMBtu/hr
DFRN03	Pig Drying Furnace (R214 Process) natural gas fired, 1 MMBtu/hr
FUG_IP_CH	East Crucible Heating Station (combustion) natural gas fired, 1.8 MMBtu/hr
FUG_IP_CH	West Crucible Heating Station (combustion) natural gas fired, 1.8 MMBtu/hr
FUG-IP_SP	Skim Pan Heating Station (combustion) natural gas fired, 1 MMBtu/hr
GF-MUA	Grandfathered MUA
MMCH04	#4 Milling Machine
OILH01	#1 Cold Mill Oil House
OILH03	#3 Cold Mill Oil House
RAP_FUG_NG	Fugitive Nat Gas Emission from R214
TFRNE07	#7 Heat Treat (electric) (chamber)
TNKA0001	Storage Tank (20000 gal) Waste Oil & Water
TNKA0018	Storage Tank (13000 gal) Rolling Oil
TNKA0019	Storage Tank (13000 gal) Rolling Oil
TNKA0026	Storage Tank (11000 gal) Rolling Oil
TNKA0027	Storage Tank (7000 gal) Rolling Oil
TNKA0028	Storage Tank (20000 gal) Rolling Oil
TNKA0029	Storage Tank (15000 gal) Rolling Oil
TNKA0041	Storage Tank (28000 gal) Rolling Emulsion
TNKA0042	Storage Tank (63000 gal) Rolling Emulsion
TNKA0043	Storage Tank (740 gal) Rolling Emulsion
TNKA0066	Storage Tank (3500 gal) Rolling Oil
TNKA0068	Storage Tank (250000 gal) Used Oil
TNKA0069	Storage Tank (250000 gal) Used Oil
TNKA0070	Storage Tank (250000 gal) Used Oil
TNKA0076	Storage Tank (10000 gal) Kerosene
TNKA0079	Storage Tank (15000 gal) Used Oil
TNKA0080	Storage Tank (30000 gal) Used Oil
TNKA0093	Storage Tank (10000 gal) Caster Oil
TNKA0101	Storage Tank (1000 gal) Diesel Fuel
TNKA0102	Storage Tank (30000 gal) Used Oil
TNKA0103	Storage Tank (15000 gal) Used Oil
TNKA0104	Storage Tank (15000 gal) Used Oil
TNKA0120	Storage Tank (12000 gal) Rolling Lubrication
TNKA0121	Storage Tank (12000 gal) Rolling Lubrication

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TNKA0122	Storage Tank (12000 gal) Rolling Lubrication
TNKA0123	Storage Tank (12000 gal) Rolling Lubrication
TNKA0124	Storage Tank (12000 gal) Rolling Lubrication
TNKA0125	Storage Tank (15000 gal) Rolling Lubrication
TNKA0126	Storage Tank (15000 gal) Rolling Lubrication
TNKA0127	Storage Tank (15000 gal) Rolling Lubrication
TNKA0144	Storage Tank (20000 gal) Reclaimed Oil
TNKA0145	Storage Tank (20000 gal) New Oil
TNKA0146	Storage Tank (15000 gal) 1 CM Scrap
TNKA0147	Storage Tank (8000 gal) 4 CM Scrap
TNKA0148	Storage Tank (11000 gal) 3 CM Scrap
TNKA0209	Storage Tank (2000 gal) Diesel Fuel
TNKA0210	Storage Tank (2000 gal) Diesel Fuel
TNKA0228	Storage Tank (12000 gal) Rolling Lubrication
TNKA0229	Storage Tank (12000 gal) Rolling Lubrication
TNKA0230	Storage Tank (1000 gal) Waste Oil
TNKA0232	Storage Tank (8000 gal) Rolling Lubrication
TNKA0233	Storage Tank (500 gal) Diesel Fuel
TNKA0235	Storage Tank (2000 gal) Diesel Fuel
TNKA0243	Storage Tank (500 gal) Diesel Fuel
TNKA0300	Storage Tank (60000 gal) Rolling Lubrication
TNKA0301	Storage Tank (60000 gal) Rolling Lubrication
TNKA0303	Storage Tank (60000 gal) Rolling Lubrication
TNKA0304	Storage Tank (60000 gal) Rolling Lubrication
TNKA0307	Storage Tank (2500 gal) Separator Oil
TNKA0312	Storage Tank (2000 gal) Diesel Fuel
TNKA0323	Storage Tank (15000 gal) Rolling Lubrication
TNKA0324	Storage Tank (15000 gal) Rolling Lubrication
TNKA0325	Storage Tank (15000 gal) Rolling Lubrication
TNKA0129	Storage Tank (402,369 gallons) Fuel Oil
TNKA0130	Storage Tank (402,369 gallons) Used Oil & Waste
TROUGH	Trough Natural Gas Burners (6 at 0.1 MMBtu/hr)
PLUG	Plug Natural Gas Burners (6 at 0.1 MMBtu/hr)
10 HHT	Emergency Engine 10 HHT for Horizontal Heat Treat Furnace
11 HHT	Emergency Engine 11 HHT for Horizontal Heat Treat Furnace
12 HHT	Emergency Engine 12 HHT for Horizontal Heat Treat Furnace
15 HHT	Emergency Engine 15 HHT for Horizontal Heat Treat Furnace

II. Plant-Wide Conditions

Facility Name: Arconic US, LLC

Permit Number: 03-TV-025R4

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

Permit Duration

The term of this permit is: Five (5) years

Commencing on: ****DATE****

Ending on: ****DATE****

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

Emission Limits

Unless specified otherwise in the Emission Point-Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from the equation provided in 23.3(2)"a"(2) or amount specified in a permit if based on an emission standard of 0.1

grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

NSPS and NESHAP

40 CFR 60 Subpart Dc Requirements

The three natural gas fired boilers, BOIL01, BOIL02 and BOIL03 are subject to 40 CFR 60 Subparts A-General Provisions and Dc-Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units. See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR 60 Subpart 60.40c(a)
567 IAC 23.1(2)"III"

40 CFR 60 Subpart TT

The Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) are subject to 40 CFR 60 Subparts A General Provisions and TT Standards of Performance for Metal Coil Surface Coating, of the New Source Performance Standards (NSPS). See Appendix A for a link to the Standard.

Authority for requirement: 40 CFR 60 Subpart TT
567 IAC 23.1(2)"ll"

40 CFR 60 Subpart JJJJ Requirements

The emergency generators OCOM20 and OCOM22 are subject to 40 CFR 60 Subparts A- General Provisions; and JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines of the New Source Performance Standards (NSPS). See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR Part 60 Subpart JJJJ
567 IAC 23.1(2)"zzz"

40 CFR 60 Subpart IIII Requirements

The emergency generators GEN10, FIREPUMP01, FIREPUMP02, and OCOM21 are subject to 40 CFR 60 Subparts A – General Provisions; and IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines of the New Source Performance Standards (NSPS). See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"

40 CFR 63 Subpart Q Requirements

#17HHT Line Cooling Towers CT-HHT17 are subject to 40 CFR 63 Subpart Q National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers. See Appendix A for a link to the standard.

40 CFR 63 Subpart RRR Requirements

The emission units listed below are subject to 40 CFR 63 Subpart RRR – Secondary Aluminum Production. See Appendix A for a link to the Standard.

Emission Point	Emission Unit	Emission Unit Description	Regulated As
FUG-IP	FILT02	#2 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT03	#3 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT04	#4 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT05	#5 Filter Box	In-Line Fluxer
	FILT10	#10 Filter Box	In-Line Fluxer
	FILT15	#15 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT16	#16 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT17	#17 In-Line Fluxer Filter Box	Existing In-Line Fluxer
	FILT18	#18 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-272	HFRN02	#2 Holding Furnace	Existing Group 1 Furnace
S-284	HFRN03	#3 Holding Furnace	Existing Group 1 Furnace

Emission Point	Emission Unit	Emission Unit Description	Regulated As
S-291	HFRN04	#4 Holding Furnace	Existing Group 1 Furnace
S-437	HFRN05	#5 Holding Furnace	Group 1 Furnace
S-441	HFRN10	#10 Holding Furnace	Group 1 Furnace
S-047	HFRN15	#15 Holding Furnace	Existing Group 1 Furnace
S-050	HFRN16	#16 Holding Furnace	Existing Group 1 Furnace
S-052	HFRN17	#17 Holding Furnace	Existing Group 1 Furnace
S-057	HFRN18	#18 Holding Furnace	Existing Group 1 Furnace
S-271	MFRN02	#2 Melting Furnace	Existing Group 1 Furnace
S-283	MFRN03	#3 Melting Furnace	Existing Group 1 Furnace
S-290	MFRN04	#4 Melting Furnace	Existing Group 1 Furnace
S-438	MFRN05	#5 Melting Furnace	Group 1 Furnace
S-439	MFRN10	#10 Melting Furnace	Group 1 Furnace
S-440			
S-048	MFRN15	#15 Melting Furnace	Existing Group 1 Furnace
S-049	MFRN16	#16 Melting Furnace	Existing Group 1 Furnace
S-053	MFRN17	#17 Melting Furnace	Existing Group 1 Furnace
S-056	MFRN18	#18 Melting Furnace	Existing Group 1 Furnace
S-350	MFRN50	#50 Melting Furnace	Existing Group 2 Furnace
S-351	MFRN60	#60 Melting Furnace	Existing Group 2 Furnace
S-352	HFRN50	#50 Holding Furnace	Existing Group 2 Furnace
	CRUC50	Crucibles	
S-353	HFRN60	#60 Holding Furnace	Existing Group 2 Furnace
	CRUC60	Crucibles	
S-443	MFRN70	#70 Melting Furnace	Group 2 Furnace
S-446	HFRN70	#70 Holding Furnace	Group 2 Furnace
S-444	MFRN80	#80 Melting Furnace	Group 2 Furnace
S-447	HFRN80	#80 Holding Furnace	Group 2 Furnace

Subpart RRR Amendments of September 18, 2015

EPA amended Subpart RRR on 9/18/2015. Arconic US, LLC shall comply with all applicable amended requirements in the subpart on and after the corresponding compliance dates.

- (1) The compliance date for the amended requirements listed in 63.1501(b) for existing units is March 16, 2016; and
- (2) The compliance date for the amended requirements listed in 63.1501(c) for existing units is September 18, 2017.

Authority for Requirement: 40 CFR 63 Subpart RRR
567 IAC 23.1(4)"br"

40 CFR 63 Subpart SSSS Requirements

The Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) are subject to 40 CFR 63 Subparts A-General Provisions and SSSS-National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil. See Appendix A for a link to the Standard.

Authority for requirement: 40 CFR 63 Subpart SSSS
567 IAC 23.1(4)"cs"

40 CFR 63 Subpart ZZZZ Requirements

The generator and pump engines are subject to 40 CFR 63 Subpart A-General Provisions and Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

40 CFR Part 63, Subpart DDDDD Requirements

Numerous CAA Furnaces, Aging Furnaces, Preheat Furnaces, Reheating Furnaces, Heat Treat Furnaces, Boilers, Horizontal Heat Treat Furnaces, and Oil House Process Heaters are subject to 40 CFR 63 Subpart A-General Provisions and Subpart DDDDD - National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. See Appendix A for a link to the Standard.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

III. Emission Point-Specific Conditions

Facility Name: Arconic US, LLC
 Permit Number: 03-TV-025R4

Emission Point ID Number: S-063

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
CAUSTDIP	Caustic Dip	NaOH, HNO ₃ , Water	9,600 gal sodium hydroxide tank, 9,600 gal water rinse tank, 9,600 gal nitric acid tank, 9,600 gal water rinse tank	05-A-860-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-860-S3
 567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g. stack testing).

Pollutant: PM₁₀

Emission Limit(s): 2.0 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-860-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.0 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-860-S3
 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 101
Stack Opening, (inches, dia.): 60.72
Exhaust Flow Rate (scfm): 38,000
Exhaust Temperature (°F): 86
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-860-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: CAA Furnaces

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
S-185	CFRN03	CAA Furnace #3	Natural Gas	0.0052 MMcf/hr
S-142	CFRN18	CAA Furnace #18	Natural Gas	0.01 MMcf/hr
S-141	CFRN19	CAA Furnace #19	Natural Gas	0.01 MMcf/hr
S-140	CFRN20	CAA Furnace #20	Natural Gas	0.01 MMcf/hr
S-139	CFRN21	CAA Furnace #21	Natural Gas	0.01 MMcf/hr
S-138	CFRN25	CAA Furnace #25	Natural Gas	0.01 MMcf/hr
S-137	CFRN26	CAA Furnace #26	Natural Gas	0.01 MMcf/hr
S-136	CFRN27	CAA Furnace #27	Natural Gas	0.01 MMcf/hr
S-135	CFRN28	CAA Furnace #28	Natural Gas	0.01 MMcf/hr
S-134	CFRN29	CAA Furnace #29	Natural Gas	0.01 MMcf/hr
S-157	CFRN50	CAA Furnace #50	Natural Gas	0.002 MMcf/hr
	CFRN51	CAA Furnace #51	Natural Gas	0.002 MMcf/hr
S-156	CFRN52	CAA Furnace #52	Natural Gas	0.01 MMcf/hr
S-155	CFRN53	CAA Furnace #53	Natural Gas	0.01 MMcf/hr
S-154	CFRN54	CAA Furnace #54	Natural Gas	0.002 MMcf/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

NESHAP

These emission units are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-GP

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
FUG-GP	CFRN03	CAA Furnace #3 (chamber)	Metal	NA
	CFRN18	CAA Furnace #18 (chamber)	Metal	NA
	CFRN19	CAA Furnace #19 (chamber)	Metal	NA
	CFRN20	CAA Furnace #20 (chamber)	Metal	NA
	CFRN21	CAA Furnace #21 (chamber)	Metal	NA
	CFRN25	CAA Furnace #25 (chamber)	Metal	NA
	CFRN26	CAA Furnace #26 (chamber)	Metal	NA
	CFRN27	CAA Furnace #27 (chamber)	Metal	NA
	CFRN28	CAA Furnace #28 (chamber)	Metal	NA
	CFRN29	CAA Furnace #29 (chamber)	Metal	NA
	CFRN50	CAA Furnace #50 (chamber)	Metal	NA
	CFRN51	CAA Furnace #51 (chamber)	Metal	NA
	CFRN52	CAA Furnace #52 (chamber)	Metal	NA
	CFRN53	CAA Furnace #53 (chamber)	Metal	NA
	CFRN54	CAA Furnace #54 (chamber)	Metal	NA
	CLAR08	Clarifier Emissions	Water	NA
	CMIL01	#1 Cold Mill	Metal	NA
	CMIL03	#3 Cold Mill	Metal	NA
	FUG_GP_P	General Plant	Various Particles	NA
	FUG_GP_V1	Stores/Off Site Consumption	Solvents	0.02 ton/hr
FUG_GP_V2	Stores/Off Site Consumption	Oils	0.04 ton/hr	
FUG_GP_V3	Stores/Off Site Consumption	Heavy Oils	0.18 ton/hr	
TFRN14	#14 Heat Treat Furnace (chamber)	Metal	NA	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-GP (Internally Venting)

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
ELUBE01	Electrostatic Lube-Treatment Line	Lubricant	556,910 lb/yr total	11-A-700-P1
ELUBE02	Electrostatic Lube-14 Slitter	Lubricant		
MARKR01	Marker-Treatment Line	Marking Ink	3,400 gal/yr total	
MARKR02	Marker-14 Slitter	Marking Ink		
MARKR03	Marker 88" Line	Marking Ink		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission unit shall not exceed the levels specified below.

BACT Emission Limit

Volatile Organic Compounds (VOC)

Emission Limit: 20.0 tons/yr⁽¹⁾ (Lube Systems), 11.0 tons/yr⁽¹⁾ (Marking Systems)

Authority for Requirement: DNR Construction Permit 11-A-700-P1

⁽¹⁾ Standard is a 365-day rolling total. See Reporting and Recordkeeping for specific recordkeeping requirements.

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 11-A-700-P1
567 IAC 23.3(2)"d"

Pollutant: PM_{2.5}

Emission Limit: 0.64 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-700-P1

Pollutant: PM₁₀

Emission Limit: 0.64 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-700-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.64 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-700-P1
567 IAC 23.3(2)"a"

Volatile Organic Compounds: (VOC)

Emission Limit: 0.28 kg/l⁽²⁾

Authority for Requirement: DNR Construction Permit 11-A-700-P1
40 CFR 60 Subpart TT
567 IAC 23.1(2)"II"

⁽²⁾ Per 40 CFR § 60.462(a)(1), 0.28 kilograms VOC per liter (kg/l) of coating solids applied for each calendar month for each affected facility that does not use an emission control device. This limit applies only to the Electrostatic Lube-Treatment Line (EU ELUBE01) and 14 Slitter (EU ELUBE02).

Pollutant: Organic HAP

Emission Limit: ⁽³⁾

Authority for Requirement: DNR Construction Permit 11-A-700-P1
40 CFR 63 Subpart SSSS
567 IAC 23.1(4)"cs"

⁽³⁾ Per 40 CFR § 63.5120, each coil coating affected source must limit organic HAP emissions to one of the following:

- No more than 2% of the organic HAP applied for each month during each 12-month compliance period (98 percent reduction); or
- No more than 0.046 kilogram of organic HAP per liter of solids applied during each 12-month compliance period; or
- If you use an oxidizer to control organic HAP emissions: The capture system shall have an efficiency of 100% and the outlet organic HAP concentration shall not exceed 20 parts per million by volume (ppm_v) on a dry basis.

This limit applies only to the Electrostatic Lube – Treatment Line (EU ELUBE01) and 14 Slitter (EU ELUBE02).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
- (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- B. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
- (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition A. (2), above.
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- C. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be

documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

- D. The owner or operator shall prepare a work practice manual documenting the good operating practices to be utilized on this emission unit to limit coolant & oil residues and submit the manual to the Department prior to startup of the Project (Project Number 11-322). The work practice manual shall be revised and submitted to the Department as necessary to document any proposed changes. The revised manual shall be implemented upon the Department's approval of the proposed changes.

Reporting & Record keeping:

A. The owner or operator shall maintain the following daily records:

- (1) The identification of each VOC containing material used in the Electrostatic Lube-Treatment Line (EU ELUBE01) & Electrostatic Lube-14 Slitter (EU ELUBE02).
- (2) The amount (in gallons) of each VOC containing material used in the Electrostatic Lube-Treatment Line (EU ELUBE01) & Electrostatic Lube-14 Slitter (EU ELUBE02). For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.

B. The owner or operator shall maintain the following monthly records:

- (1) The 12-month rolling total amount of VOC emissions from the Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02), in tons.

C. If the 12-month rolling total of the VOC emissions for the Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) exceeds 16.0 tons, the owner or operator shall immediately begin keeping the following daily records:

- (1) The amount of VOC emissions from the Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02), in tons.
- (2) The 365-day rolling total of the amount of VOC emissions from the Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02), in tons.
- (3) Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from the Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) drops below 16.0 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per C, above, of this permit. If the emissions once again exceed 16.0 tons, daily recordkeeping will be required per C, above, of this permit.

D. The owner or operator shall maintain the following daily records:

- (1) The identification of each VOC containing material used in the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02). & Marker 88" Line (EU MARKR03).
- (2) The amount (in gallons) of each VOC containing material used in the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03). For the purposes of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.

E. The owner or operator shall maintain the following monthly records:

- (1) The 12-month rolling total amount of VOC emissions from the Marker – Treatment Line (EU MARKR01) & Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03), in tons.
- F. If the 12-month rolling total of the VOC emissions for the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03) exceeds 8.8 tons, the owner or operator shall immediately begin keeping the following daily records:
- (1) The amount of VOC emissions from the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03), in tons.
- (2) The 365-day rolling total of the amount of VOC emissions from the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03), in tons.
- (3) Daily calculations for VOC emissions shall continue until the 365-day rolling total of the amount of VOC emissions from the Marker – Treatment Line (EU MARKR01), Marker – 14 Slitter (EU MARKR02) & Marker 88" Line (EU MARKR03) drops below 8.8 tons for the remainder of the current calendar month plus one additional calendar month. At that time, rolling daily calculation of VOC emissions will cease per F, above, of this permit. If the emissions once again exceed 8.8 tons, daily recordkeeping will be required per F, above, of this permit.
- G. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in A. under Operating Limits, above.
- H. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in B. under Operating Limits, above, and that record shall be retained by the owner or operator for a period of ten (10) years after the project (Project Number 11-322) is completed.

Authority for Requirement: DNR Construction Permit 11-A-700-P1

NESHAP and NSPS

The Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) are subject to Subparts A (*General Provisions*; 40 CFR §60.1 through 40 CFR §60.19) and TT (*Standards of Performance Metal Coil Surface Coating*, 40 CFR §60.460 – 40 CFR §60.464) of the New Source Performance Standards (NSPS).

Authority for requirement: DNR Construction Permit 11-A-700-P1
40 CFR 60 Subpart TT
567 IAC 23.1(2)"II"

The Electrostatic Lube – Treatment Line (EU ELUBE01) & Electrostatic Lube – 14 Slitter (EU ELUBE02) are subject to Subparts A (*General Provisions*; 40 CFR §60.1 through 40 CFR §60.19) and SSSS (*National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil*, 40 CFR §63.5080 – 40 CFR §63.5209) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for requirement: DNR Construction Permit 11-A-700-P1
40 CFR 63 Subpart SSSS
567 IAC 23.1(4)"cs"

The Marker-Treatment Line (EU MARKR01), Marker-14 Slitter (EU MARKR02) and Marker 88" Line (EU MARKR03) are not subject to any NSPS or NESHAP at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-GP-1 (Internally Vented)

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
MARKR04	#1-84 Marker	Ink	0.37 gal/hr	24-A-139

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: DNR Construction Permit 24-A-139
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions (NVE)" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit applies to the building openings.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 lb/hr, 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 24-A-139
567 IAC 23.4(13)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The total quantity of surface coating materials used in #1-84 Marker (MARKR04) shall not exceed the values specified in **Material Usage and Solids/VOC Content Limits** table below, in units of gallons per twelve-month rolling period.

Material Usage and Solids/VOC Content Limits

Material Type	Usage Limit (gallons per twelve-month rolling period)	Solids Content Limit (pounds per gallon)	VOC Content Limit (pounds per gallon)
Coating Materials	280	0.36	7.51

On a monthly basis, the owner or operator shall:

- (1) Record the quantity of surface coating materials used, in gallons, over the previous month; and
- (2) Calculate and record the quantity of surface coating materials used, in gallons, over the previous twelve months.
- (3) For the purposes of tracking material usage, all materials may be considered used on

the day the materials are delivered to the facility or to the #1-84 Marker (MARKR04).

B. The Solids and VOC content of surface coating materials used in the #1-84 Marker (MARKR04) shall not exceed the values specified in **Material Usage and Solids/VOC Content Limits Table** listed above, in units of pounds per gallon.

(1) The owner or operator shall maintain a copy of a Safety Data Sheet (SDS) or other vendor's documentation showing the Solids and VOC content of all surface coating materials used.

Authority for Requirement: DNR Construction Permit 24-A-139

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): Internally Vented

Stack Opening, (inches, dia.): Internally Vented

Exhaust Flow Rate (scfm): Internally Vented

Exhaust Temperature (°F): 68

Discharge Style: Internally Vented

Authority for Requirement: DNR Construction Permit 24-A-139

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-287

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
CMIL01	#1 Cold Mill	CE-CMIL0287: Centrifugal Mist Eliminator	Metal	NA	89-A-032-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 38.4 tons/yr

Authority for Requirement: DNR Construction Permit 89-A-032-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 48.4 tons/yr

Authority for Requirement: DNR Construction Permit 89-A-032-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 62.46 tons/yr

Authority for Requirement: DNR Construction Permit 89-A-032-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 70
Stack Opening (inches, dia.): 84
Exhaust Flow Rate (scfm): 88,000
Exhaust Temperature (°F): 85
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 89-A-032-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-165

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
CMIL03	#3 Cold Mill	CE-CMIL0165: Demister	Metal	NA	Grandfathered

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-436

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
DFRN05	Pig Drying Furnace	Natural Gas	11.625 MMBtu/hr	20-A-025-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 20-A-025-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 20-A-025-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 20-A-025-S1
567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall be fired by natural gas only. The amount of natural gas fired in the Pig Drying Furnace (EU DFRN05) shall not exceed 103 million cubic feet per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of natural gas fired in the Pig Drying Furnace (EU DFRN05), in cubic feet, during the previous month; and
 - b. Calculate and record the total amount of natural gas fired in the Pig Drying Furnace (EU DFRN05), in cubic feet, during the previous 12-month period.

Authority for Requirement: DNR Construction Permit 20-A-025-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 97
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 1,103
Exhaust Temperature (°F): 400
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 20-A-025-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (tons/hr)	Construction Permit Number
FILT02	#2 In-line Fluxer Filter Box	Metal	22.49	85-A-067P-S3
FILT03	#3 In-line Fluxer Filter Box	Metal	22.49	87-A-045P-S3
FILT04	#4 In-line Fluxer Filter Box	Metal	22.49	89-A-177P-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

MACT Emission Limits for all Emission Units

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.04 lb/ton of feed

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

BACT Emission Limit(s): 5%⁽¹⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04
567 IAC 23.3(2) "d"

⁽¹⁾Opacity standard is 40% during fluxing

Pollutant: PM₁₀

BACT Emission Limit(s): 0.4 lb/hr, 1.75 tons/yr

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04

Pollutant: Particulate Matter (PM)

BACT Emission Limit(s): 0.4 lb/hr, 1.75 tons/yr

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04

Pollutant: Nitrogen Oxides (NOx)

Emission Limit(s): 38 tons/yr ⁽²⁾, 140 lb/MMcf ⁽³⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04

⁽²⁾ Total NOx emissions for all of #2, #3, #4 casting complexes (each).

⁽³⁾ Limit is the average across each casting complex.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Each In-Line Fluxer Boxes shall process a maximum of 197,000 tons of aluminum each per 12-month rolling period.
- B. The amount of chlorine used in the In-Line Fluxer Boxes shall not exceed 0.04 lbs/ton aluminum.
- C. This facility (Plant number 82-01-002) is subject to all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).

Reporting & Record keeping

- A. The permit holder, owner or operator of the facility shall record the amount of any chlorine used in each In-Line Fluxer Box. Calculate and record monthly and 12-month rolling totals
- B. The permit holder, owner or operator of the facility shall record the amount of aluminum processed in each In-Line Fluxer Box, in tons. Calculate and record monthly and 12-month rolling totals
- C. This facility (Plant number 82-01-002) is subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).

Authority for Requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04

567 IAC 23.1(4)"br"

40 CFR 63 Subpart RRR

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permits Listed in: Table: In-line Fluxer Filter Boxes 02-04
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Vents indoors

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FILT05	#5 Filter Box	Metal	20.91	20-A-028

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 20-A-028
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.01 lb/ton, 0.76 tons/yr

Authority for Requirement: DNR Construction Permit 20-A-028

Pollutant: PM₁₀

Emission Limit(s): 0.01 lb/ton, 0.76 tons/yr

Authority for Requirement: DNR Construction Permit 20-A-028

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: DNR Construction Permit 20-A-028
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.1 gr/dscf, 0.01 lb/ton, 0.76 ton/yr

Authority for Requirement: DNR Construction Permit 20-A-028
567 IAC 23.3(2)"a"

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.04 lb/ton of feed

Authority for Requirement: DNR Construction Permit 20-A-028
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The amount of aluminum processed in #5 filter box (EU FILT05) shall not exceed 152,375 tons per 12-month rolling period.
 - (1) Record the amount of aluminum processed in #5 holding furnace (EU FILT05), in tons. Calculate and record monthly and 12-month rolling totals.
- B. #5 filter box (EU FILT05) may be fluxed with chlorine gas.
- C. The owner or operator shall monitor the total reactive chlorine flux injection rate used in #5 filter box on an hourly basis.
- D. The owner or operator shall meet the notification requirements of §63.1515.
- E. The owner or operator shall submit reports according to §63.1516.

Authority for Requirement: DNR Construction Permit 20-A-028
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Vents indoors.

Authority for Requirement: DNR Construction Permit 20-A-028

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FILT10	#10 Filter Box	Metal	22.22 ton/hr	23-A-172-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 23-A-172-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: DNR Construction Permit 23-A-172-S1

Pollutant: PM₁₀

Emission Limit(s): 0.01 lb/ton

Authority for Requirement: DNR Construction Permit 23-A-172-S1
567 IAC 23.3(2)"a"1

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: DNR Construction Permit 23-A-172-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.04 lb/ton of feed

Authority for Requirement: DNR Construction Permit 23-A-172-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The #10 Filter Box (EU-FILT10) may be fluxed with chlorine gas and/or chloride salts. The owner or operator shall monitor the total reactive flux injection rate used in #10 Filter Box (EU-FILT10) according to 40 CFR §63.1510(j).
- B. The owner or operator shall meet all applicable operating requirements specified in 40 CFR §63.1506.
- C. The owner or operator shall meet all applicable notification requirements specified in 40 CFR §63.1515.
- D. The owner or operator shall submit all applicable reports according specified in 40 CFR §63.1516.
- E. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 24-368) the owner or operator shall document and maintain a record of the following:
 - a. A description of the project (Project Number 24-368),
 - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 24-368), and
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- F. Per 567 IAC 33.3(18)“f”(4), the owner or operator shall:
 - a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition G.(b).
 - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- G. Per 567 IAC 33.3(18)“f”(5), the owner or operator shall retain a written record containing the information required in Condition B. of this permit for a period of ten (10) years after the project (Project Number 24-368) is completed.
- H. Per 567 IAC 33.3(18)“g”, the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)“f” available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Authority for Requirement: DNR Construction Permit 23-A-172-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Exhaust Temperature (°F): 70

Discharge Style: Indoor Vented

Authority for Requirement: DNR Construction Permit 23-A-172-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FILT15	#15 In-Line Fluxer Filter Box	Metal	16 tons of Aluminum/hr (each)	07-A-091
FILT16	#16 In-Line Fluxer Filter Box	Metal		07-A-092

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3 (2)"d"

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.04 lb/ton of feed

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These units shall be sealed units (NOTE: Based on the information from the facility, the particulate emissions from each sealed unit are calculated to be 0.16 lb/hr).
- B. The amount of chlorine gas used shall not exceed 0.0389 lbs per ton of Aluminum.
- C. The combined throughput of the #15 In-Line Filter Box (EU FILT15) and #16 In-Line Filter Box (EU FILT16) shall not exceed 140,160 tons of aluminum per 12-month rolling period.

Reporting & Recordkeeping:

- A. Annual inspection reports demonstrating the unit is sealed as originally designed.
- B. Record the amount of any chlorine gas used in each filter box.
- C. Record the amount of aluminum processed in Filter Boxes 15 (EU FILT15) and 16 (EU FILT16), in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 07-A-091 (FILT15) and 07-A-092 (FILT16)

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permits 07-A-091 (FILT15) and 07-A-192 (FILT16)
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Vents inside.

Authority for requirement: DNR Construction Permits 07-A-091 (FILT15) and 07-A-192 (FILT16)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FILT17	#17 In-Line Fluxer Filter Box	Metal	16 ton/hr	02-A-233-S2
FILT18	#18 In-Line Fluxer Filter Box	Metal	16 ton/hr	02-A-234-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3 (2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.16 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-233-S2 (FILT17) and 02-A-234-S2 (FILT18)

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.01 lb/ton of feed

Authority for Requirement: DNR Construction Permit 02-A-233-S2 (FILT17) and 02 A-234-S2 (FILT18)
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.16 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-233-S2 (FILT17) and 02 A-234-S2 (FILT18)

Pollutant: Single HAP⁽¹⁾

Emission Limit(s): 0.04 lb/ton of feed

Authority for Requirement: DNR Construction Permit 02-A-233-S2 (FILT17) and 02-A-234-S2 (FILT18)
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

⁽¹⁾ The single HAP is HCl.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. Each In-Line Fluxer Box shall process a maximum of 140,160 tons of aluminum per 12-month rolling period.
- B. The amount of chlorine used in each In-Line Fluxer Box shall not exceed 0.04 lbs/ton aluminum.
- C. This facility (Plant number 82-01-002) is subject to all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).

Reporting & Record keeping:

- A. The permit holder, owner or operator of the facility shall record the amount of any chlorine used in each In-Line Fluxer Box.
- B. The permit holder, owner or operator of the facility shall record the amount of aluminum processed in each In-Line Fluxer Box, in tons. Calculate and record monthly and 12-month rolling totals
- C. This facility (Plant number 82-01-002) is subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).

Authority for Requirement: DNR Construction Permit 02-A-233-S2 (FIL17) and 02-A-234-S2 (FIL18)
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permit 02-A-233-S2 (FIL17) and 02-A-234-S2 (FIL18)
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Vents internally.

Authority for requirement: DNR Construction Permit 02-A-233-S2 (FIL17) and 02-A-234-S2 (FIL18)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-IP

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FUG_IP_P	Internally Vented – Ingot Plant	Various airborne particulate	NA	Grandfathered

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-B7XX

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
FUG-B7XX	Internally Vented – Plain Foil & Foil IPS	Airborne Particles	NA	Grandfathered

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operational limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Fire Pumps

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-448	FIREPUMP01	Fire Pump Engine, 600 hp	Diesel	600 hp	N/A
S-449	FIREPUMP02	Fire Pump Engine, 600 hp	Diesel	600 hp	N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb SO₂/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

See NSPS section for additional emission limits.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered.

The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this compression ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

NSPS

These emission units are subject to New Source Performance Standards (NSPS) Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and also subject to Subpart A: General Provisions

Authority for Requirements: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"

NSPS Subpart IIII Requirements

Emission Standards:

According to 40 CFR 60.4205(c) and Table 4 to Subpart IIII, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NOx	CO	PM
450 ≤ kW < 560 (600 ≤ HP < 750)	2009 +	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)

Fuel Requirements:

You must use diesel fuel that has a maximum sulfur content of 15 ppm by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

Compliance Requirements:

1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
 - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
 - b) Changing only those emission-related settings that are permitted by the manufacturer; and
 - c) Meeting the requirements of 40 CFR 1068, as they apply to you.
2. You must demonstrate compliance with the applicable emission standards according to one of the following methods. 40 CFR 60.4211(c). You must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as

applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph 3 of this section.

3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

Operating and Recordkeeping Requirements

1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 40.4209(a)).
2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Authority for Requirement: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Aging Furnaces

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-144	GFRN16	#16 Aging Furnace	Natural Gas	0.006 MMcf/hr	Grandfathered
S-143	GFRN17	#17 Aging Furnace	Natural Gas	0.006 MMcf/hr	Grandfathered
S-125	GFRN31	60" Ager #31	Natural Gas	0.009 MMcf/hr	Grandfathered
S-126	GFRN32	210" Ager #32	Natural Gas	0.02 MMcf/hr	Grandfathered

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission units are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-339

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
GWAST01	Ground Water Air Stripping Tower	Water	18,000 gal/hr	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-272, S-284, S-291

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-272	HFRN02	#2 Holding Furnace	Natural Gas, Aluminum	16 MMBtu/hr, 22.49 ton/hr (each)	92-A-619P-S1
S-284	HFRN03	#3 Holding Furnace			92-A-620P-S1
S-291	HFRN04	#4 Holding Furnace			92-A-621P-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR
40 CFR 63.1505(i)(1)

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR
40 CFR 63.1505(i)(4)

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR
40 CFR 63.1505(i)(3)

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 5%⁽¹⁾

Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1
567 IAC 23.3(2) "d"

B. Opacity standard is 40% during fluxing

Pollutant: PM₁₀

Emission Limit(s): 4.0 lb/hr, 17.5 tons/yr, 0.4 lb/ton Al

Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1

Pollutant: Particulate Matter (PM) State
Emission Limit(s): 4.0 lb/hr, 17.5 tons/yr, 0.4 lb/ton Al
Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 38 tons/yr⁽²⁾, 140 lb/MMcf⁽³⁾
Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1

- C. Total NO_x emissions for all of #2, #3, #4 casting complexes (each).
- D. Limit is the average across each casting complex.

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. The amount of chlorine used in each holder in either gaseous or salt form shall not exceed 1.24 lb/ton aluminum.
- B. These holders may be fluxed with chlorine gas and/or chloride salts.
- C. These holders shall use the SNORT system whenever fluxing with chlorine gas.
- D. These holders shall be fired by natural gas only.
- E. The amount of natural gas fired in each of casting complexes (#2, #3, #4, (melter, holder and fluxer)) shall not exceed 542×10^6 cubic feet per 12-month rolling period.
- F. Each holder shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

Reporting & Record keeping:

- A. Record the amount of any chlorine used in each holder.
- B. Record the amount of natural gas used in each casting complex, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- C. Record the amount of aluminum processed in each holder, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 99.6

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (acfm): 16,565 (S-272)
17,640 (S-284)
18,575 (S-291)

Exhaust Temperature (°F): 831 (S-272)
802 (S-284)
773 (S-291)

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 92-A-619P-S1, 92-A-620P-S1,
92-A-621P-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is under normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Arconic US, LLC shall use the following procedure to monitor opacity:

Check the opacity to ensure no visible emissions. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then make another Method 9 observation. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-437

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
HFRN05	#5 Holding Furnace	Natural Gas, Aluminum	24 MMBtu/hr, 15.40 ton/hr	20-A-026-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.014 lb/ton

Authority for Requirement: DNR Construction Permit 20-A-026-S1

Pollutant: PM₁₀

Emission Limit(s): 0.015 lb/ton

Authority for Requirement: DNR Construction Permit 20-A-026-S1

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR
40 CFR 63.1505(i)(1)

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.1 gr/dscf, 0.017 lb/ton

Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 2.09 lb/hr
Authority for Requirement: DNR Construction Permit 20-A-026-S1

Pollutant: Hydrogen Chloride (HCl)
Emission Limit(s): 0.40 lb/ton of feed
Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR
40 CFR 63.1505(i)(4)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall be fired by natural gas only. The total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05) shall not exceed 374 million cubic feet per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05), in cubic feet, during the previous month; and
 - b. Calculate and record the total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05), in cubic feet, during the previous 12-month period.
 - B. The SNORT system shall be used whenever fluxing with chlorine gas in the #5 Holding Furnace (EU HFRN05). #5 Holding Furnace (EU HFRN05) may be fluxed with chlorine gas and/or chloride salts.
 - C. The owner or operator shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test, at or below the average rate established during the performance test. The owner or operator shall monitor the total reactive flux injection rate used in #5 holding furnace (EU HFRN05) rate according to 40 CFR §63.1510(j).
 - D. The owner or operator shall meet the notification requirements of 40 CFR §63.1515.
 - E. The owner or operator shall submit reports according to 40 CFR §63.1516.
- Authority for Requirement: DNR Construction Permit 20-A-026-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 92
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 6,878
Exhaust Temperature (°F): 127
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 20-A-026-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-441

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
HFRN10	#10 Holding Furnace	Natural Gas	24 MMBtu/hr 22.22 ton/hr	23-A-171-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.037 lb/ton

Authority for Requirement: DNR Construction Permit 23-A-171-S1

Pollutant: PM₁₀

Emission Limit(s): 0.039 lb/ton

Authority for Requirement: DNR Construction Permit 23-A-171-S1

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.044 lb/ton, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.3(2)"a"(1)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 1.88 lb/hr, 30.84 ton/yr(2), 80 lb/MMCF

Authority for Requirement: DNR Construction Permit 23-A-171-S1

⁽²⁾This is a combined limit for the #10 Melting Furnace and #10 Holding Furnace (EP-S-439, EP-S-440, and EP-S-441).

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Total HAP

Emission Limit(s): 15.0 µg TEQ/Mg Feed

Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall be fired by natural gas only. The total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10) shall not exceed 541 million cubic feet per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10), in cubic feet, during the previous month; and
 - b. Calculate and record the total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10), in cubic feet, during the previous 12-month period.
- B. The SNORT system shall be used whenever fluxing with chlorine gas in the #10 Holding Furnace (EU-HFRN10). #10 Holding Furnace (EU-HFRN10) may be fluxed with chlorine gas and/or chloride salts.
- C. The owner or operator shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test, at or below the average rate established during the performance test. The owner or operator shall monitor the total reactive flux injection rate used in #10 Holding Furnace (EU-HFRN10) according to 40 CFR §63.1510(j).
- D. The owner or operator shall meet all applicable operating requirements specified in 40 CFR §63.1506.
- E. The owner or operator shall meet all applicable notification requirements specified in 40 CFR §63.1515.
- F. The owner or operator shall submit all applicable reports according specified in 40 CFR §63.1516.

- G. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 24-368) the owner or operator shall document and maintain a record of the following:
- a. A description of the project (Project Number 24-368),
 - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 24-368), and
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- H. Per 567 IAC 33.3(18)“f”(4), the owner or operator shall:
- a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition G.(b).
 - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- I. Per 567 IAC 33.3(18)“f”(5), the owner or operator shall retain a written record containing the information required in Condition B. of this permit for a period of ten (10) years after the project (Project Number 24-368) is completed.
- J. Per 567 IAC 33.3(18)“g”, the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)“f” available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).
- Authority for Requirement: DNR Construction Permit 23-A-171-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 95

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 7,000

Exhaust Temperature (°F): 130

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 23-A-171-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing

Pollutant – Particulate Matter (PM)⁽¹⁾

Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date

Test Method - 40 CFR 60, Appendix A, Method 5

Authority for Requirement – DNR Construction Permit 23-A-171-S1

⁽¹⁾Compliance demonstrations shall be conducted accord to 40 CFR §63.1512(d).

Pollutant – Nitrogen Oxides (NOx)

Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date

Test Method - 40 CFR 60, Appendix A, Method 7E

Authority for Requirement – DNR Construction Permit 23-A-171-S1

Pollutant – Hydrogen Chloride (HCl)

Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date

Test Method - 40 CFR 60, Appendix A, Method 26A

Authority for Requirement – DNR Construction Permit 23-A-171-S1

Pollutant – Dioxins/Furans

Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date

Test Method - 40 CFR 60, Appendix A, Method 23

Authority for Requirement – DNR Construction Permit 23-A-171-S1

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-047, S-050

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-047	HFRN15	#15 Holding Furnace	Natural Gas, Aluminum	10 MMBtu/hr, 16 tons/hr Al	92-A-624-S3
S-050	HFRN16	#16 Holding Furnace		10 MMBtu/hr, 16 tons/hr Al	92-A-625-S6

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 4.87 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.3(3) "e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Each emission unit shall be fired by natural gas only.
- B. The combined amount of aluminum processed in the #15 Holding Furnace and #16 Holding Furnace shall not exceed 140,160 tons per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of aluminum processed, in tons, in the #15 Holding Furnace and #16 Holding Furnace during the previous month; and,
 - b. Calculate and record the total amount of aluminum processed, in tons, in the #15 Holding Furnace and #16 Holding Furnace during the previous 12-month period.
- C. The SNORT system shall be used whenever fluxing with chlorine gas in #15 Holding Furnace (EU HFRN15) or #16 Holding Furnace (EU HFRN16). The #15 Holding Furnace (EU HFRN15) and #16 Holding Furnace (EU HFRN16) may be fluxed with chlorine gas and/or chloride salts.
- D. The owner or operator shall maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test, at or below the average rate established during the performance test. The owner or operator shall monitor the total reactive flux injection rate used in #15 Holding Furnace (EU HFRN15) and #16 Holding Furnace (EU HFRN16) rate according to 40 CFR §63.1510(j).
- E. The owner or operator shall meet the notification requirements of 40 CFR §63.1515.
- F. The owner or operator shall submit reports according to 40 CFR §63.1516.

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 99.6

Stack Opening, (inches, dia.): 51

Exhaust Flow Rate (scfm): 12,100

Exhaust Temperature (°F): 316

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 92-A-624-S3, 92-A-625-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-052, S-057

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-052	HFRN17	#17 Holding Furnace	Natural Gas, Aluminum	13 MMBtu/hr 16 ton/hr	92-A-626-S3
S-057	HFRN18	#18 Holding Furnace		13 MMBtu/hr 16 ton/hr	92-A-627-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: HCl

Emission Limit(s): 0.40 lb/ton of feed

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 4.0 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 0.1 gr/dscf and 4.0 lb/hr

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. These units shall be fired by natural gas only.
 - B. These units shall process only clean charge as defined in §63.1503.
 - C. The amount of aluminum processed in #17 and #18 holding furnace (EU HFRN17 & EU HFRN18) shall not exceed 140,160 tons per 12-month rolling period each.
 - (1) Record the amount of aluminum processed in each #17 and #18 holding furnace (EU HFRN17 & EU HFRN18), in tons. Calculate and record monthly and 12-month rolling totals each.
 - D. The SNORT system shall be used whenever fluxing with chlorine gas in #17 holding furnace (EU HFRN17) or #18 holding furnace (EU HFRN18).
 - E. Each holding furnace (EU HFRN17 & EU HFRN18) may be fluxed with chlorine gas and/or chloride salts.
 - F. Gas fluxing in each holder shall not exceed 2,464 hours per 12-month rolling period.
 - (1) Record the number of hours gas fluxing is performed in each holder. Calculate and record monthly and 12-month rolling totals.
 - G. The amount of chlorine (gaseous and solid flux) used in each holder shall be limited in accordance with NESHAP subpart RRR for Secondary Aluminum Processing facilities SAPU and operating and maintenance plan.
 - (1) Monitor the total reactive flux injection rate used in #17 holding furnace (EU HFRN17) and #18 holding furnace (EU HFRN18) rate according to §63.1510.
 - H. The owner or operator shall meet the notification requirements of §63.1515.
 - I. The owner or operator shall submit reports according to §63.1516.
- Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 77.6

Stack Opening, (inches, dia.): 53

Exhaust Flow Rate (scfm): 2,762

Exhaust Temperature (°F): 2,012

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 92-A-626-S3, 92-A-627-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Holding Furnaces & Crucibles

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-352	HFRN50	#50 Holding Furnace	Natural Gas	.0047 MMcf/hr	NA
	CRUC50	Crucibles (3 units): #50 Holding Furnace	Natural Gas	.0015 MMcf/hr	
S-353	HFRN60	#60 Holding Furnace	Natural Gas	.0047 MMcf/hr	NA
	CRUC60	Crucibles (3 units): #60 Holding Furnace	Natural Gas	.0015 MMcf/hr	
S-446	HFRN70	#70 Holding Furnace	Natural Gas	4.5 MMbtu/hr	NA
S-447	HFRN80	#80 Holding Furnace	Natural Gas	4.5 MMbtu/hr	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: 567 IAC 23.1(4)"br"

40 CFR 63 Subpart RRR

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-450

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-450	16 HHT	Emergency Generator 16 HHT for Horizontal Heat Treat Furnace (58.5 hp)	Natural Gas	58.5 hp	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

According to 40 CFR 63.6590(a)(1)(ii) this spark ignition emergency engine, located at a major source, is existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.

3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (up to) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Authority for requirement: 567 IAC 23.1(4)"cz"
40 CFR 63 Subpart ZZZZ

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-HL

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
HMIL10	100" 5 Stand Hot Mill	Metal	NA	HMIL0288 HMIL0289: 4-Stage Mist Eliminators
HMIL14	144" Hot Mill		NA	HMIL0344: 3-Stage Mist Eliminator
HMIL16	160" Hot Mill		NA	HMIL0349: 3-Stage Mist Eliminator
HMIL22	220" Hot Mill		NA	HMIL0119: Chevron Screens (Mist Eliminators)
HMILPH	PAHTS 144" Taper Mill		NA	HMIL0071: Demister
PFRN01	Preheat Furnace #1	Ammonium Fluoroborate	0.05 MMcf/hr	NA
PFRN02	Preheat Furnace #2		0.03 MMcf/hr	NA
PFRN03	Preheat Furnace #3		0.04 MMcf/hr	NA
PFRN04	Preheat Furnace #4		0.04 MMcf/hr	NA
PFRN12	Preheat Furnace #12		0.04 MMcf/hr	NA
PFRN13	Preheat Furnace #13		0.04 MMcf/hr	NA
PFRN16	Preheat Furnace #16		0.04 MMcf/hr	NA
PFRN17	Preheat Furnace #17		0.04 MMcf/hr	NA
PFRN18	Preheat Furnace #18		0.05 MMcf/hr	NA
PFRN19	Preheat Furnace # 19		0.05 MMcf/hr	NA
PFRN20	Preheat Furnace # 20		0.05 MMcf/hr	NA
PFRN21	Preheat Furnace # 21		0.05 MMcf/hr	NA
PFRN22	Preheat Furnace #22		0.05 MMcf/hr	NA
PFRN23	Preheat Furnace #23		0.03 MMcf/hr	NA
PFRN24	Preheat Furnace #24		0.05 MMcf/hr	NA
PFRN25	Preheat Furnace #25		0.05 MMcf/hr	NA
PFRN26	Preheat Furnace #26		0.05 MMcf/hr	NA
PFRN27	Preheat Furnace #27	0.05 MMcf/hr	NA	
FUG_HL_P	Fugitive Hot Line	Various Particulate	NA	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

PFRN01-04, PFRN12-13 and PFRN16-27 are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: S-288, S-289

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
S-288	HMIL10	100" 5 Stand Hot Mill - N	CE HMIL0289: 4-Stage Mist Eliminators	Metal	NA	88-A-158-P2
S-289		100" 5 Stand Hot Mill - S				88-A-159-P2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

BACT Emission Limits

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 170.4 tons/yr⁽¹⁾⁽²⁾ and 30ppm as propane

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and 88-A-159-P2 (S-289)

⁽¹⁾Standard is a 365-day rolling total.

⁽²⁾This limit is the combined total for the 100" Hot Mill (EPs S-288 and S-289), 144" Hot Mill (EP S-344) and 160" Hot Mill (EP S-349).

Other Emission Limits – per emission point

Pollutant: Opacity

Emission Limit(s): 40%⁽⁴⁾

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and 88-A-159-P2 (S-289)
567 IAC 23.3(2)"d"

⁽⁴⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 4.40 lb/hr

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and 88-A-159-P2 (S-289)

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and 88-A-159-P2 (S-289)
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

- A. The pressure drop across the control equipment (CE HMIL0288) shall be maintained between 0.2 – 8 inches of H₂O on an hourly block average.
- B. The owner or operator shall properly operate and maintain equipment to monitor the pressure drop across the control equipment (CE HMIL0288). The monitoring device(s) and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
 - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition D.(2) (above).
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- E. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. The owner or operator shall collect and record the pressure drop across the control equipment (CE HMIL0288) on an hourly basis when the emission unit is operating, except for normal meter maintenance, calibration and replacement, and malfunctions. A minimum of one (1) measurement shall be recorded per hour.
- B. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in Condition C. (above) of this permit.
- C. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in Condition D. (above) of this permit and that record shall be retained by the owner or operator for a period of ten (10) years after the project (Project Number 11-322) is completed.

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and 88-A-159-P2 (S-289)

Emission Point Characteristics

Each emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 86.4

Stack Opening, (inches, dia.): 108

Exhaust Flow Rate (scfm): 130,000

Exhaust Temperature (°F): 100

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permits 88-A-158-P2 (S-288) and
88-A-159-P2 (S-289)

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: See Table: Hot Mills

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
S-344	HMIL-14	144" Hot Mill	HMIL0344: 3 Stage Mist Eliminator	Metal	Variable	11-A-687-P
S-349	HMIL-16	160" Hot Mill	HMIL0349: 3 Stage Mist Eliminator	Metal	Variable	11-A-688-P

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Table: Emission Limits

Emission Point	Emission Unit	Opacity Limit 567 IAC 23.3(2)"d"	PM Limit (gr./dscf) 567 IAC 23.3(2)"a"	PM ₁₀ Limit (lb/hr)	BACT VOC Limit (tons/yr)	BACT VOC Limit (ppm, as propane)	Authority for Requirement (Construction Permit Number)
S-344	HMIL-14	40% ⁽¹⁾	0.1	5.84	170.4 ⁽²⁾⁽³⁾	20	11-A-687-P
S-349	HMIL-16	40% ⁽¹⁾	0.1	7.03		20	11-A-688-P

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
⁽²⁾ Standard is a 365-day rolling total.
⁽³⁾ This limit is the combined total for the 100" Hot Mill (EPs S-288 and S-289), 144" Hot Mill (EP S-344) and 160" Hot Mill (EP S-349).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

The pressure drop across the control equipment (CE HMIL0344 and CE HMIL0349) shall be maintained between 0.2 – 8 inches of H₂O on an hourly block average.

- A. The owner or operator shall properly operate and maintain equipment to monitor the pressure drop across the control equipment. The monitoring device(s) and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
- B. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project

Number 11-322) the owner or operator shall document:

- (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- C. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
- (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition C.(2) (above).
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- D. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. The owner or operator shall collect and record the pressure drop across the control equipment (CE HMIL0344 and CE HMIL0349) on an hourly basis when the emission units are operating, except for normal meter maintenance, calibration and replacement, and malfunctions. A minimum of one (1) measurement shall be recorded per hour.
- B. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in Condition C. (above) of this permit.
- C. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in Condition D. (above) of this permit and that record shall be retained by the owner or operator for a period of ten (10) years after the project (Project Number 11-322) is completed.

Authority for Requirement: DNR Construction Permits 11-A-687-P, 11-A-688-P

Emission Point Characteristics

These emission points shall conform to the conditions specified in Table: Hot Mill Stacks

Table: Hot Mill Stacks			Stack Characteristics				
Emission Point	Emission Unit	Construction Permit	Height (feet)	Diameter (inches)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Stack Characteristics
S-344	HMIL-14	11-A-687-P	85	88	148,200	85	Vertical Unobstructed
S-349	HMIL-16	11-A-688-P	70	96	184,000	100	Vertical Unobstructed

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Hot & Taper Mill

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity
S-119	HMIL22	220" Hot Mill Stack	HMIL0119: Chevron screens (mist eliminators)	Metal	NA
S-120			HMIL0120: Chevron screens (mist eliminators)		
S-071	HMILPH	PAHTS 144" Taper Mill	HMIL0071: Demister	Metal	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-314

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
LHLT05	Lime Storage Silo	LHLT05-P1: Bin Vent Filter	Lime	2,000 ft ³ , 20 tons/hr fill rate	94-A-546-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 94-A-546-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.4 lb/hr,

Authority for Requirement: DNR Construction Permit 94-A-546-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.4 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 94-A-546-S3
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The owner or operator shall maintain the Bin Vent Filter (LHLT05-P1) in accordance with the manufacturer's specifications and maintenance schedule. The owner or operator shall maintain a record of all inspections and maintenance conducted on the control equipment. This record shall include, but is not limited to:
- (1) The date any inspection and/or maintenance was performed on the control equipment;
 - (2) Any issues identified during the inspection; and,
 - (3) Any issues addressed during the maintenance activities.

Authority for Requirement: DNR Construction Permit 94-A-546-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 47.5
Stack Opening, (inches): 10.71 x 6.42
Exhaust Flow Rate (scfm): 2,090
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 94-A-546-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-271, S-283, S-290

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-271	MFRN02	#2 Melting Furnace	Natural Gas, Aluminum	70 MMBtu/hr and 22.5 tons/hr (each)	85-A-065P-S1
S-283	MFRN03	#3 Melting Furnace			87-A-043P-S1
S-290	MFRN04	#4 Melting Furnace			89-A-175P-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 5%⁽¹⁾

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1, 89-A-175P-S1
567 IAC 23.3(2)"d"

⁽¹⁾ Opacity standard is 40% during startup. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less.

Pollutant: PM₁₀

Emission Limit(s): 4.0 lb/hr, 17.5 tons/yr⁽²⁾, 0.4 lb/ton of Al

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1, 89-A-175P-S1

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 4.0 lb/hr, 17.5 tons/yr⁽²⁾, 0.4 lb/ton of Al

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1,
89-A-175P-S1

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 38 tons/yr⁽²⁾⁽³⁾, 140 lb/MMcf⁽⁴⁾

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1,
89-A-175P-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

⁽²⁾ Limit is a 12-month rolling total.

⁽³⁾ Total NO_x emissions for each casting complex (#2, #3, #4 each)

⁽⁴⁾ Limit is the average across each casting complex (#2, #3, #4 each).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. Each melter shall be charged with aluminum ingots and other aluminum complying with NESHAP subpart RRR.
- B. Each melter shall be fired by natural gas only.
- C. Each melter shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.
- D. The amount of natural gas fired in each of casting complexes (#2, #3, #4 (melter, holder and fluxer)) shall not exceed 542×10^6 cubic feet per 12-month rolling period.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of natural gas used in each casting complex (#2, #3, #4), in cubic feet. Calculate and record monthly and 12-month rolling totals.
- B. Record the amount of aluminum processed in each melter, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1,
89-A-175P-S1

NESHAP

This emission unit is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1,
89-A-175P-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 103.6
Stack Opening, (inches, dia.): 85
Exhaust Flow Rate (acfm): 68,700 (S-271)
71,145 (S-283)
56,213 (S-290)
Exhaust Temperature (°F): 566 (S-271)
385 (S-283)
792 (S-290)

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 85-A-065P-S1, 87-A-043P-S1,
89-A-175P-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

The facility shall check the opacity weekly during a period when the emission unit on this emission point is under normal operation except during startup and record the reading. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Arconic US, LLC shall use the following procedure to monitor opacity:

Check the opacity to ensure no visible emissions. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional

corrective action within eight hours from the Method 9 observation and then make another Method 9 observation. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-438

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
MFRN05	#5 Melting Furnace	Natural Gas/ Aluminum	80 mmBtu/hr, 15.40 ton/hr	20-A-027-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of Al

Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}
Emission Limit(s): 0.105 lb/ton of feed
Authority for Requirement: DNR Construction Permit 20-A-027-S1

Pollutant: PM₁₀
Emission Limit(s): 0.111 lb/ton of feed
Authority for Requirement: DNR Construction Permit 20-A-027-S1

Pollutant: Particulate Matter (PM) State
Emission Limit(s): 0.125 lb/ton, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.3(2)"a"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 5.85 lb/hr
Authority for Requirement: DNR Construction Permit 20-A-027-S1

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 20-A-027-S1
567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall be fired by natural gas only. The total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05) shall not exceed 374 million cubic feet per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05), in cubic feet, during the previous month; and
 - b. Calculate and record the total amount of natural gas fired in the #5 Holding Furnace (EU HFRN05) and #5 Melting Furnace (EU MFRN05), in cubic feet, during the previous 12-month period.
- B. This unit shall be charged with aluminum ingots, alloying materials, and other aluminum complying with NESHAP Subpart RRR.
- C. The owner or operator shall meet the notification requirements of 40 CFR §63.1515.
- D. The owner or operator shall submit reports according to 40 CFR §63.1516.

Authority for Requirement: DNR Construction Permit 20-A-027
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 92
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 24,614
Exhaust Temperature (°F): 377
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 20-A-027-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-439, S-440

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
S-439	MFRN10	#10 Melting Furnace	CE-MFRN10: Baghouse	Natural Gas, Aluminum	80 MMBtu/hr, 22.22 ton/hr	23-A-170-S1
S-440						

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of Al

Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}
Emission Limit(s): 0.017 lb/ton
Authority for Requirement: DNR Construction Permit 23-A-170-S1

Pollutant: PM₁₀
Emission Limit(s): 0.018 lb/ton
Authority for Requirement: DNR Construction Permit 23-A-170-S1

Pollutant: Particulate Matter (PM) State
Emission Limit(s): 0.020 lb/ton, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.3(2)"a"(1)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppm_v
Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 7.23 lb/hr, 30.84 tons/yr⁽²⁾, 114 lb/MMCF
Authority for Requirement: DNR Construction Permit 23-A-170-S1
⁽²⁾This is a combined limit for the #10 Melting Furnace and #10 Holding Furnace (EP-S-439, EP-S-440, and EP-S-441).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall be fired by natural gas only. The total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10) shall not exceed 541 million cubic feet per rolling 12-month period. On a monthly basis, the owner or operator shall:
 - a. Record the total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10), in cubic feet, during the previous month; and
 - b. Calculate and record the total amount of natural gas fired in the #10 Holding Furnace (EU-HFRN10) and #10 Melting Furnace (EU-MFRN10), in cubic feet, during the previous 12-month period.
- B. This unit shall be charged with aluminum ingots, alloying materials, and other aluminum complying with NESHAP Subpart RRR.
- C. The Baghouse (CE-MFRN10) shall be operated and maintained according to the facility's operation, maintenance, and monitoring plan (OM&M). At a minimum, annual inspections shall be performed to ensure that the emission capture, collection, and transport systems continue to operate in accordance with ACGIH Guidelines. Inspections shall meet all of the applicable requirements specified in 40 CFR §63.1510(d). A log shall include, but is not necessarily limited to:

- a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE-MFRN10);
 - b. Any issues identified during the inspection and the date each issue was resolved;
 - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and,
 - d. Identification of the staff member performing the maintenance or inspection.
- D. The owner or operator shall meet all applicable operating requirements specified in 40 CFR §63.1506. Operating requirements for capture/collection systems are specified in 40 CFR §63.1506(c).
- E. The owner or operator shall meet all applicable notification requirements specified in 40 CFR §63.1515.
- F. The owner or operator shall submit all applicable reports according specified in 40 CFR §63.1516.
- G. The owner or operator shall operate the Baghouse (CE-MFRN10) during normal operations. In emergency situations, the owner or operator may vent emissions through a safety vent (EP-S-440). If there is an emergency situation, the owner or operator shall immediately turn off the #10 Melting Furnace (EU-MFRN10) and take corrective actions.
- H. Per 567 IAC 33.3(18)“f”(1), prior to beginning actual construction of the project (Project Number 23-137) the owner or operator shall document and maintain a record of the following:
- a. A description of the project (Project Number 23-137),
 - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 23-137), and
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph “3” of the definition of “*projected actual emissions*” in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- I. Per 567 IAC 33.3(18)“f”(4), the owner or operator shall:
- a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition H.(b).
 - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- J. Per 567 IAC 33.3(18)“f”(5), the owner or operator shall retain a written record containing the information required in Condition B. of this permit for a period of ten (10) years after the project (Project Number 23-137) is completed.
- K. Per 567 IAC 33.3(18)“g”, the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)“f” available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).
- Authority for Requirement: DNR Construction Permit 23-A-170-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 95
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 24,000
Exhaust Temperature (°F): 375
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 23-A-170-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (PM)
Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date
Test Method - 40 CFR 60, Appendix A, Method 5
Authority for Requirement – DNR Construction Permit 23-A-170-S1

Pollutant – Nitrogen Oxides (NO_x)
Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement – DNR Construction Permit 23-A-170-S1

Pollutant – Hydrogen Chloride (HCl)
Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date
Test Method - 40 CFR 60, Appendix A, Method 26A
Authority for Requirement – DNR Construction Permit 23-A-170-S1

Pollutant – Dioxins/Furans
Stack Test to be Completed by - • Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date
Test Method - 40 CFR 60, Appendix A, Method 23
Authority for Requirement – DNR Construction Permit 23-A-170-S1

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-048

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
MFRN15	#15 Melting Furnace	Natural Gas, No. 2 Fuel Oil, Used Waste Oil, Metal	21.4 MMBtu/hr, 16 tons/hr	08-A-297-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of Al⁽¹⁾

Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al⁽¹⁾

Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al⁽¹⁾

Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

⁽¹⁾Per §63.1505(i)(6), the owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the feed/charge.

Secondary Aluminum Processing Unit

Pollutant	Limit ⁽¹⁾⁽²⁾	Reference
Particulate Matter (PM) ⁽³⁾	$L_{CPM} = \frac{\sum_{i=1}^n (L_{iPM} \times T_{ii})}{\sum_{i=1}^n (T_{ii})}$	40 CFR §63.1505 NESHAP Subpart RRR 567 IAC 23.1(4)"br"
Hydrogen Chloride (HCl) ⁽⁴⁾	$L_{CHCl} = \frac{\sum_{i=1}^n (L_{iHCl} \times T_{ii})}{\sum_{i=1}^n (T_{ii})}$	40 CFR §63.1505 NESHAP Subpart RRR 567 IAC 23.1(4)"br"
Dioxins and Furans (D/F) ⁽⁵⁾	$L_{CD/F} = \frac{\sum_{i=1}^n (L_{iD/F} \times T_{ii})}{\sum_{i=1}^n (T_{ii})}$	40 CFR §63.1505 NESHAP Subpart RRR 567 IAC 23.1(4)"br"

⁽¹⁾ Standard is expressed as a 3-day, 24-hour rolling average.

⁽²⁾ The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limit if §63.1505(k)(1) through (3) by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of §63.1505(i) and §63.1505(j).

⁽³⁾ Where,

L_{CPM} = The PM emission limit for the secondary aluminum processing unit.

L_{iPM} = The PM emission limit for individual emission unit i in §63.1505(i)(1) and (2) for a group 1 furnace or §63.1505(j)(2) for an in-line fluxer. NOTE: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

T_{ii} = The feed/charge rate for individual emission unit i .

⁽⁴⁾ Where,

L_{CHCl} = The HCl emission limit for the secondary aluminum processing unit.

L_{iHCl} = The HCl emission limit for individual emission unit i in §63.1505(i)(4) for a group 1 furnace or §63.1505(j)(1) for an in-line fluxer. NOTE: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

T_{ii} = The feed/charge rate for individual emission unit i .

⁽⁵⁾ Where,

$L_{CD/F}$ = The D/F emission limit for the secondary aluminum processing unit.

$L_{iD/F}$ = The D/F emission limit for individual emission unit i in §63.1505(i)(3) for a group 1 furnace.

T_{ii} = The feed/charge rate for individual emission unit i .

Authority for Requirement: DNR Construction Permit 08-A-297-S1

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽²⁾

Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.3(2)"d"

⁽²⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀
Emission Limit(s): 6.4 lb/hr
Authority for Requirement: DNR Construction Permit 08-A-297-S1

Pollutant: Particulate Matter (PM) State
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 53.5 lb/hr, 500 ppmv ⁽³⁾, 2.5 lb/MMBtu ⁽⁴⁾
Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.3(3)"e"
567 IAC 23.3(3)"b"

⁽³⁾SO₂ emission standard applies when the melter is burning natural gas.

⁽⁴⁾SO₂ emission standard applies when the melter is burning used oil

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 3.8 lb/hr
Authority for Requirement: DNR Construction Permit 08-A-297-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 2.2 lb/hr
Authority for Requirement: DNR Construction Permit 08-A-297-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process Throughput and Work Practice Standards:

- A. The burners on the #15 Melter are limited to burning natural gas, #2 fuel oil or used oil.
- B. The sulfur content of used oil burned in the #15 Melter shall not exceed 2.3% by weight.
- C. The sulfur content of #2 fuel oil burned in the #15 Melter shall not exceed 0.5% by weight.
- D. The total halogen concentration of the used oil burned in the #15 Melter shall be less than 4,000 ppm and shall be properly rebutted as not containing a listed halogenated hazardous waste per 40 CFR §279.63. Used oil that contains a total halogen concentration less than 1,000 ppm is not considered a hazardous waste and a rebuttal demonstration is not required in order for the used oil to be burned.
- E. Used oil shall only be burned while the melting furnace is at normal operating temperatures and not during start-up or shutdown.
- F. The owner or operator of the facility shall comply with all applicable operating limits and requirements contained in NESHAP Subpart RRR, 40 CFR 63.1506.
- G. The owner or operator shall provide and maintain easily visible labels posted at the #15 Melter that identifies the applicable emission limits and means of compliance per 40 CFR

63.1506(b) including:

- (1) The type of affected source or emission unit
 - (2) The applicable operational standard(s) and control method(s). This includes but is not limited to, the type of charge to be used for a furnace, flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.
- H. The owner or operator shall install and operate a device to measure and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test per 40 CFR 63.1506(d). The weight measurement system or other weight determination procedure shall be operated in accordance with the OM&M plan. The owner or operator may choose to measure and record aluminum production weight from an affect source or emission unit rather than feed/charge weight to an affect source or unit provided:
- (1) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
 - (2) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
- I. The owner or operator of group 1 furnace (i.e. #15 Melter) without add-on air pollution control device must, per 40 CFR.63.1506(n):
- (1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
 - (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.

Reporting and Recordkeeping:

- A. The owner or operator shall maintain a record of the sulfur content, in percent by weight, for all of the #2 fuel oil and used oil burned in the #15 Melter. If the analysis of the sulfur content is not provided by the fuel oil supplier or the used oil refiner, the owner or operator shall perform the analysis prior to combustion of the material.
- B. The owner or operator shall maintain a record of the PCB concentration, in ppm, for all of the used oil burned in the #15 Melter. If the analysis of the PCB concentration is not provided by the used oil refiner, the owner or operator shall perform the analysis prior to combustion of the used oil.
- C. The owner or operator shall maintain a record of the total halogen concentration, in ppm, for all of the used oil burned in the #15 Melter. If the total halogen concentration is greater than or equal to 1,000 ppm, the owner or operator shall also maintain the rebuttal demonstration for the used oil showing that it does not contain hazardous waste. The owner or operator shall determine the halogen content of the used oil by:
 - (1) Testing the used oil;
 - (2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used, or
 - (3) If the used oil has been received from a processor/re-refiner subject to regulation under subpart F of 40 CFR Part 279, using information provided by the processor/re-refiner.
- D. The owner or operator shall develop written operating procedures to ensure that used oil

is not burned in the #15 Melter during start-up or shutdown. The owner or operator shall document any deviations from the written operating procedures.

- E. The owner or operator shall develop and implement a written preventative maintenance plan for the #15 Melter. At a minimum, the plan shall include procedures to monitor the condition of the door seal and to ensure the combustion system is operating properly.
- F. The owner or operator of the facility shall comply with all applicable operating monitoring requirements contained in NESHAP Subpart RRR, 40 CFR 63.1510.
- G. The owner or operator shall prepare and implement a written operation, maintenance, and monitoring (OM&M) plan per the monitoring requirements of 40 CFR 63.1510. The OM&M plan shall include the required information for secondary aluminum processing units as described in 40 CFR 63.1510(s).
- H. The owner or operator shall inspect the labels for the #15 Melter at least once per calendar month to confirm that posted labels are intact and legible.
- I. The owner or operator of the #15 Melter shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the #15 Melter over the same operating cycle or time period used in the performance test per 40 CFR 63.1510(e). The owner or operator shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months. The device shall conform to the specifications of 40 CFR 63.1510(e)(1).
- J. The owner or operator shall install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to the #15 Melter per 40 CFR 63.1510(j). The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test. The owner or operator shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- K. Calculate and record the gaseous or liquid reactive flux injection rate in kg/Mg or lb/ton for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- L. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of gaseous or liquid reactive flux, other than chlorine; and solid reactive flux per 40 CFR 63.1510(j).
- M. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
- N. The owner or operator of a group 1 furnace that is not equipped with an add-on pollution control device (e.g. #15 Melter) shall develop a site specific monitoring plan including all of the requirements of 40 CFR 63.1510(o).
- O. The owner or operator group 1 furnace that is not equipped with an add-on pollution control device (e.g. #15 Melter) shall develop a scrap inspection program including all of the requirements of 40 CFR 63.1510(p). However, per 40 CFR 63.1510(q), The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap of a uniform composition, may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap using a calculation method rather than a scrap inspection program. A scrap contamination

monitoring program using a calculation method shall include all of the requirements per 40 CFR 63.1510(q)(1) through 40 CFR 63.1510(q)(3).

- P. The owner or operator shall calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl and D/F for each secondary aluminum processing unit on a daily basis per 40 CFR 63.1510(t), unless the owner or operator has demonstrated through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit per 40 CFR 63.1510(u).
- Q. The owner or operator shall follow all applicable notification requirements of 40 CFR 63.1515.
- R. The owner or operator shall follow all applicable reporting requirements of 40 CFR 63.1516.
- S. The owner or operator shall follow all applicable recordkeeping requirements of 40 CFR 63.1517.
- T. For the purposes of maintaining Project 08-096 as a minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall have the following monitoring conditions for a period ten (10) years from the date of start of operation (start-up date) of the #15 Melter after the burner replacement:
 - (1) Record the date the #15 Melter starts operation after the burner replacement.
 - (2) Record annually the sum of the actual PM, PM10 and SO₂ emissions from the #15 Melter melting furnace off-gasses and from the burner fuel combustion in tons per year on a calendar-year basis.
 - (3) Record annually the ton per year value of the actual emissions minus the baseline actual emissions for PM, PM10 and SO₂.

Authority for Requirement: DNR Construction Permit 08-A-297-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 73.6

Stack Opening, (inches, dia.): 65

Exhaust Flow Rate (scfm): 28,925

Exhaust Temperature (°F): 605

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 08-A-297-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter⁽¹⁾⁽²⁾

Stack Test to be Completed once every five years, with the previous test being completed on 08/22/2022

Test Method – 40 CFR 60, Appendix A, Method 5

Authority for Requirement – DNR Construction Permit 08-A-297-S1

Pollutant – HCl⁽¹⁾⁽³⁾

Stack Test to be Completed once every five years, with the previous test being completed on 08/22/2022

Test Method – 40 CFR 60, Appendix A , Method 26A

Authority for Requirement – DNR Construction Permit 08-A-297-S1

Pollutant – Dioxins and Furans⁽¹⁾

Stack Test to be Completed once every five years, with the previous test being completed on 08/22/2022

Test Method – 40 CFR 60, Appendix A, Method 23

Authority for Requirement – DNR Construction Permit 08-A-297-S1

⁽¹⁾ With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative if the criteria listed in 40 CFR §63.1511(f) are met.

⁽²⁾ Per 40CFR§63.1511(b)(3), each performance test for a batch process must consist of three separate runs; pollutant sampling for each run must be conducted over the entire processing cycle.

⁽³⁾ The owner or operator may choose to determine the rate of reactive flux addition to the melter and assume, for purposes of demonstrating compliance with the SAPU emission limit, that all reactive flux is emitted. Under these circumstances, the owner or operator is not required to conduct an emissions test for HCl.

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Melting Furnaces

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
S-049	MFRN16	#16 Melting Furnace	Natural Gas, Waste Oil, Metal	0.02 MMcf/hr, 160 gallons/hr, 16 tons/hr
S-053	MFRN17	#17 Melting Furnace	Natural Gas, Metal	0.04 MMcf/hr, 16 tons/hr
S-056	MFRN18	#18 Melting Furnace	Natural Gas, Metal	0.04 MMcf/hr, 16 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: 567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv (Natural Gas), 2.5 lb/MMBtu (Waste Oil)

Authority for Requirement: 567 IAC 23.3(3)"e"
567 IAC 23.3(3)"b"(2)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission units are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: 567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-350, S-351

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-350	MFRN50	#50 Melting Furnace	Natural Gas, Metal	12.4 MMBtu/hr, 4.97 tons/hr	06-A-567-S2
S-351	MFRN60	#60 Melting Furnace	Natural Gas, Metal	12.4 MMBtu/hr, 4.97 tons/hr	06-A-568-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

MACT Emission Limits

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.40 lb/ton of Al

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(1)
40 CFR 63 Subpart RRR

Pollutant: Hydrogen Chloride (HCl)

Emission Limit(s): 0.40 lb/ton Al

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(4)
40 CFR 63 Subpart RRR

Pollutant: Dioxins/Furans (D/F)

Emission Limit(s): 15µg TEQ/Mg Al

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.1(4)"br"
40 CFR 63.1505(i)(3)
40 CFR 63 Subpart RRR

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 2.0 lb/hr, 8.7 tons/yr⁽²⁾

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1

Pollutant: Particulate Matter (PM) State

Emission Limit(s): 2.0 lb/hr, 8.7 tons/yr⁽²⁾

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

⁽²⁾Standard is a 12-month rolling total and a combined limit for S-350 & S-351.

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.3(2)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 1.22 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. The maximum amount of cold metal charged/fed to the melting furnaces, combined, (emission units MFRN50 and MFRN60) shall not exceed 87,000,000 pounds per rolling twelve-month period.
- B. This facility (Plant number 82-01-002) is subject to all applicable operating limits set forth in 40 CFR Part 63 Subpart A (General Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).
- C. MFRN60, EP-S-351 is limited to operating as a Group 2 furnace, as defined in 40 CFR §63.1503 (i.e., processing only clean charge and performs no fluxing or fluxing using only nonreactive agents), until emission unit MFRN50 (Permit 06-A-567-S1) demonstrates compliance with the emission limits contained in Permit Condition 10 for Group 1 furnaces. Upon a successful compliance demonstration for Permit 06-A-567-S1, this emission unit (MFRN60) may operate as a Group 1 furnace, as defined in 40 CFR §63.1503.

Reporting & Record keeping:

- A. The permit holder, owner or operator of the facility shall calculate and record the monthly total and the 12-month rolling total amount of cold metal charged/fed to the melting furnaces, combined, (emission units MFRN50 and MFRN60), in pounds.
- B. This facility (Plant number 82-01-002) is subject to all applicable monitoring and/or recordkeeping requirements as set forth in 40 CFR Part 63 Subpart A (General

Provisions) and 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production (§63.1500).

- C. Should the facility wish to modify MFRN60 status from a Group 2 furnace to a Group 1 furnace and upon a successful compliance demonstration for emission unit MFRN50 (Permit 06-A-567-S1), the facility shall submit all notices/submittals required by 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production to modify the emission unit’s status to a Group 1 furnace following the compliance demonstration.

Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 57
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate: 7,851 acfm (S-350), 7,851 scfm (S-351)
Exhaust Temperature (°F): 600
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-567-S2, 06-A-568-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-443, S-444

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-443	MFRN70	#70 Melting Furnace	Natural Gas, Aluminum	12 MMBtu/hr, 3.125 tons/hr	23-A-174
S-444	MFRN80	#80 Melting Furnace	Natural Gas, Aluminum	12 MMBtu/hr, 3.125 tons/hr	23-A-175

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.071 lb/ton

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175

Pollutant: PM₁₀

Emission Limit(s): 0.071 lb/ton

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.071 lb/ton, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 1.34 lb/hr

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. Each unit shall be fired by natural gas only.
- B. These units shall only be charged with clean charge. Per 40 CFR §63.1503, clean charge means furnace charge materials, including molten aluminum; T-bar; sow; ingot; billet; pig; alloying elements; aluminum scrap known by the owner or operator to be entirely free of paints, coatings, and lubricants; uncoated/unpainted aluminum chips that have been thermally dried or treated by a centrifugal cleaner; aluminum scrap dried at 343 °C (650 °F) or higher; aluminum scrap delacquered/decoated at 482 °C (900 °F) or higher; and runaround scrap. Anodized aluminum that contains dyes or sealants containing organic compounds is not clean charge. The owner or operator shall maintain records of the materials charged in each furnace.
- C. The owner or operator shall perform no reactive fluxing in each unit. Fluxing using only nonreactive, non-HAP-containing/non-HAP-generating gases or agents is allowed. The owner or operator shall maintain a record of the type of fluxing materials used in each furnace.
- D. The owner or operator shall meet all applicable operating requirements of §63.1506.
- E. The owner or operator shall meet all applicable notification requirements of §63.1515.
- F. The owner or operator shall submit all applicable reports according to §63.1516.

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

NESHAP

These emission units are considered Group 2 Furnaces and are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart RRR, Secondary Aluminum Production and the provisions of 40 CFR 63 Subpart A – General Provisions.

Authority for requirement: DNR Construction Permit 06-A-567-S2
567 IAC 23.1(4)"br"
40 CFR 63 Subpart RRR

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 63

Stack Opening, (inches, dia.): 50.5

Exhaust Flow Rate (scfm): 8,500

Exhaust Temperature (°F): 760

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 23-A-174, 23-A-175

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: S-097 and S-098

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-097	MMCH03	#3 Mill Machine	Metal	1.88 ton/hr	05-A-479
S-098					79-A-008-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 3.8 lb/hr

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf and 3.8 lb/hr

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compound (VOC)

Emission Limit(s): 8.0 lb/hr, 35 tons/yr⁽²⁾

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2

⁽²⁾Standard is a 12-month rolling total.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit shall not operate more than 6,500 hours per rolling twelve (12) month period.
- B. Determine the annual hours of operation for this emission unit on a rolling 12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 58.81

Stack Opening, (inches, dia.): 18 x 144

Exhaust Flow Rate (scfm): 19,000

Exhaust Temperature (°F): 100

Discharge Style: Downward

Authority for Requirement: DNR Construction Permits 05-A-479, 79-A-008-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-300

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM01	Ingot Plant Standby Diesel Generator	Diesel	390 hp	90-A-392

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 90-A-392
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Fuel Requirements

No requirements except (beginning January 1, 2015) if you own or operate an existing emergency compression ignition stationary engine with a site rating of more than 100 bhp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(b)

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).

2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Exhaust Flow Rate (scfm): 2,540

Authority for Requirement: DNR Construction Permit 90-A-392

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-315

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM02	MIS Standby Diesel Engine/Generator Emergency Engine	Diesel	1,332 hp	97-A-144-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-144-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.46 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-144-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 97-A-144-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 97-A-144-S1
567 IAC 23.3(3)"b"(2)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The hours of operation of this engine shall not exceed a maximum of 2,400 hours in any rolling 12-month period.
 - (1) The owner or operator shall record the hours of operation for the engine for each month of operation.
 - (2) The owner or operator shall calculate and record the rolling 12-month total of hours of operation of the engine each month.

- B. This emission unit shall only use diesel fuel.
- C. The sulfur content of the fuel used shall not exceed 0.0015% by weight. The owner or operator shall comply with this requirement through one of the following methods:
 - (1) Having the fuel supplier certify the fuel delivered meets the required sulfur content;
 - (2) Obtaining a fuel analysis from the supplier showing the sulfur content; or,
 - (3) Performing an analysis of the fuel to determine the sulfur content.
- D. Per the definition of 'Emergency stationary RICE' in 40 CFR 63.6675, all emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE.
- E. In accordance with 40 CFR §63.6640(f):
 - (1) Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for (up to) 50 hours per year is prohibited.
 - (2) There is no time limit on the use of emergency stationary RICE in emergency situations, provided that the annual hourly limit established in Condition A. is not exceeded.
 - (3) The owner or operator may operate the emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response, or voltage deviation. See 40 CFR §63.6640(f)(2) for additional information and restrictions.
 - (4) The owner or operator may operate the emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. Except as provided in 40 CFR §63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- F. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's instructions.
 - (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the equipment in order to demonstrate that it was maintained in accordance with the manufacturer's instructions or in accordance with the facility's maintenance plan.
 - (2) At a minimum, this log shall include:
 - (a) The date that any inspection and/or maintenance was performed on the control devices;
 - (b) Any issues identified during the inspection;
 - (c) Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - (d) Identification of the staff member or third-party performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 97-A-144-S1
40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 12
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 8,092
Exhaust Temperature (°F): 1,027
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 97-A-144-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-319, S-320

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-319	OCOM06	High Pressure Water System Pump Engine (Emergency Engine)	Diesel	420 hp	97-A-141-S1
S-320	OCOM07	High Pressure Water System Pump Engine (Emergency Engine)	Diesel	420 hp	97-A-142-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 20% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 1.85 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1

Pollutant: Particulate Matter

Emission Limit(s): 1.85 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1
567 IAC 23.3(3)"b"(2)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. Each engine is limited to operating a maximum of 2350 hours in any rolling 12-month period.

(1) The owner or operator shall record the hours of operation for the engine for each month of operation.

- (2) The owner or operator shall calculate and record the rolling 12-month total of hours of operation of each engine each month.
- B. These emission units shall only use diesel fuel.
- C. The sulfur content of the fuel used shall not exceed 0.0015% by weight. The owner or operator shall comply with this requirement through one of the following methods:
 - (4) Having the fuel supplier certify the fuel delivered meets the required sulfur content;
 - (5) Obtaining a fuel analysis from the supplier showing the sulfur content; or,
 - (6) Performing an analysis of the fuel to determine the sulfur content.
- D. Each engine:
 - (1) Is limited to operate as an emergency stationary internal combustion engine as defined in 40 CFR 63.6675 and in accordance with 40 CFR 63.6640(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition A. is not exceeded.
 - (2) In accordance with 40 CFR 63.6640(f)(2), the engine is limited to operate a maximum of 100 hours per calendar year for maintenance checks and readiness testing.
 - (3) Is also allowed to operate up to 50 hours per calendar year in non-emergency situations in accordance with 40 CFR 63.6640(f)(3), but the 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2). The 50 hours per calendar year for non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.
- E. In accordance with 40 CFR 63.6625(f), the engine shall be equipped with a non-resettable hour meter.
 - (1) In accordance with 40 CFR §63.6655(f),
 - a. the owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 - b. The owner or operator shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
 - c. If the engine is used for the purpose specified in § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- F. In accordance with 40 CFR §63.6625(h), the owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- G. In accordance with 40 CFR 63.6602 and Table 2c to Subpart ZZZZ, the owner or operator shall:
 - (1) Change oil and filter every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first, (sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement);
 - (2) Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
 - (3) Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of

- the previous inspection, whichever comes first, and replace as necessary.
- H. The owner or operator must keep records in accordance with 40 CFR 63.6655.
 - I. In accordance with 40 CFR §63.6625(e), the owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - J. The owner or operator shall operate, inspect, and maintain the equipment described in this permit according to the manufacturer's specifications and instructions.
 - (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the equipment described in this permit.
 - (2) At a minimum, this log shall include:
 - a. The date that any inspection and/or maintenance was performed on the equipment;
 - b. Any issues identified during the inspection;
 - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member or third-party technician/company performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1
 40 CFR 63 Subpart ZZZZ
 567 IAC 23.1(4)"cz"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36.6

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 3,351

Exhaust Temperature (°F): 956

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 97-A-141-S1, 97-A-142-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-335

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM10	High Pressure Water System Backup Generator (Emergency Engine)	Diesel	749 hp	98-A-1009-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 98-A-1009-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 98-A-1009-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 1.18 lb/hr, 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 98-A-1009-S1
567 IAC 23.3(3)"b"(2)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This engine is limited to operating a maximum of 2,500 hours in any rolling 12-month period.
 - (1) The owner or operator shall record the hours of operation for the engine for each month of operation.
 - (2) The owner or operator shall calculate and record the rolling 12-month total of hours of operation of the engine each month.
- B. This emission unit shall only use diesel fuel.
- C. The sulfur content of the fuel used shall not exceed 0.0015% by weight. The owner or operator shall comply with this requirement through one of the following methods:
 - (7) Having the fuel supplier certify the fuel delivered meets the required sulfur content;

- (8) Obtaining a fuel analysis from the supplier showing the sulfur content; or,
 - (9) Performing an analysis of the fuel to determine the sulfur content.
 - D. Per the definition of ‘Emergency stationary RICE’ in 40 CFR 63.6675, all emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE.
 - E. In accordance with 40 CFR §63.6640(f):
 - (5) Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for (up to) 50 hours per year is prohibited.
 - (6) There is no time limit on the use of emergency stationary RICE in emergency situations, provided that the annual hourly limit established in Condition A. is not exceeded.
 - (7) The owner or operator may operate the emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response, or voltage deviation. See 40 CFR §63.6640(f)(2) for additional information and restrictions.
 - (8) The owner or operator may operate the emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. Except as provided in 40 CFR §63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - F. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer’s instructions.
 - (3) The owner or operator shall keep a log of all maintenance and inspection activities performed on the equipment in order to demonstrate that it was maintained in accordance with the manufacturer’s instructions or in accordance with the facility’s maintenance plan.
 - (4) At a minimum, this log shall include:
 - (a) The date that any inspection and/or maintenance was performed on the control devices;
 - (b) Any issues identified during the inspection;
 - (c) Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - (d) Identification of the staff member or third-party performing the maintenance or inspection.
- Authority for Requirement: DNR Construction Permit 98-A-1009-S1
 40 CFR Part 63 Subpart ZZZZ
 567 IAC 23.1(4)"cz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1,358
Exhaust Temperature (°F): 1,187
Discharge Style: Vertical
Authority for Requirement: DNR Construction Permit 98-A-1009-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-364

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM20	Emergency Generator	Natural Gas	304 bhp	11-A-697-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

BACT Emission Limits

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.66 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-697-P1

NSPS and NESHAP Emission Limits

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.0 g/hp-hr⁽¹⁾ (86 ppm)⁽²⁾

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567 IAC 23.1(2)"zzz"
40 CFR 60 Subpart JJJJ

Pollutant: Nitrogen Oxides (NOx)

Emission Limit(s): 2.0 g/hp-hr⁽¹⁾ (160 ppm)

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567 IAC 23.1(2)"zzz"
40 CFR 60 Subpart JJJJ

Pollutant: Carbon Monoxide (CO)

Emission Limit(s):): 4.0 g/hp-hr⁽¹⁾ (540 ppm)

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567 IAC 23.1(2)"zzz"
40 CFR 60 Subpart JJJJ

⁽¹⁾ Per NSPS Subpart JJJJ, owners and operators of stationary non-certified spark ignition (SI) engines may choose to comply with the emission standards in units of either g/hp-hr or ppv_{vd} @ 15% O₂. The ppv_{vd} @ 15% O₂ is listed in parenthesis.

⁽²⁾ For purposes of NSPS Subpart JJJJ, when calculating VOC emissions, formaldehyde should not be included.

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽³⁾

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567C 23.3(2)"d"

⁽³⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-697-P1

Pollutant: PM_{2.5}

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-697-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.05 lb/hr and 0.1 g/dscf

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-697-P1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 1.34 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-697-P1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating conditions:

- A. This emission unit is limited to firing on only natural gas.
- B. This emission unit shall not operate more than 1,000 hours per year.
- C. Per 40 CFR§60.4242(d), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations.

The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards

require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR §60.4243, is prohibited.

- D. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - a. A description of the project (Project Number 11-322),
 - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- E. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
 - a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition D.b. above.
 - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- F. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. The owner or operator of this generator shall follow the monitoring requirements of 40 CFR§60.4209 (i.e., installation of a non-resettable hour meter prior to start-up or meet the standards applicable to non-emergency engines).
- B. Record each month the total hours of operation for this generator and the reason the generator was operated. Calculate and record rolling twelve-month totals.
- C. Maintain records of the sulfur content of the fuel oil utilized in this generator.
- D. The owner or operator of this generator shall follow the compliance requirements of 40 CFR§60.4211.
- E. The owner or operator of this generator shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 11-A-671-P1
40 CFR Part 60 Subpart JJJJ
567 IAC 23.1(2)"zzz"

NESHAP and NSPS:

This emission unit is subject to Subparts A (*General Provisions*; 40 CFR §63.1 through 40 CFR §63.15) and ZZZZ (*National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 CFR §63.6580 – 40 CFR §63.6675) of the National Emission Standards for Hazardous Air Pollutants (NESHAP). Per 40 CFR §63.6590(c), this emission unit must meet the requirements of NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart JJJJ and no further requirements apply under NESHAP Subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

This emission unit is subject to Subparts A (*General Provisions*; 40 CFR §60.1 through 40 CFR §60.19) and JJJJ (*Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, 40 CFR §60.4230 – 40 CFR §60.4248) of the New Source Performance Standards (NSPS). Please note that EPA amended NSPS Subpart JJJJ on June 28, 2011 and this emission unit may be subject to those amendments.

Authority for Requirement: 40 CFR Part 60 Subpart JJJJ
567 IAC 23.1(2)"zzz"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10
Stack Opening, (inches, dia.): 5
Exhaust Flow Rate (scfm): 1,500
Exhaust Temperature (°F): 1,385
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 11-A-697-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No
Facility Maintained Operation & Maintenance Plan Required? Yes No
Compliance Assurance Monitoring (CAM) Plan Required? Yes No
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-408

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM21	Emergency Generator	Diesel	779 bhp	12-A-328

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): ⁽¹⁾

Authority for Requirement: DNR Construction Permit 12-A-328
567 IAC 23.1(2)"yyy"
40 CFR 60 Subpart III

⁽¹⁾ Exhaust opacity must not exceed the following: (a) 20 percent during the acceleration mode, (b) 15 percent during the lugging mode, and (c) 50 percent during the peaks in either the acceleration or lugging modes.

Pollutant: PM₁₀

Emission Limit(s): 0.14 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-328

Pollutant: Particulate Matter (PM) Federal

Emission Limit(s): 0.14 lb/hr and 0.20 g/kW-hr

Authority for Requirement: DNR Construction Permit 12-A-328
567 IAC 23.1(2)"yyy"
40 CFR 60 Subpart III

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-328
567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 4.6 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-328

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.5 g/kW-hr

Authority for Requirement: DNR Construction Permit 12-A-328
567 IAC 23.1(2)"yyy"
40 CFR 60 Subpart III

Pollutant: NMHC + NO_x⁽²⁾

Emission Limit(s): 6.4 g/kW-hr

Authority for Requirement: DNR Construction Permit 12-A-328

567 IAC 23.1(2)"yyy"

40 FR 60 Subpart III

⁽²⁾ NMHC is defined as non-methane hydrocarbons; NO_x is for oxides of nitrogen.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating conditions:

- A. This generator shall not operate more than 500 hours per rolling twelve-month period.
- B. Per 40 CFR§60.4211(f), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- C. Beginning October 1, 2010, diesel fuel fired in this generator shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR1090.305.
- D. Any other operating limits not listed here but are part of 40 CFR Part 60 Subpart III shall also be maintained.

Reporting & Record keeping:

- A. The owner or operator of this generator shall follow the monitoring requirements of 40 CFR§60.4209 (i.e., installation of a non-resettable hour meter prior to start-up or meet the standards applicable to non-emergency engines).
- B. Record each month the total hours of operation for this generator and the reason the generator was operated. Calculate and record rolling twelve-month totals.
- C. Maintain records of the sulfur content of the fuel oil utilized in this generator.
- D. The owner or operator of this generator shall follow the compliance requirements of 40 CFR§60.4211.
- E. The owner or operator of this generator shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214(b).

Authority for Requirement: DNR Construction Permit 12-A-328

40 CFR Part 60 Subpart III

567 IAC 23.1(2)"yyy"

NESHAP and NSPS:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(i) this emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after December 19, 2002.

According to 40 CFR 63.6590(b)(1)(i), a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is not subject to the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A except for initial notification requirements of 40 CFR 63.6645(f) unless it operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes of emergency demand response and for the periods of voltage or frequency deviation as specified in 40 CFR 63.6640(f)(2)(ii) and (iii).

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Authority for Requirement: 40 CFR Part 60 Subpart III
567 IAC 23.1(2)"yyy"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 9,700
Exhaust Temperature (°F): 377
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 12-A-328

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No
Facility Maintained Operation & Maintenance Plan Required? Yes No
Compliance Assurance Monitoring (CAM) Plan Required? Yes No
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-435

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
OCOM22	#17 HHT Line Emergency Generator	Natural Gas	168 bhp	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP:

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

NSPS Requirements

Certification Requirements:

According to 60.4231(c) and 60.4233(c) (for rich burn LPG engines), the engine manufacturers must certify these engines to the following emission standards in grams/kW-hr (grams/HP-hr) and other requirements for new nonroad SI engines in 40 CFR Part 1048 as follows:

Limits in grams/kW-hr (grams/HP-hr) - see rule for alternative standards

Maximum Engine Power	HC + NO _x	CO	Rule Reference
100 ≤ kW	2.7 (2.0)	4.4 (3.3)	40 CFR 1048
(130 ≤ HP)	2.7 (2.0) ⁽¹⁾	130 (97.0) ⁽¹⁾	40 CFR 1048

⁽¹⁾ Severe-duty engines are used in, for example, concrete saws, concrete pumps and similar severe applications where air-cooled engines must be used.

Requirements for Certified SI Engines:

1. Owners and operators must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).
2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer’s written instructions must keep records of required maintenance. 40 CFR 60.4243(a)(1).

Requirements for Non-Certified SI Engines:

1. Owners and operators of non-certified engines must keep records of the documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).
2. Engines that are required to be certified that are not operated and maintained according to manufacturer’s written instructions are considered to be non-certified engines. Owners and operators of such a non-certified SI engine must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice to minimize emissions. In addition, the following non-certified SI must conduct the performance test in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4243(a) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
100 ≤ HP ≤ 500	Within 1 year of engine startup	Not required

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine Power	Engine Was Built On Or After
HP < 130	7/1/2008
130 ≤ HP < 500	1/1/2011
500 ≤ HP	7/1/2010

2. There is no time limit on the use of the emergency engine in emergency situations.
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
130 ≤ HP < 500	7/1/2011	Hours of operation recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

Authority for Requirement: 567 IAC 23.1(2)"zzz"
40 CFR 60 Subpart JJJJ

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Natural Gas-Fired Generators

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)
S-316	OCOM03	Security Communications Backup Generator	Natural Gas	0.170
S-318	OCOM05	Building 808 Phone Backup Generator	Natural Gas	0.299
S-321	OCOM08	Low Pressure Water System Pump	Natural Gas	0.776
S-324	OCOM09	Ingot Plant Phone Backup Emergency Generator	Natural Gas	0.127

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v (Natural Gas)

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP:

These emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) these spark ignition emergency engines, located at a major source, are existing stationary RICE as they were constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of subpart ZZZZ that are applicable by October 19, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or within 1 year + 30 days, whichever comes first. (See 63.6625(j) for the oil analysis option to extend time frame of requirements.)
2. Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: See Table: Preheat Furnaces

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
S-093	PFRN01	Preheat Furnace #1	Natural Gas	0.05 MMcf/hr
S-095				
S-094	PFRN02	Preheat Furnace #2	Natural Gas	0.03 MMcf/hr
S-278	PFRN12	Preheat Furnace #12	Natural Gas	0.04 MMcf/hr
S-279				
S-275	PFRN13	Preheat Furnace #13	Natural Gas	0.04 MMcf/hr
S-276				
S-115	PFRN16	Preheat Furnace #16	Natural Gas	0.04 MMcf/hr
S-116				
S-113	PFRN17	Preheat Furnace #17	Natural Gas	0.04 MMcf/hr
S-114				
S-111	PFRN18	Preheat Furnace #18	Natural Gas	0.05 MMcf/hr
S-112				
S-109	PFRN19	Preheat Furnace #19	Natural Gas	0.05 MMcf/hr
S-110				
S-107	PFRN20	Preheat Furnace #20	Natural Gas	0.05 MMcf/hr
S-108				
S-105	PFRN21	Preheat Furnace #21	Natural Gas	0.05 MMcf/hr
S-106				
S-103	PFRN22	Preheat Furnace #22	Natural Gas	0.05 MMcf/hr
S-104				
S-102	PFRN23	Preheat Furnace #23	Natural Gas	0.03 MMcf/hr
S-101	PFRN24	Preheat Furnace #24	Natural Gas	0.05 MMcf/hr
S-100				
S-294	PFRN25	Preheat Furnace #25	Natural Gas	0.05 MMcf/hr
S-295				
S-296	PFRN26	Preheat Furnace #26	Natural Gas	0.05 MMcf/hr
S-297				
S-325	PFRN27	Preheat Furnace #27	Natural Gas	0.05 MMcf/hr
S-326				

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission units are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: S-345, S-346, S-347, and S-348

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-345	PFRN03	Preheat Furnace #3	Natural Gas	40 MMBtu/hr	05-A-477-S2
S-346					06-A-017-S1
S-347	PFRN04	Preheat Furnace #4		40 MMBtu/hr	05-A-478-S2
S-348					06-A-018-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-477-02, 06-A-017-S1, 05-A-478-S2, 06-A-018-S1
567 IAC 23.3"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.3 lb/hr, 1.314 tons/yr⁽²⁾⁽³⁾

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1, 05-A-478-S2, 06-A-018-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 0.3 lb/hr, 1.314 tons/yr⁽²⁾⁽³⁾

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1, 05-A-478-S2, 06-A-018-S1

⁽²⁾ The total PTE for EP S-345, EP S-346 (PFRN03) is 1.314 tons/yr.

The total PTE for EP S-347 and S-348 (PFRN04) is 1.314 tons/yr.

⁽³⁾ Standard is a 12-month rolling total.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1, 05-A-478-S2, 06-A-018-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 4.01 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1,
05-A-478-S2, 06-A-018-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. Each emission unit shall fire only on natural gas.
- B. Each emission unit shall not burn more than 175.73 million cubic feet of natural gas per rolling twelve (12) month period.
- C. Ammonium Fluoroborate use in each emission unit shall not exceed 1.5 tons per twelve (12) month rolling period.

Reporting & Record keeping:

- A. Determine the annual amount of natural gas fired by this emission unit on a rolling-12-month basis for each month of operation.
- B. Determine the annual amount of Ammonium Fluoroborate used by this emission unit on a rolling-12-month basis for each month of operation.
- C. Monitoring for NESHAP Subpart DDDDD shall be done per the subpart.
- D. Recordkeeping for NESHAP Subpart DDDDD shall be done per the subpart. Records shall be kept on site and available for inspection for a period of five (5) years.

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1,
05-A-478-S2, 06-A-018-S1
40 CFR 63 Subpart DDDDD

Emission Point Characteristics

Each emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 87.42

Stack Opening, (inches, dia.): 43

Exhaust Flow Rate (scfm): 7,958

Exhaust Temperature (°F): 800

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 05-A-477-S2, 06-A-017-S1,
05-A-478-S2, 06-A-018-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: S-118 and S-117

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-118	PFRN14	Preheat Furnace #14	Natural Gas	34 MMBtu/hr	97-A-251-S1
S-117	PFRN15	Preheat Furnace #15	Natural Gas	34 MMBtu/hr	97-A-250-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-251-S1, 97-A-250-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 97-A-251-S1, 97-A-250-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 97-A-251-S1, 97-A-250-S1
567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. This emission unit is limited to the use of natural gas as fuel.
- B. Natural gas consumed by emission units, preheat furnaces #14 and #15, shall not exceed total of 562 million cubic feet (MMcf) per year during each twelve (12) month rolling period.
- C. The permittee shall record the following:
 - (4) monthly natural gas usage by this emission unit.
 - (5) the total natural gas consumption rate of preheat furnaces #14 and #15 each month, and
 - (6) the total twelve-month rolling usage of natural gas consumption for both preheat

furnaces #14 and #15.

D. The owner or operator shall operate and maintain the equipment covered under this permit according to the manufacturer's instructions.

(5) The owner or operator shall keep a log of all maintenance and inspection activities performed on the equipment in order to demonstrate that it was maintained in accordance with the manufacturer's instructions or in accordance with the facility's maintenance plan.

(6) At a minimum, this log shall include:

(a) The date that any inspection and/or maintenance was performed on the control devices;

(b) Any issues identified during the inspection;

(c) Any issues addressed during the maintenance activities and the date each issue was resolved; and

(d) Identification of the staff member or third-party performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 97-A-251-S1, 97-A-250-S1

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 72

Stack Opening, (inches, dia.): 54

Exhaust Flow Rate (scfm): 5,300

Exhaust Temperature (°F): 325

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 97-A-251-S1, 97-A-250-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-356

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
PPFRN01	#1 Pusher Preheat Furnace	Natural Gas	60 MMBtu/hr	11-A-689-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-689-P1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.46 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-689-P1

Pollutant: PM₁₀

Emission Limit: 0.46 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-689-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.46 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-689-P1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-689-P1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 5.88 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-689-P1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

- A. This emission unit is limited to firing on only natural gas.
- B. This emission unit is limited to combusting 216 million cubic feet (MMCF) of natural gas per year (yr).
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
 - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in C. (2), above.
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- E. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. For the first twelve (12) months of operation, determine the total amount of fuel used (in cubic feet/month) by this emission unit for each month of operation.
- B. After the first twelve (12) months of operation, determine the cumulative amount of fuel used (in cubic feet/year) by this emission unit on a rolling 12-month basis for each month of operation.
- C. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in C. (under Operating Limits, above)
- D. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information in D. (under Operating Limits, above) and that record shall be retained by the owner or operator for a period of ten (10) years after the project (Project Number 11-322) is completed.

Authority for Requirement: DNR Construction Permit 11-A-689-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 108
- Stack Opening, (inches, dia.): 76
- Exhaust Flow Rate (scfm): 13,500
- Exhaust Temperature (°F): 480
- Discharge Style: Unobstructed vertical
- Authority for Requirement: DNR Construction Permit 11-A-689-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-131

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
PNTS01	Maintenance Paint Booth	PNTS01: Filters – Paint Arrestor Pads	Paint	Four Guns at 1.02 gal/min each (17 gal/day limit)	97-A-140-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-140-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 97-A-140-S3
567 IAC 23.4(13)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. The amount of coatings used in the Maintenance Paint Booth (EU PNTS01) shall not exceed 17 gallons per day
- B. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.

Reporting & Record keeping:

- A. Record daily the amount of paint used in the Maintenance Paint Booth each day.
- B. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment.

Authority for Requirement: DNR Construction Permit 97-A-140-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 37.2
- Stack Opening, (inches, dia.): 43
- Exhaust Flow Rate (scfm): 45,000
- Exhaust Temperature (°F): Ambient
- Discharge Style: Vertical, Unobstructed
- Authority for Requirement: DNR Construction Permit 97-A-140-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Paint Booth Agency Operation & Maintenance Plan

Weekly

- Inspect the paint booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.
- Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and available upon request.

Quality Control

- The filter equipment will be operated and maintained according to the manufacturer’s recommendations.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Reheat Furnaces

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
S-007	RFRN01	Reheat Furnace #1	Natural Gas	0.01 MMcf/hr
S-014	RFRN08	Reheat Furnace #8	Natural Gas	0.01 MMcf/hr
S-015	RFRN09	Reheat Furnace #9	Natural Gas	0.01 MMcf/hr
S-016	RFRN10	Reheat Furnace #10	Natural Gas	0.01 MMcf/hr
S-017	RFRN11	Reheat Furnace #11	Natural Gas	0.01 MMcf/hr
S-018	RFRN12	Reheat Furnace #12	Natural Gas	0.01 MMcf/hr
S-019	RFRN13	Reheat Furnace #13	Natural Gas	0.01 MMcf/hr
S-020	RFRN14	Reheat Furnace #14	Natural Gas	0.01 MMcf/hr
S-021	RFRN15	Reheat Furnace #15	Natural Gas	0.01 MMcf/hr
S-074	RFRN20	Reheat Furnace #20	Natural Gas	0.01 MMcf/hr
S-073	RFRN21	Reheat Furnace #21	Natural Gas	0.01 MMcf/hr
S-072	RFRN22	Reheat Furnace #22	Natural Gas	0.01 MMcf/hr
S-070	RFRN24	Reheat Furnace #24	Natural Gas	0.01 MMcf/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission unit are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: HR-P and HR-UP

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
HR-P	ROADP	Paved Haul Roads	Vehicle Miles Traveled (VMT)	4.17 VMT/hr
HR-UP	ROADUP	Unpaved Haul Roads		0.42 VMT/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-099

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
SCLP03	#3 Scalper	SCLP099: Fabric Filter – Type Dust Collector	Metal	1.62 ton/hr	01-A-216

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 01-A-216
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 3.28 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-216

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 5.57 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-216
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 115
Stack Opening, (inches, dia.): 84
Exhaust Flow Rate (scfm): 62,250
Exhaust Temperature (°F): 70
Discharge Style: Vertical without raincap
Authority for Requirement: DNR Construction Permit 01-A-216

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Numbers: S-261, S-262

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
S-261	SCLP04	#4 Scalper	Metal	8.13 ton/hr	79-A-186-S1
S-262					79-A-187-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits 79-A-186-S1, 79-A-187-S1
567 IAC 23.3(2)"d"

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate matter standard.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.78 lb/hr

Authority for Requirement: DNR Construction Permits 79-A-186-S1, 79-A-187-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 67.42

Stack Opening, (inches, dia.): 84

Exhaust Flow Rate (scfm): 31,000

Exhaust Temperature (°F): Ambient

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permits 79-A-186-S1, 79-A-187-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-298

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
SHLT01	Scrap Conveyor System Exhaust	Metal	NA	90-A-363-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 90-A-363-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 0% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 3.29 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-363-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 90-A-363-S1
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 35' 3 7/8"
- Stack Opening, (inches, dia.): 21.5
- Exhaust Flow Rate (scfm): 8,500
- Exhaust Temperature (°F): 120
- Discharge Style: Vertical, with obstructive discharge
- Authority for Requirement: DNR Construction Permit 90-A-363-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-338

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
SKIM	Skim House	SKIM0338L: Fabric Filter-Type Dust Collector	Skim Dust	2.5 ton/hr	01-A-217

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 01-A-217
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 3.28 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-217

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf, 5.57 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-217
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 65
- Stack Opening, (inches, dia.): 60
- Exhaust Flow Rate (scfm): 83,600
- Exhaust Temperature (°F): 100
- Discharge Style: Vertical without raincap
- Authority for Requirement: DNR Construction Permit 01-A-217

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FUG-R214

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
SKIM-R214	Fugitives from Dumping/Loading Skim	Dross	0.23 ton/hr	06-A-569

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-569
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.52 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-569

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.52 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-569
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Vents inside.

Authority for Requirement: DNR Construction Permit 06-A-569

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Heat Treat

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
S-068	TFRN10	#10 Heat Treat Furnace	Natural Gas	0.01 MMcf/hr
S-069	TFRN11	#11 Heat Treat Furnace	Natural Gas	0.01 MMcf/hr
S-259	TFRN12	#12 Heat Treat Furnace Line	Natural Gas	0.02 MMcf/hr
S-172	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.01 MMcf/hr
S-176				
S-177				
S-178				
S-179				
S-180				

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission unit shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM) – (TFRN10, TFRN11, TFRN12 Only)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Particulate Matter (PM) – (TFRN86 Only)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

NESHAP

These emission units (excluding TFRN86) are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: #14 Heat Treat

Associated Equipment

Table: #14 Heat Treat

Emission Point	Emission Unit	Emission Unit Description	Raw Material/Fuel	Rated Capacity	Construction Permit
S-327	TFRN14	#14 Heat Treat Furnace	Natural Gas	16 MMBtu/hr	95-A-638
S-328					
S-329					
S-330					

Applicable Requirements

Emission Limits⁽¹⁾ (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from emission points shall not exceed the levels specified below.

⁽¹⁾All emission limits listed below are the combined limits for emission points S-327, S-328, S-329, and S-330

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM₁₀

Emission Limit(s): 0.96 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-638

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.96 tons/yr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 95-A-638

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMbtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.04 tons/yr, 500ppm_v

Authority for Requirement: DNR Construction Permit 95-A-638
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 9.8 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-638

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.20 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-638

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 2.8 tons/yr
Authority for Requirement: DNR Construction Permit 95-A-638

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. Fuel usage in the No. 14 Vertical Heat Treat Furnace shall be limited to natural gas.
- B. Annual usage of natural gas in the No. 14 Vertical Heat Treat Furnace shall be limited to 140.16 million cubic feet, as determined by monthly rolling total.
- C. Quantities of fuel usage in the No. 14 Vertical Heat Treat Furnace shall be determined by non-resettable natural gas metering device(s).

Reporting & Record keeping:

- A. Annual usage of natural gas in cubic feet shall be recorded each month on a 12-month rolling total basis.

Authority for Requirement: DNR Construction Permit 95-A-638

NESHAP

This emission unit is subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 78.61
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (acfm): 15,045
Exhaust Temperature (°F): 600
Discharge Style: Unobstructed vertical
Authority for Requirement: DNR Construction Permit 95-A-638

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-333

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TFRN15	#15 Heat Treat Furnace	Natural Gas	0.03 MMcf/hr	95-A-812-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 95-A-812-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 2.0 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-812-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.0 tons/yr , 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 95-A-812-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMbtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.09 tons/yr, 500 ppmv

Authority for Requirement: DNR Construction Permit 95-A-812-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 31.0 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-812-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.41 tons/yr

Authority for Requirement: DNR Construction Permit 95-A-812-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.1 tons/yr
Authority for Requirement: DNR Construction Permit 95-A-812-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. Fuel usage in the No. 15 Horizontal Heat Treat Furnace shall be limited to natural gas.
- B. Annual usage of natural gas in No. 15 Horizontal Heat Treat Furnace shall be limited to 289.08 million cubic feet per rolling 12 month period
- C. Quantities of fuel usage in the No. 15 Horizontal Heat Treat Furnace shall be determined by non-resettable natural gas metering device(s).

Reporting & Record keeping:

- A. On monthly basis, record the amount of natural gas used in 15 Horizontal Heat Treat Furnace is cubic feet. Calculate and record rolling 12-month totals.

Authority for Requirement: DNR Construction Permit 95-A-812-S1

NESHAP

This emission unit is subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 65.81
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (acfm): 19,282
Exhaust Temperature (°F): 480
Discharge Style: Vertical Obstructed
Authority for Requirement: DNR Construction Permit 95-A-812-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-340

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TFRN16	#16 Heat Treat Furnace	Natural Gas	50 MMBtu/hr	01-A-879

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 01-A-879
567 IAC 23.3(2)"a"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 0.76 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-879

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.76 lb/hr , 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 01-A-879

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMbtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Oxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 01-A-879
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.0 lb/hr

Authority for Requirement: DNR Construction Permit 01-A-879

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. This unit shall operate on natural gas only.
- B. The total amount of natural gas used by this unit shall not exceed 200,000,000 cubic feet per 12-month rolling period.

Reporting & Record keeping:

- A. Determine the cumulative amount natural gas used on a rolling-12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permit 01-A-879

NESHAP

This emission unit is subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 71.5

Stack Opening, (inches, dia.): 49.25

Exhaust Flow Rate (scfm): 18,000

Exhaust Temperature (°F): 480

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 01-A-879

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-362

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TFRN88	88" Continuous Heat Treat Line	Natural Gas	21.4 MMBtu/hr	11-A-695-P3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

⁽¹⁾Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 11-A-695-P3
567 IAC 23.3(2)"a"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.16 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-695-P3

Pollutant: PM₁₀

Emission Limit(s): 0.16 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-695-P3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.16 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-695-P3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Oxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-695-P3
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 2.1 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-695-P3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

- A. This emission unit is limited to firing on only natural gas.
- B. This emission unit is limited to combusting 95 million cubic feet (MMCF) of natural gas per year (yr).
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall;
 - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in C. (2), above.
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- E. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. After the first twelve (12) months of operation, determine the cumulative amount of fuel used (in cubic feet/year) by this emission unit on a rolling-12-month basis for each month of operation.
- B. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in Condition C. under Operating Limits, above of this permit.
- C. Per 567 IAC 33.3(18)"f"(4) and 567 IAC 33.3(18)"f"(5), the owner or operator shall maintain a record containing the information required in D., under Operating Limits, above, of this permit and that record shall be retained by the owner or operator for a period of ten (10) years after the project (Project Number 11-322) is completed.

Authority for Requirement: DNR Construction Permit 11-A-695-P3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 55
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 2,200
Exhaust Temperature (°F): 410
Discharge Style: Unobstructed vertical
Authority for Requirement: DNR Construction Permit 11-A-695-P3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-363

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
ATL01	#1 Automotive Treatment Line	ATL363A & ATL363B: Packed Bed Scrubber and Demister	Metal	300 ft/min	11-A-696-P2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

BACT Emission Limit

Volatile Organic Compounds (VOC)

Emission Limit: 5.81 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-696-P2

Other Emission Limits

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-696-P2
567C 23.3(2)"a"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.64 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-696-P2

Pollutant: PM₁₀

Emission Limit(s): 0.64 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-696-P2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.64 lb/hr and 0.1 gr/dscf.

Authority for Requirement: DNR Construction Permit 11-A-696-P2
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

- A. The pressure drop across the Packed Bed Scrubber (CE ATL363B) shall be maintained between 2.0 inches H₂O – 5.5 inches of H₂O on an hourly average.
- B. The owner or operator shall properly operate and maintain equipment to monitor the pressure drop across the control equipment (CE ATL363B). The monitoring device(s) and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall conduct a monthly visual inspection of the Demister (CE ATL363A) and annual preventative maintenance on the Demister (CE ATL363A).
- D. The pH of the Packed Bed Scrubber (CE ATL363B) scrubbant shall be maintained between 1 -7 on an hourly average.
- E. The owner or operator shall properly operate and maintain equipment to monitor the pH (or conductivity) of the Packed Bed Scrubber (CE ATL363B) scrubbant. The monitoring device(s) and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
- F. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- G. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall;
 - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in F. (ii), above.
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- H. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. The owner or operator shall collect and record the pressure drop across the control equipment (CE ATL363B) on an hourly basis when the emission unit is operating, except for normal meter maintenance, calibration and replacement, and malfunctions. A minimum of one (1) measurement shall be recorded per hour.
- B. A log of the visual inspections and maintenance on the Demister (CE ATL363A). This log shall detail:
 - The date,
 - Detail whether visual inspection or annual maintenance,
 - Condition of the Demister (CE ATL363A), and
 - Any maintenance conducted.
- C. The owner or operator shall collect and record the pH (or conductivity) of the Packed Bed Scrubber (CE ATL363B) scrubbant on an hourly basis when the emission unit is operating, except for normal meter maintenance, calibration and replacement, and malfunctions. A minimum of one (1) measurement shall be recorded per hour.
- D. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in F., under Operating Limits, above.

Authority for Requirement: DNR Construction Permit 11-A-696-P2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 69

Stack Opening, (inches, dia.): 29

Exhaust Flow Rate (scfm): 10,950

Exhaust Temperature (°F): 125

Discharge Style: Unobstructed vertical

Authority for Requirement: DNR Construction Permit 11-A-696-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: Storage Tanks

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
T-141	TNKA0141	Storage Tank	Gasoline	2,000 gallons	95-A-436
T-142	TNKA0142	Storage Tank - Diesel Fuel	Diesel Fuel	2,000 gallons	95-A-437

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 1 ton/yr

Authority for Requirement: DNR Construction Permit 95-A-436, 95-A-437

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: T-223

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TNKA0223	Storage Tank – (30,000 gallons) Oily Waste	Oily Waste	4,450 gallons/hr	99-A-969-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

None at this time.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. The material stored in this tank shall not have a vapor pressure that exceeds 15.0 kPa.

Reporting & Record keeping:

- A. Maintain the MSDS for any material stored in Tank 223.
- B. Maintain a record of the vapor pressure for any material stored in the tank.

Authority for Requirement: DNR Construction Permit 99-A-969-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-323

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TTST12	Truck Maintenance Engine Exhaust (3 Bays)	Diesel Fuel	NA	97-A-145-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 97-A-145-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM₁₀

Emission Limit(s): 1.2 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-145-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.2 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-145-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lbs/MMBtu

Authority for Requirement: DNR Construction Permit 97-A-145-S1
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 8.1 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-145-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 44.8
- Stack Opening, (inches, dia.): 29
- Exhaust Flow Rate (scfm): 8,400
- Exhaust Temperature (°F): 100
- Discharge Style: Vertical, unobstructed
- Authority for Requirement: DNR Construction Permit 97-A-145-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-133

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
WWRK02	Sawdust Collector	WWRK02: Cyclone	Wood	143 tons/hr	NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 54.3 lb./hr⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"a"

⁽¹⁾Based on a process weight rate of 143 tons/hr

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

There are no operating limits or record keeping requirements at this time

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Boilers

Associated Equipment

Table: Boilers

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	Construction Permit Number
S-405	BOIL01	Natural Gas Fired Boiler	Natural Gas	48.356	12-A-313-P2
S-406	BOIL02	Natural Gas Fired Boiler	Natural Gas	48.356	12-A-314-P2
S-407	BOIL03	Natural Gas Fired Boiler	Natural Gas	48.356	12-A-315-P2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.00738 lb/MMBtu

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

Pollutant: PM₁₀

Emission Limit: 0.36 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

Pollutant: Particulate Matter (PM)

Emission Limit 0.36 lb/hr, 0.6 lb/MMBtu,

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Rate: 0.024 lb/MMBtu

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

Pollutant: Carbon Dioxide (CO₂)

Emission Rate: 122 lb/MMBtu

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾

Emission Rate: 26,858 tons/yr

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

⁽²⁾ Limit is total combined emissions for emission points S-405 through S-407.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units are limited to firing on natural gas.
- B. The three boilers combined are limited to using no more than 425 MMcf of natural gas per 12-month rolling period.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in all these boilers (EP's: S-405, S-406 and S-407), combined; and,
 - (2) a determination of the 12-month rolling total amount of natural gas burned in all these boilers (EP's: S-405, S-406 and S-407), combined.
- B. As specified in 40 CFR Part 60 §60.48c(g), the owner or operator of these boilers shall record and maintain records of the amount of fuel combusted in each emission unit during each calendar month or record and maintain records of the total amount of each steam generating unit fuel delivered to the facility during each calendar month.
- C. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by the units vented to emission points S-405, S-406 and S-407. The meter(s) shall be configured to indicate the flow of natural gas to the units as a group or individually.
 - (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

40 CFR 60 Subpart Dc

567 IAC 23.1(2)"III"

NESHAP:

These boilers are subject to Subpart A (General Provisions, 40 CFR §63.1-§63.15) and DDDDD (National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR §63.7480-§63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, dia.): 28

Exhaust Flow Rate (scfm): 9,620

Exhaust Temperature (°F): 274

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits Listed in: Table: Boilers

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Oil House Process Heaters

Associated Equipment

Table: Oil House Process Heaters

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	Construction Permit
S-400	PHeat01	Oil House Process Heater #1	Natural Gas	8	12-A-316-P2
S-401	PHeat02	Oil House Process Heater #2	Natural Gas	8	12-A-317-P2
	PHeat03	Oil House Process Heater #3	Natural Gas	8	
	PHeat04	Oil House Process Heater #4	Natural Gas	8	
	PHeat05	Oil House Process Heater #5	Natural Gas	8	
S-403	PHeat06	Oil House Process Heater #6	Natural Gas	8	12-A-319-P2
	PHeat07	Oil House Process Heater #7	Natural Gas	8	
	PHeat08	Oil House Process Heater #8	Natural Gas	8	
	PHeat09	Oil House Process Heater #9	Natural Gas	8	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.00738 lb/MMBtu

Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

Pollutant: PM₁₀

Emission Limit: 0.236 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

Pollutant: Particulate Matter (PM)

Emission Limit: 0.6 lb/MMBtu, 0.236 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit: 500 ppmv
Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Rate: 0.036 lb/MMBtu
Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

Pollutant: Carbon Dioxide (CO₂)
Emission Rate: 122 lb/MMBtu
Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾
Emission Rate: 15,155 tons/yr
Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

⁽²⁾The emission rates listed are for all emission units associated with the oil house process heaters, combined. These units are limited to natural gas usage in the operating limits section.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units are limited to firing on natural gas.
- B. The oil house process heaters combined are limited to using no more than 250 MMcf of natural gas per 12-month rolling period.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in all oil house process heaters (EP's: S-400, S-401 and S-403), combined; and,
 - (2) a determination of the 12-month rolling total amount of natural gas burned in all the oil house process heaters (EP's: S-400, S-401 and S-403), combined.
- B. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by the units vented to emission points S-400, S-401 and S-403. The meter(s) shall be configured to indicate the flow of natural gas to the units as a single group (S-400, S-401 and S-403, combined) as distinct groups (S-400 as a group, S-401 as a group and S-403 as a group) or individually (emission unit).
 - (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a

suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.

Authority for Requirement: DNR Construction Permits Listed in: Table: Oil House Process Heaters

NESHAP:

These process heaters are subject to Subpart A (General Provisions, 40 CFR §63.1-§63.15) and DDDDD (National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR §63.7480-§63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point	S-400	S-401 & S-402
Stack Height (ft, from the ground)	84	68.5
Stack Opening (inches, dia	24	36
Exhaust Flow Rate (scfm)	3,100	12,400
Exhaust Temperature (°F)	250-350	250-350
Discharge Style	Vertical Unobstructed	Vertical Unobstructed
Construction Permit	12-A-316-P2	12-A-317-P2, 12-A-319-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: CAA Furnaces

Associated Equipment

Table: CAA Furnaces

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	Construction Permit
S-357	CFRN60	#60 Controlled Atmospheric Annealing Furnace	Natural Gas	12	11-A-690-P1
S-358	CFRN61	#61 Controlled Atmospheric Annealing Furnace	Natural Gas	12	11-A-691-P1
S-359	CFRN62	#62 Controlled Atmospheric Annealing Furnace	Natural Gas	12	11-A-692-P1
S-360	CFRN63	#63 Controlled Atmospheric Annealing Furnace	Natural Gas	12	11-A-693-P1
S-361	CFRN64	#64 Controlled Atmospheric Annealing Furnace	Natural Gas	12	11-A-694-P1
S-366					13-A-116-P

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point (or combined limits for S-361 and S-366) shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.089 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces

Pollutant: PM₁₀

Emission Limit: 0.089 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces

Pollutant: Particulate Matter (PM)
Emission Limit: 0.089 lb/hr and 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit: 500 ppmv
Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Rate: 1.68 lb/hr
Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating limits:

- A. These emission units are limited to firing on only natural gas.
- B. The combined total natural gas consumption for Annealing Furnaces #60 – #64 (EUs CFRN60 – CFRN64) shall not exceed 309.2 million cubic feet (MMCF) of natural gas per year (yr).
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:
 - (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
 - (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in C.(2).
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- E. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. After the first twelve (12) months of operation, determine the cumulative amount of fuel used (in cubic feet/year) by Annealing Furnaces #60 – #64 (EUs CFRN60 – CFRN64) on a rolling-12-month basis for each month of operation.
- B. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in Operating limits C. of this permit.

Authority for Requirement: DNR Construction Permits Listed in: Table: CAA Furnaces

NESHAP:

These CAA Furnaces are subject to Subpart A (General Provisions, 40 CFR §63.1-§63.15) and DDDDD (National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR §63.7480-§63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

For Emission Points S-357, S-358, S-359 and S-360

Stack Height, (ft, from the ground): 69

Stack Opening, (inches, dia.): 37

Exhaust Flow Rate (scfm): 7,400

Exhaust Temperature (°F): 520

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 11-A-690-P1 (S-357), 11-A-691 (S-358), 11-A-692 (S-359) and 11-A-693 (S-360)

For Emission Points S-361 and S-366

Stack Height, (ft, from the ground): 69

Stack Opening, (inches, dia.): 31

Exhaust Flow Rate (scfm): 3,700

Exhaust Temperature (°F): 520

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 11-A-694-P1 (S-361) and 13-A-116-P (S-366)

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-CT-88-1, S-CT-88-2, S-CT-88-3, S-CT-88-4

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
CT-88	88 Line Cooling Towers 1 through 4	CT-88: Drift Eliminator	Cooling Water	207,840 gal/hr	11-A-698-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-698-P1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit(s): 0.22 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-698-P1

Pollutant: PM₁₀

Emission Limit(s): 0.22 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-698-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.22 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-698-P1
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits:

- A. The total dissolved solids (TDS) of the water used shall not exceed 2,500 ppm (monthly average).
- B. Chromium based and HAP containing water treatment chemicals shall not be used in this emission unit.
- C. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 11-322) the owner or operator shall document:

- (1) A description of the project (Project Number 11-322),
 - (2) Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 11-322), and
 - (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- D. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall;
- (1) Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in C. (2), above.
 - (2) Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- E. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 24.107(6).

Reporting & Record keeping:

- A. An analysis of the TDS of the water used for each calendar month this emission unit is in use and the monthly average TDS of the water.
- B. Per 567 IAC 33.3(18)"f"(1), the owner or operator shall maintain a record of the information required in C., under Operating Limits, above.

Authority for Requirement: DNR Construction Permit 11-A-698-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 49.5

Stack Opening, (inches, dia.): 4 cells at 120 inches each

Exhaust Flow Rate (scfm): 4 cells at 128,000 scfm each

Exhaust Temperature (°F): 70

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 11-A-698-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: See Table: Direct Fired Space Heaters
Associated Equipment

Table: Direct Fired Space Heaters

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
SpHt1	SpHt1	Direct Fired Space Heaters	Natural Gas	3.2 MMBtu/hr/unit	12-A-321-P1
SpHt2	SpHt2	Direct Fired Space Heaters	Natural Gas	1.6 MMBtu/hr/unit	12-A-322-P2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters
 567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 1.87 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters

Pollutant: PM₁₀

Emission Limit: 1.87 lb/hr

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters

Pollutant: Particulate Matter (PM)

Emission Limit: 1.87 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters
 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters
 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x) (SpHt1 only)
Emission Rate: 0.06 lb/MMBtu
Authority for Requirement: DNR Construction Permit 12-A-321-P1

Pollutant: Nitrogen Oxides (NO_x) (SpHt2 only)
Emission Rate: 0.07 lb/MMBtu
Authority for Requirement: DNR Construction Permit 12-A-322-P2

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾ (SpHt1 only)
Emission Rate: 15,121.5 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-321-P1
⁽²⁾The emission rates listed are for all emission units associated with the direct fired space heaters (SpHt1 only), combined. These units are limited to natural gas usage in the operating limits section.

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽³⁾ (SpHt2 only)
Emission Rate: 3936.0 tons/yr
Authority for Requirement: DNR Construction Permit 12-A-322-P2
⁽³⁾The emission rates listed are for all emission units associated with the direct fired space heaters (SpHt2 only), combined. These units are limited to natural gas usage in the operating limits section.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units are limited to firing on natural gas.
- B. The Direct Fired Space Heaters, EU-SpHt1, combined, are limited to using no more than 250.5 MMcf of natural gas per 12-month rolling period and the Direct Fired Space Heaters, EU-SpHt2, combined, are limited to using no more than 65.2 MMcf of natural gas per 12-month rolling period.
- C. The facility is allowed to install and/or replace Direct Fired Space Heaters with units of similar design. The maximum rated capacity of any single Direct Fired Space Heater shall not exceed 3.2 MMBtu/hr for SpHt1 units and 1.6 MMBtu/hr for SpHt2 units.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in Direct Fired Space Heaters, EU-SpHt1, combined; and the total amount of natural gas burned in Direct Fired Space Heaters, EU-SpHt2, combined.
 - (2) a determination of the 12-month rolling total amount of natural gas burned in Direct Fired Space Heaters, EU-SpHt1, combined, and in Direct Fired Space Heaters, EU-SpHt2, combined.
- B. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by Direct Fired Space Heaters, EU-SpHt1, and Direct Fired Space Heaters, EU-SpHt2. The meter(s) shall be configured to indicate the flow of natural gas to the units as single entire groups (EU-SpHt1 and EU-SpHt2), a set of groups within EU-SpHt1 and Eu-SpHt2, or individually.

- (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.
 - (2) the equipment used to measure the quantities of natural gas used for the monitoring and recording required under this Permit Condition shall be recalibrated at the frequency specified by the standard method used or by the manufacturer's directions. Should the meter manufacturer not have a recalibration schedule the facility shall establish a schedule and maintain this schedule.
 - (3) Should the facility not monitor the total natural gas flow rate into this emissions group in its entirety, the facility will monitor the natural gas flow for at least a minimum of 25% of the emission units installed. The facility shall determine the total fuel usage (MMcf) and the total firing capacity (MMBtu/hr) for the metered emission units and calculate the average fuel usage based on emission unit capacity [i.e., MMcf/(MMBtu/hr)]. The facility shall use this value to determine the total fuel usage for these emission units (EU- SpHt1).
- C. The permittee shall record the installation date and maximum rated capacity of each Direct Fired Space Heater and the total number of Direct Fired Space Heaters on-site. The permittee shall update this information within 15 days of the installation of any Direct Fired Space Heater.

Authority for Requirement: DNR Construction Permits Listed in: Table: Direct Fired Space Heaters

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: MUA

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
MUA	Make-up Air Heaters & Conversion Burners (up to 44 units)	Natural Gas	7.995 MMBtu/hr/unit	12-A-324-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 12-A-324-P1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 1.52 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-324-P1

Pollutant: PM₁₀

Emission Limit: 1.52 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-324-P1

Pollutant: Particulate Matter (PM)

Emission Limit: 1.52 lb/hr and 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-324-P1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permit 12-A-324-P1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Rate: 0.084 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-324-P1

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾

Emission Rate: 22,063.5 tons/yr

Authority for Requirement: DNR Construction Permit 12-A-324-P1

⁽²⁾The emission rates listed are for all emission units associated with the Make-up Air Units, combined. These units are limited to natural gas usage in the operating limits section.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. This emission unit (EU-MA) is limited to firing on natural gas.
- B. The Make-up Air Heaters & Conversion Burners, EU-MUA, combined, are limited to using no more than 365.5 MMcf of natural gas per 12-month rolling period.
- C. The facility is allowed to install and/or replace Make-up Heaters & Conversion Burners with units of similar design. The maximum rated capacity of any single Make-up Heater & Conversion Burner shall not exceed 7.995 MMBtu/hr. The maximum number of Make-up Air Heaters & Conversion Burners on-site shall not exceed 44 units at any given time.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in all Make-up Air Heaters & Conversion Burners, EU-MUA, combined; and
 - (2) a determination of the 12-month rolling total amount of natural gas burned in all Make-up Air Heaters & Conversion Burners, EU-MUA, combined.
- B. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by these Make-up Air Heaters & Conversion Burners, EP-MUA. The meter(s) shall be configured to indicate the flow of natural gas to the units as a single entire group (EU-MUA), a set of groups, or individually.
 - (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.
 - (2) the equipment used to measure the quantities of natural gas used for the monitoring and recording required under this Permit Condition shall be recalibrated at the frequency specified by the standard method used or by the manufacturer's directions. Should the meter manufacturer not have a recalibration schedule the facility shall establish a schedule and maintain this schedule.
 - (3) Should the facility not monitor the total natural gas flow rate into this emissions group in its entirety, the facility will monitor the natural gas flow for at least a minimum of 25% of the emission units installed. The facility shall determine the total fuel usage (MMcf) and the total firing capacity (MMBtu/hr) for the metered emission units and calculate the average fuel usage based on emission unit capacity [i.e., MMcf/(MMBtu/hr)]. The facility shall use this value to determine the total fuel usage for these emission units (EU-MUA).
- C. The permittee shall record the installation date and maximum rated capacity of each Make-up

Air Heater & Conversion Burners on-site. The permittee shall update this information within 15 days of the installation of any Make-up Air Heater & Conversion Burner.
Authority for Requirement: DNR Construction Permit 12-A-324-P1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-409 through S-428

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
HtFurn01-20	Gas Heaters/Furnaces (up to 30 units)	Natural Gas	0.4 MMBtu/hr/unit	12-A-325-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The combined emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 12-A-325-P1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-325-P1

Pollutant: PM₁₀

Emission Limit: 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-325-P1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.05 lb/hr and 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-325-P1
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permit 12-A-325-P1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Rate: 0.092 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-325-P1

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾

Emission Rate: 1255.6 tons/yr

Authority for Requirement: DNR Construction Permit 12-A-325-P1

⁽²⁾The emission rates listed are for all emission units associated with the Gas Heaters/Furnaces, combined. These units are limited to natural gas usage in the operating limits section.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units (EU-HtFurn01-20) are limited to firing on natural gas.
- B. The Gas Heaters/Furnaces, EU-HtFurn01-20, combined, are limited to using no more than 20.8 MMcf of natural gas per 12-month rolling period.
- C. The facility is allowed to install and/or replace Gas Heaters/Furnaces with units of similar design. The maximum rated capacity of any single Gas Heater/Furnace shall not exceed 0.04 MMBtu/hr. The maximum number of Gas Heaters/Furnaces on-site shall not exceed 30 units at any given time.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in these Gas Heaters/Furnaces, EU-HtFurn01-20, combined; and
 - (2) a determination of the 12-month rolling total amount of natural gas burned in these Gas Heaters/Furnaces, EU-HtFurn01-20, combined.
- B. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by these Gas Heaters/Furnaces, EU-HtFurn01-20. The meter(s) shall be configured to indicate the flow of natural gas to the units as a single entire group (EU-HtFurn01-20), a set of groups, or individually.
 - (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.
 - (2) the equipment used to measure the quantities of natural gas used for the monitoring and recording required under this Permit Condition shall be recalibrated at the frequency specified by the standard method used or by the manufacturer's directions. Should the meter manufacturer not have a recalibration schedule the facility shall establish a schedule and maintain this schedule.
 - (3) Should the facility not monitor the total natural gas flow rate into this emissions group in its entirety, the facility will monitor the natural gas flow for at least a minimum of 25% of the emission units installed. The facility shall determine the total fuel usage (MMcf) and the total firing capacity (MMBtu/hr) for the metered emission units and calculate the average fuel usage based on emission unit capacity [i.e., MMcf/(MMBtu/hr)]. The facility shall use this value to determine the total fuel usage for these emission units (EU-HtFurn01-20).
- C. The permittee shall record the installation date and maximum rated capacity of each Gas

Heaters/Furnace and the total number of Gas Heaters/Furnaces on-site. The permittee shall update this information within 15 days of the installation of any Gas Heaters/Furnace.
Authority for Requirement: DNR Construction Permit 12-A-325-P1

NESHAP:

These gas heaters and furnaces are subject to Subpart A (General Provisions, 40 CFR §63.1-§63.15) and DDDDD (National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR §63.7480-§63.7575) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: IRHt

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
IRHt	Radiant Gas Heaters (up to 49 units)	Natural Gas	0.12 MMBtu/hr/unit	12-A-326-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 12-A-326-P1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{2.5}

Emission Limit: 0.043 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-326-P1

Pollutant: PM₁₀

Emission Limit: 0.043 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-326-P1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.043 lb/hr and 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-326-P1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permit 12-A-326-P1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Rate: 0.092 lb/MMBtu

Authority for Requirement: DNR Construction Permit 12-A-326-P1

Pollutant: Carbon Dioxide Equivalents (CO_{2e})⁽²⁾

Emission Rate: 301.8 tons/yr

Authority for Requirement: DNR Construction Permit 12-A-326-P1

⁽²⁾The emission rates listed are for all emission units associated with the Radiant Gas Heaters, combined. These units are limited to natural gas usage in the operating limits section.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units (EU-IRHt) are limited to firing on natural gas.
- B. The Radiant Gas Heaters, EU-IRHt, combined, are limited to using no more than 5.0 MMcf of natural gas per 12-month rolling period.
- C. The facility is allowed to install and/or replace Radiant Gas Heaters with units of similar design. The maximum rated capacity of any single Radiant Gas Heater shall not exceed 0.12 MMBtu/hr. The maximum number of Radiant Gas Heaters on-site shall not exceed 49 units at any given time.

Reporting & Record keeping:

- A. The permittee shall maintain the following monthly records:
 - (1) the total amount of natural gas burned in these Radiant Gas Heaters, EU-IRHt, combined; and
 - (2) a determination of the 12-month rolling total amount of natural gas burned in these Radiant Gas Heaters, EU-IRHt, combined.
- B. The permittee shall install and operate flow meters to measure and record, in a permanent format, the volume of natural gas consumed by these Radiant Gas Heaters, EU-IRHt. The meter(s) shall be configured to indicate the flow of natural gas to the units as a single entire group (EU-IRHt), a set of unit groupings, or individually.
 - (1) the equipment used to measure the quantities of natural gas used shall be calibrated prior to its first use for monitoring and recording under this Permit Condition, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.
 - (2) the equipment used to measure the quantities of natural gas used for the monitoring and recording required under this Permit Condition shall be recalibrated at the frequency specified by the standard method used or by the manufacturer's directions. Should the meter manufacturer not have a recalibration schedule the facility shall establish a schedule and maintain this schedule.
 - (3) Should the facility not monitor the total natural gas flow rate into this emissions group in its entirety, the facility will monitor the natural gas flow for at least a minimum of 25% of the emission units installed. The facility shall determine the total fuel usage (MMcf) and the total firing capacity (MMBtu/hr) for the metered emission units and calculate the average fuel usage based on emission unit capacity [i.e., MMcf/(MMBtu/hr)]. The facility shall use this value to determine the total fuel usage for these emission units (EU-IRHt).
- C. The permittee shall record the installation date and maximum rated capacity of each Radiant

Gas Heater and the total number of Radiant Gas Heaters on-site. The permittee shall update this information within 15 days of the installation of any Radiant Gas Heater.
Authority for Requirement: DNR Construction Permit 12-A-326-P1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-429 through S-432

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
WtrHt	Water Heaters	Natural Gas	0.715 MMBtu/hr/unit	12-A-327-P1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The combined emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40 %⁽¹⁾

Authority for Requirement: DNR Construction Permit 12-A-327-P1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit: 0.6 lb/MMBtu,

Authority for Requirement: DNR Construction Permit 12-A-327-P1
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 500 ppmv

Authority for Requirement: DNR Construction Permit 12-A-327-P1
567 IAC 23.3(3)"e"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Process throughput:

- A. These emission units (EU-WtrHt) are limited to firing on natural gas.
- B. The facility is allowed to install and/or replace Water Heaters with units of similar design.
The maximum rated capacity of any single Water Heater shall not exceed 0.715 MMBtu/hr.

Reporting & Record keeping:

- A. The permittee shall record the installation date and maximum rated capacity of each Water Heater and the total number of Water Heaters on-site. The permittee shall update this information within 15 days of the installation of any Water Heater.

Authority for Requirement: DNR Construction Permit 12-A-327-P1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-CT-HHT17

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
CT-HHT17	#17 HHT Line Cooling Tower (4 cells)	CE-CT-HHT17-1, CE-CT-HHT17-2, CE-CT-HHT17-3: Mist Eliminator, 0.02%	Cooling Water	6,000 gal/minute	17-A-478-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-478-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.80 lb/hr and 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-478-S3
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The Total Dissolved Solids (TDS) concentration in the cooling tower makeup water shall not exceed 3000 parts per million (ppm):
 - (1) Monitoring of the TDS shall be conducted, at a minimum, on a monthly schedule. Sampling/testing shall be completed once each calendar month with a minimum of 10 calendar days and a maximum of 45 calendar days between samples. Testing for TDS includes conductivity testing with a correlation to determine the TDS concentration.
 - (2) The owner or operator shall maintain records on-site of the TDS concentration, in ppm, in the cooling tower makeup water. Records shall be kept of the dates of the measurement and the methods used to determine the concentration of the TDS in the cooling tower makeup water.
- B. The maximum usage of water treatment chemicals (liquid) shall not exceed 4200 gallons per twelve (12) month period, rolled monthly.

- (1) At the end of each month, the owner/operator shall record the amount of water treatment chemicals used in this unit over the previous month. The owner/operator may use purchase records of the material and assume that all material is used during the month it is purchased.
 - (2) At the end of each month, the owner/operator shall record, in gallons, the amount of water treatment chemicals used in this unit over the previous twelve (12) months.
- C. The maximum VOC content of the water treatment chemicals (i.e. biocides, fungicides, scale inhibitors, etc.) used in this emission unit shall not exceed 5% by weight.
- (1) The owner or operator shall not use chromium based and/or HAP containing water treatment chemicals (i.e. biocides, fungicides, scale inhibitors, etc.) in this emission unit.
 - (2) The owner or operator shall retain on-site a copy of the Safety Data Sheet (SDS) for each water treatment chemical used in this emission unit.

Authority for Requirement: DNR Construction Permit 17-A-478-S3

NESHAP

This unit is of the source category for Subpart Q (*National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*; 40 CFR §63.400 through 40 CFR §63.407) of the National Emission Standards for Hazardous Air Pollutants (NESHAP), but there are no requirements since the facility is taking limits to not use chromium-based water treatment chemicals.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35

Stack Opening, (inches,): 144 each cell

Exhaust Flow Rate (scfm): 4 cells at 192,000 scfm each

Exhaust Temperature (°F): 90

Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 17-A-478-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-433

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
TFRN17	#17 Horizontal Heat Treat Furnace	Natural Gas	33 MMBtu/hr	17-A-477

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-477
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.25 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-477
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall only combust natural gas in this emission unit.

Authority for Requirement: DNR Construction Permit 17-A-477

NESHAP

These emission unit are subject to Subparts A (General Provisions, 40 CFR §63.1 – §63.15) and DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; 40 CFR §63.7480 – §63.7575) of the National Emission Standards for Hazardous Air Pollutants NESHAP).

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 85
Stack Opening, (inches, dia.): 56
Exhaust Flow Rate (scfm): 25,000
Exhaust Temperature (°F): 482
Discharge Style: Unobstructed vertical
Authority for Requirement: DNR Construction Permit 17-A-477

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: S-442

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
GEN10	Emergency Generator for Ingot Cooling Water Pumps	Diesel	1,252 kWh 1,702 bhp 65.2 gal/hr	23-A-173-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾, 20% Acceleration, 15% Lugging, 50% peaks in either mode

Authority for Requirement: DNR Construction Permit 23-A-173-S1

567 IAC 23.3(2)"d"

40 CFR 60 Subpart III

567 IAC 23.1(2)"yyy"

⁽¹⁾An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.20 gr/kW-hr

Authority for Requirement: DNR Construction Permit 23-A-173-S1

40 CFR 60 Subpart III

567 IAC 23.1(2)"yyy"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 6.4 gr/kW-hr

Authority for Requirement: DNR Construction Permit 23-A-173-S1

40 CFR 60 Subpart III

567 IAC 23.1(2)"yyy"

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.5 gr/kW-hr

Authority for Requirement: DNR Construction Permit 23-A-173-S1

40 CFR 60 Subpart III

567 IAC 23.1(2)"yyy"

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

- A. The engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
- B. The engine:
 - (1) Is limited to operate as an emergency stationary internal combustion engine as defined in 40 CFR §60.4219 and in accordance with 40 CFR §60.4211(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition A. is not exceeded. In accordance with 40 CFR §60.4211(f)(2), the engine is limited to operate a maximum of 100 hours per calendar year for maintenance checks and readiness testing.
 - (2) Is also allowed to operate up to 50 hours per calendar year in non-emergency situations in accordance with 40 CFR §60.4211(f)(3), but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per calendar year for non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.
- C. In accordance with 40 CFR §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
- D. The owner or operator shall maintain the following monthly records:
 - (1) the number of hours that the engine operated for maintenance checks and readiness testing;
 - (2) the number of hours that the engine operated for allowed non-emergency service and the reason for the non-emergency operation;
 - (3) the number of hours that the engine operated for emergency service and the reason for the emergency operation [See 40 CFR §60.4214(b)];
 - (4) the total number of hours that the engine operated; and
 - (5) the rolling 12-month total amount of the number of hours that the engine operated.
- E. The owner or operator shall maintain the following annual records:
 - (1) the number of hours that the engine operated for maintenance checks and readiness testing;
 - (2) the number of hours that the engine operated for allowed non-emergency operations; and
 - (3) the total number of hours that the engine operated for maintenance checks, readiness testing, and allowed non-emergency operations.
- F. In accordance with §60.4207(b), the diesel fuel burned in this engine shall meet the following specifications from 40 CFR 1090.305 for ultra-low sulfur diesel (ULSD):

Diesel Fuel Specifications

Parameter	Limit
Sulfur (S) content	15 ppm (0.0015%) by weight
Minimum cetane index or	40
Maximum aromatic content	35% (by volume)

- (1) The owner or operator shall comply with the requirements listed above by one of the

- following methods:
- a. have the fuel supplier certify that the fuel delivered meets the of non-road diesel fuel ULSD as defined in 40 CFR 1090.80; or
 - b. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
 - c. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.
- G. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR §60.4211(g).
- H. In accordance with 40 CFR §60.4211(a), the engine shall be operated and maintained in accordance with the manufacturer's emission-related written instructions. Except as permitted in 40 CFR §60.4211(g), the owner or operator may only change emission-related engine settings that are permitted by the manufacturer.
- I. The owner or operator shall complete all applicable monitoring, compliance, notification, reporting, and recordkeeping requirements as required by NSPS Subpart IIII not specifically listed in this permit:
- (1) The owner or operator of the engine shall follow the monitoring requirements of 40 CFR §60.4209.
 - (2) The owner or operator of the engine shall follow the compliance requirements of 40 CFR §60.4211.
 - (3) The owner or operator of the engine shall follow the notification, reporting, and recordkeeping requirements of 40 CFR §60.4214(b).
- J. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 24-368) the owner or operator shall document and maintain a record of the following:
- a. A description of the project (Project Number 24-368),
 - b. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 24-368), and
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in subrule 33.3(1), an explanation describing why such amount was excluded, and any netting analysis if applicable.
- K. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
- a. Monitor the emission of any regulated NSR pollutant that could increase as a result of the project that is emitted by any emissions unit identified in Condition G.(b).
 - b. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of five (5) years following resumption of regular operations and maintain a record of regular operations after the change.
- L. Per 567 IAC 33.3(18)"f"(5), the owner or operator shall retain a written record containing the information required in Condition B. of this permit for a period of ten (10) years after the project (Project Number 24-368) is completed.
- M. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the

requirements for Title V operating permits contained in 567 IAC 24.107(6).
Authority for Requirement: DNR Construction Permit 23-A-173-S1
40 CFR 60 Subpart III
567 IAC 23.1(2)"yyy"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 10
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 8,092
Exhaust Temperature (°F): 1,027
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 23-A-173-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 24.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 24.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 24.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 24.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 24.108(14)*
5. It shall not be a defense for a 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 the permit. *567 IAC 24.108(9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 24.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—24.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—24.105(455B). *567 IAC 24.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 24.105(2). *567 IAC 24.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable

inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 24.107(4)

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 24.108(15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 24.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 24.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 24.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 24.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 24.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 21.8(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 24.108(4), 567 IAC 24.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 24;
 - b. Compliance test methods specified in 567 Chapter 21; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 24.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control

measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.

- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 21.7(1)-567 IAC 21.7(4)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 24.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in *567 IAC Chapter 24*.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules *567—24.140(455B)* through *567 - 24.144(455B)*);
 - e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the

purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change.
567 IAC 24.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 24.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 24.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 24.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there

is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and
vi. Are not required to be processed as significant modification under rule 567 - 24.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- ii. The permittee's suggested draft permit;
- iii. Certification by a responsible official, pursuant to 567 IAC 24.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 24.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 24.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 24, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 24.111-567 IAC 24.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional

permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"j"; 567 IAC 23.2(3)"j" - *State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 24.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (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. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 24.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 24.108(17)"a"*, *567 IAC 24.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than

the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 24.114*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 24.114*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 24.114*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- a. Such applicable requirements are included and are specifically identified in the permit; or
- b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 24.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 24.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 24.111(1). *567 IAC 24.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 343-6589

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 21.10(7)"a", 567 IAC 21.10(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

1101 Commercial Court, Suite 10
Manchester, IA 52057
(563) 927-2640

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health

Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

V. Appendix A – NSPS and NESHAP Links

40 CFR 60 Subpart A – General Provisions

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A>

40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Dc>

40 CFR 60 Subpart TT – Standards of Performance for Metal Coil Surface Coating

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-TT>

40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ>

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII>

40 CFR 63 Subpart A – National Emission Standards for Hazardous Air Pollutants for Source Categories – General Provisions

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A>

40 CFR 63 Subpart Q – National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-Q>

40 CFR 63 Subpart RRR – National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-RRR>

40 CFR 63 Subpart SSSS – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-SSSS>

40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>

40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-DDDDD>

V. Appendix B – Executive Order (EO10) Rules Crosswalk

Iowa Department of Natural Resources

Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 24.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Arconic US LLC, located at 4879 State Street, Riverdale, IA 52722 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Jeffrey Weida.
2. Arconic US LLC is an aluminum sheet, plate, and foil manufacturing facility. This facility consists of 219 emission units with potential emissions of:

3.

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	735.24
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	1,092.49
Particulate Matter	PM	1,275.46
Sulfur Dioxide	SO ₂	290.85
Nitrogen Oxides	NO _x	1,141.45
Volatile Organic Compounds	VOC	838.15
Carbon Monoxide	CO	783.17
Lead	Lead	0.43
Hazardous Air Pollutants ⁽¹⁾	HAP	1,104.75

⁽¹⁾ May include the following: See application.

4. Arconic US LLC, submitted a Title V Operating Permit renewal application on July 30, 2025 and any additional information describing the facility on March 30, 2026 and April 9, 2026. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.
5. DNR has complied with the procedures set forth in 567 IAC 24.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from May 7, 2026 through June 6, 2026. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

Derek Wedemeier
Iowa Department of Natural Resources - Air Quality Bureau
6200 Park Ave
Ste #200
Des Moines, Iowa 50321
Phone: (515) 725-9520
E-mail: Derek.Wedemeier@dnr.iowa.gov

DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 21-33, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 21-33.
4. DNR is required to comply with 567 IAC Chapter 24 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Draft Title V Application Review Notes

Facility Name:	Arconic US, LLC
SIC Code	3353 (Aluminum Sheet, Plate, and Foil Manufacturing)
City:	Riverdale
County:	Scott (FO#6)
Facility #:	82-01-002
EIQ #:	92-0132
Permit #:	03-TV-025R4
Reviewer:	Derek Wedemeier

Facility Identification:

Facility Name: Arconic US, LLC
 Facility Location: 4879 State St., Riverdale, IA 52722
 Responsible Official: Jeffrey Weida

Background

Arconic US LLC (formerly Alcoa) has been in operation since 1948 and is a global supplier of aluminum sheet, plate, and extruded products for the aerospace, automotive, transportation, defense, industrial, and construction industries. The Davenport, IA facility is over one mile long and is one of the largest aluminum rolling mills in the world. The Arconic Corporation was acquired by Apollo Global Management, Inc on May 4, 2023.

The Title V application was submitted on 7/30/2025 and deemed complete. This is the 4th renewal of the facility’s Title V permit. Modification applications were submitted on 3/30/2026 and 4/9/2026 to update the original application with supplemental information.

Title V Major Source Status by Pollutant:

Pollutant	Major for Title V?
PM ₁₀	<input checked="" type="checkbox"/>
SO ₂	<input checked="" type="checkbox"/>
NO _x	<input checked="" type="checkbox"/>
VOC	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input checked="" type="checkbox"/>
Total HAPs	<input checked="" type="checkbox"/>

HAPs emitted from the facility may include: See Application

Program Applicability

- PSD: NO
- Part 60 NSPS: YES. A, Dc: BOIL01, BOIL02, BOIL03
 - A, TT: ELUBE01 ELUBE02
 - A, JJJ: OCOM20
 - A, III: GEN10, OCOM21

- Part 61 NESHAP: NO, except Subpart M (asbestos).
- Part 63 NESHAP: YES. A, Q, RRR, ZZZZ, SSSS, DDDDD
- Major Source of HAPs: YES
- CSAPR: NO
- Acid Rain: NO. The facility does not generate electricity for wholesale or retail sale and does not own or operate one of the Phase I or Phase II units listed in 40 CFR 73.10.
- Stratospheric Ozone Protection: YES
- Prevention of Accidental Releases: NO

Emission Estimations

- The potential emissions calculations were based off of construction permit limits, AP-42 emission factors, stack test data, mass balance and engineering estimates provided by the facility. The AP-42 emission factors for SO₂, if available, were used instead of 500ppmv to provide a more realistic potential value when compared to the previous year's emissions inventory. Many of the natural gas burning units have limited PTE based on fuel throughput limitations.

PTE Emission Values

PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Lead	Total HAPs
Potential Emissions								
1,275.46	1,092.49	735.24	290.85	1,142.45	838.15	783.17	0.43	1,104.75
Actual Emissions 2025								
165.61	161.51	150.61	1.46	200.53	251.80	192.93	0.00	44.64

Rescinded Equipment

Emission Point	Descriptions	Construction Permit	Rescission Date
S-336	Pig Drying Furnace (Ingot Plant)	98-A-928	12/8/2022
Removed Insignificant Equipment			
CLSCRUB01	Powell Blow-Down Scrubber	NA	NA

New and Modified Construction Permits

Emission Point	Description	Construction Permit	Issue Date
FUG-GP-1	#1-84 Marker	24-A-139	6/28/2024
S-436	Pig Drying Furnace	20-A-025-S1	6/1/2023
FUG-IP	#10 Filter Box	23-A-172-S1	1/24/2025
S-437	#5 Holding Furnace	20-A-027-S1	6/1/2023
S-441	#10 Holding Furnace	23-A-171-S1	1/24/2025
S-047	#15 Holding Furnace	92-A-624-S3	6/8/2023
S-050	#16 Holding Furnace	92-A-525-S6	6/8/2023
S-314	Lime Storage for Blowdown Treatment	94-A-546-S3	6/28/2024
S-438	#5 Melting Furnace	20-A-027-S1	6/1/2023
S439	#10 Melting Furnace	23-A-170-S1	01/24/2025
S440			
S-443	#70 Melting Furnace	23-A-174	7/6/2023
S-444	#80 Melting Furnace	23-A-175	7/6/2023
S-442	Emergency Generator for Ingot Cooling Water Pumps	23-A-173-S1	1/24/2025

S-117	Preheat Furnace 15	97-A-250-S1	2/10/2026
S-118	Preheat Furnace 14	97-A-251-S1	2/10/2026
S-315	MIS Emergency Engine	97-A-144-S1	2/10/2026
S-319	High Pressure Water System Emergency Engine	97-A-141-S1	2/10/2026
S-320	High Pressure Water System Emergency Engine	97-A-142-S1	2/10/2026
S-335	High Pressure Water System Backup Emergency Engine	98-A-1009-S1	2/10/2026
S-446	#70 Holding Furnace	NA	NA
S-447	#80 Holding Furnace	NA	NA
S-448	Fire Pump Engine 01, 600hp	NA	NA
S-449	Fire Pump Engine 02, 600hp	NA	NA
S-450	Emergency Generator 16 HHT	NA	NA

Changes Made To the Title V Permit Since the previous Permit Renewal Was Issued

1. Updated facility name to Arconic US, LLC
2. Updated permit number (pp. 1, 5, 13, 18, footer)
3. Updated permit expiration and renewal deadline dates (pp. 1, 13, footer)
4. Updated responsible official information (pp. 1)
5. Facility Description and Equipment List
6. Plant-Wide Conditions
7. Numerous construction permits reference 567 IAC 22.107(6). throughout the Title V. These have been updated to 24.107(6).

Emission Point-Specific Conditions

S-063: CAUSTDIP – No changes

CAA Furnaces – No changes

FUG-GP – No Changes

FUG-GP: ELUBE & MARKR – No changes, The lube system has a 20.0 ton/yr VOC limit and the marking system has an 11.0 ton/yr VOC limit. The lube system is subject to NSPS TT and NEHSAP SSSS.

S-287: CMIL01 – Cold Mill 1 is controlled by CMIL0287: Centrifugal Mist Eliminator to control PM emissions. The facility reports a 20% control efficiency. PTE does not exceed the major source threshold. A facility O&M is required for this equipment.

S-165: CMIL03 – #3 Cold Mill is controlled by CMIL0165: Demister to control PM emission. The facility reports a 75% capture efficiency and a 10 % control efficiency. Based on these values, precontrol PTE does not exceed the Major source threshold. No additional monitoring is required.

S-436: DFRN50 – The construction permits for the pig drying furnace were updated in project 22-403 since the previous renewal. These changes included updates to operating limits, stack characteristics, and rated capacity. This unit is limited to 103 MMCF natural gas per rolling 12-month period.

FUG-IP: FILT02, 03, 04, 05 – No changes.

FUG-IP: FILT10 – The construction permit 23-A-172-S1 was issued on 1/24/2025 to extend the construction period.

FUG-IP: FILT15, FILT16 – These units are limited to 140,160 ton of aluminum combined per 12month rolling period. PTE was based on this throughput limit. Each unit is associated with a separate casting complex.

S-272, S-284, S-291: HFRN02, 03, 04 – These units have an opacity limit of 5%. To ensure compliance with this limit weekly opacity monitoring has been added to the monitoring requirements. No other changes.

S-437: HFRN05 – Construction permit was updated since the previous renewal to update operating limits, stack characteristics, and rated capacity. Stack testing for NOx was required by construction permit 20-A-026-S1. This was completed 6/20/2023 and passed at 0.03 lb/hr, less than 2% of the emission limit. HFRN05 and MFRN05 are limited to 374 MMCF of natural gas per rolling 12-month period.

S-441: HFRN10 – Construction permit 23-A-171-S1 was issued on 1/24/2025 to extend the construction period. Stack testing for PM, NOx, HCl, and D/F are required to be completed within 60 days after achieving max rate but not later than 180 days of initial startup. HFRN10 and MFRN10 combined are limited to 541 MMCF natural gas per rolling 12-month rolling period. No additional monitoring is required.

S-047, S-050: HFRN15, HFRN16 – Construction permits for these units were updated to include NESHAP RRR requirements. PTE based on combined throughput for both units.

FUG-HL – PFRN01-04, PFRN12-13, and PFRN16-27 are subject to the requirements of NESHAP DDDDD. These units meet the definition of metal process furnaces. The furnaces associated with FUG-HL are indirect fired.

S-288, S-298: HMIL10 – The hot mill uses a 4-stage mist eliminator to control PM emission. Rated capacity is not listed in the construction permit but the application lists 70,000 lb/hr. This was left out of the permit since it is not an enforceable limit. Application documents identify 2 mist eliminators (HMIL0288 & HMIL0289) while the construction permit lists only HMIL0288. The facility confirmed there 2 control devices, one for the entry and one for the exit with HMIL0289 being the correct unit number. The facility reports a 22.8% control efficiency. Based on this value with the emission limit, precontrol emission do not exceed the major source threshold. No additional monitoring is required.

S-344:HMIL-14, S-349: HMIL-16 – Each hot mill uses a 3 stage mist eliminator to control PM emissions. Operating conditions meet the requirements of a facility O&M. The facility reports a 20% combined control efficiency for each emission point. Precontrol emissions do not exceed the major source threshold. No additional monitoring is required for either emission point.

S-119 & S-120: HMIL22, S-071: HMILPH – The hot and taper mill use mist eliminators/demister to control PM emission. The facility reported a control efficiency of 7% per

control unit. Using this value, precontrol emission limits do not exceed the major source threshold. No additional monitoring is required.

S-314: LHLT05 – Construction permit 94-A-546-S3 was updated in 2024 to replace the control equipment and updated the exhaust flow rate. The lime storage silo is controlled by a bin vent filter, LHLT05-P1. Operating conditions meet the requirements of a Facility O&M plan. Facility provided CAM calculations use manufacturer reported values of 0.004gr/dscf and 99% control efficiencies. These values result in a controlled PTE of 0.31tpy and a precontrol total of 31.39tpy. Precontrol emissions do not exceed the major source threshold. CAM does not apply. S-271: MFRN02, S-283: MFRN03, S-290: MFRN04 – These melting furnaces have an opacity emission limit of 5% when operating. The opacity standard is 40% during startup. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less. The 5% opacity warrants weekly opacity monitoring except during startup.

S-438: MFRN05 – The construction permit for #5 melting furnace was updated in 2023 to removed ton/yr PM limits and increase the PM, lb/ton, emission rates. Operational requirements limit natural gas throughput and is subject to NESHAP RRR. Construction permit required PM stack testing was completed shortly after construction permit issuance and passed.

S-439, S-440: MFRN10 - #10 Melting Furnace is a new unit to this renewal. Construction permit 23-A-170-S1 was updated to extend the construction period. Control equipment CE MFRN10: baghouse, is used to control PM emissions. Stack testing is required by the construction permit for PM, NO_x, HCl, and Dioxins/Furans within 60 days of achieving max production, after construction is completed. This has not been completed as of Title V issuance. This unit and HFRN10 are limited to 541 MMCF combined per rolling 12-month period. Project 23-137 listed uncontrolled PTE for PM at 9.07 lb/hr (39.73tpy), which was used when determining the emission limit for PM. This emission factor is based off 2022 stack test results of MFRN05 along with a safety factor of 3x. Periodic monitoring would suggest Facility O&M and no additional test. Operating conditions meet the requirements of a Facility O&M Plan so no additional plan is required. Precontrol PM emission do not exceed the major source threshold so CAM does not apply.

S-048: MFRN15 – Construction permit 08-A-297-S1 requires stack testing for PM, HCl, and Dioxins and Furans once every 5 years. Testing was last completed on 8/22/2022 and passed. Construction permit condition 14 J. has been removed from the Title V because the 10 year period had ended.

S-315: OCOM02, S-319: OCOM06, S-320: OCOM07, S-335: OCOM10 – The SO₂ emission limit has been corrected to 2.5 lb/mmBtu for liquid fuel. These construction permit were modified to update the opacity limit.

S-435: OCOM22 – This new generator is a rich burn LPG fueled emergency generator. The engine is subject to NESHAP ZZZZ and NSPS JJJJ.

S-316, S-318, S-321: OCOM03, OCOM05, OCOM08, OCOM09: These engines are subject to NESHAP ZZZZ. The NESHAP requirements have been updated to include 1 year+30 days instead of annually, where applicable.

Preheat Furnaces (pp. 144-145) These furnaces are considered indirect fired units according to the facility. The correct PM emission limits is 0.6 lb/MMBtu. These units are subject to NESHAP DDDDD.

S-345, S-346: PFRN03; S-347, S-348: PFRN04 – These are indirect heating furnaces. The correct PM emission limit for these units based on IAC is 0.6 lb/MMBtu, 567 IAC 23.3(2)"b" and has been added to the Title V. Construction permits for these furnaces incorrectly list 0.1 gr/dscf with the state authority as 567 IAC 23.3(2)"a". The emission limits will remain but the construction permit is the only authority for the limit. This should be addressed the next time a construction project is opened with the department.

S-118: PFRN14, S-117: PFRN15 – These preheat furnaces are direct fired units and are not subject to NESHAP DDDDD. The construction permit was modified to update the opacity limit.

S-356: PFRN01 – This is a direct fired unit. PTE was calculated using the throughput limit of 216 mmcf/yr specified in the operating conditions. This is roughly 3672 hours annually.

S-131: PNTS01 – The maintenance paint booth has an Agency O&M requiring weekly inspection of the control equipment. Recordkeeping is required.

S-099: SCLP03 – Emissions from this unit are controlled by SCLP099: fabric filter. Facility provided CAM calculations uses 0.013gr/dscf when determining precontrol PTE, for a total of 30.38tpy, which does not exceed the major source threshold. This emission factor is from construction project 01-049. A facility O&M plan is required for the control equipment. CAM does not apply.

S-338: SKIM – Emissions from this unit are controlled by SKIM0338L: Fabric Filter. Facility provided CAM calculations uses 0.009 gr/dscf when determining precontrol PTE, for a total of 28.25tpy. This emission factor is from the engineering evaluation for project 01-049. Periodic monitoring does not recommend testing. A facility O&M plan is required for the control equipment. CAM does not apply because precontrol emission do not exceed the major source threshold.

Heat Treat Furnaces: (pp.169-170) – Units TFRN10,TFRN11, and TFRN12 are considered indirect fired units. These units are subject to the PM emission limit 0.6 lb/MMBtu, 567 IAC 23.3(2)"b" and are subject to NESHAP DDDDD. TFRN86 is a direct fired unit and is subject to the 0.1 gr/dscf emission limit, 567 IAC 23.3(2)"a" and is not subject to DDDDD.

TFRN14 – This unit is an indirect fired furnace. The correct PM emission limit for these units based on IAC is 0.6 lb/MMBtu, 567 IAC 23.3(2)"b" and has been added to the Title V. Construction permit 95-A-638 lists 0.1 gr/dscf with the state authority as 567 IAC 23.3(2)"a". The emission limit will remain but the construction permit is the only authority for the limit. This should be addressed the next time a construction project is opened with the department.

S-333: TFRN15 - This unit is an indirect fired furnace. The correct PM emission limit for these units based on IAC is 0.6 lb/MMBtu, 567 IAC 23.3(2)"b" and has been added to the Title V. Construction permit 95-A-812-S1 lists 0.1 gr/dscf with the state authority as 567 IAC 23.3(2)"a". The emission limit will remain but the construction permit is the only authority for the limit. This should be addressed the next time a construction project is opened with the department.

S-340: TFRN16 - This unit is an indirect fired furnace. The correct PM emission limit for these units based on IAC is 0.6 lb/MMBtu, 567 IAC 23.3(2)"b" and has been added to the Title V. Construction permit 01-A-879 lists 0.1 gr/dscf with the state authority as 567 IAC 23.3(2)"a". The emission limit will remain but the construction permit is the only authority for the limit. This should be addressed the next time a construction project is opened with the department. The actual stack height is 79' 8". This is within the 25% allowable height difference so no action is required.

S-362: TFRN88 – This is a direct fired unit and is not subject to NESHAP DDDDD.

S-363: ATL01 – The #1 automotive treatment lines uses two pieces of control equipment to limit PM emissions. The facility reports a 95% control efficiency for PM. Precontrol emissions do not exceed the major source threshold for PM. Operating conditions meet the requirements of a facility O&M plan. Periodic monitoring guidance does not recommend any additional monitoring. CAM does not apply. Operating condition 15 E. of construction permit 11-A-696-P2 has been removed because the 10year period has ended.

Arconic requested to move tanks T-129, T-130, T-141, and T-142 to the insignificant activities list. However, T-141 and T-142 are subject to a 1 ton/yr VOC emission limit listed in their corresponding construction permits. No operational limit or recordkeeping requirements are present at this time for any of these 4 tanks. T-129 and T-130 have been moved to the insignificant activities list because the construction permits for these two units have no applicable requirements.

S-133: WWRK02 – The sawdust collector utilizes a cyclone as part of the wood chip and dust recovery process. The PM emission limit is based on the process throughput equation listed in 567 IAC 23.3(2)"a". Testing will not be required because the PM does not account for the use of a recovery device. A facility O&M has been required. CAM does not apply because the cyclone is considered an inherent process to the woodworking activities.

Oil house process heaters – PTE is limited by natural gas throughput limit of 250 MMCF per rolling 12-month period.

CAA Furnaces – PTE limited by NG throughput limit of 309.2 MMCF per rolling 12-month period.

Direct Fired Space Heaters – Construction permits for these units incorrectly list 0.6 lb/mmbtu as the PM emission limit. This limit would apply to indirect heaters. The correct limit of 0.1gr/dscf has been included.

MAU & IRHt- These make-up air heaters and radiant gas heaters are considered direct fired units. The construction permits incorrectly list 0.6 lb/MMBtu as the PM emission limit citing the statewide standard for combustion for indirect heating. The correct limit of 0.1gr/dscf has been included and the citation has been updated. Please considered updating the construction permits the next time a construction permit is submitted.

HtFurn01-20 - Gas Heaters and Furnaces – These are indirect fired units subject to NESHAP DDDDD.

S-433: #17 Heat Treat Furnace fits the definition of a metal process furnaces and is subject to NESHAP DDDDD. This is an indirect fired unit. The correct PM emission limit (0.6 lb/MMBtu) and statewide standard citation (567 IAC 23.3(2)"b") has been included. Consider correcting during next permitting project.

S-442: GEN10 – The emergency generator for Ingot Cooling water pumps has not been ordered yet according to a note within the PTE spreadsheet. The construction permit was modified to extend the construction window. Exhaust flow rate and exhaust temperature were interchanged for one another. The construction permit application for 23-A-173-S1 confirms this was a typo. The Title V reflects the correct values. This should be corrected the next time a construction permit modification is submitted.

Periodic Monitoring

1. All periodic monitoring requirements are in accordance with the Department’s Periodic Monitoring Guidance Document.
2. Most of the emission points do not have control equipment and therefore do not require periodic monitoring
3. The only emission points that have control equipment are EPs S-287, S-165, S-288, S-289, S-344, S-349, S-119, S-120, S-071, S-314, S-439, & S-440. According to our calculations, these emission points do not qualify for periodic monitoring for this renewal of the permit.
4. Due to the fact that EP S-313 is a paint booth, we will keep in place the previous Agency Approved Operation & Maintenance Plan.
5. Due to the fact that EP S-133 is a cyclone, we will keep in place the previous Facility Maintained Operation & Maintenance Plan.

Periodic Monitoring Guidance Summary Table

Emission Point	Control Equipment	O&M Plan	Additional Monitoring/Testing	NESHAP
S-287	CE-CMIL0287: Centrifugal Mist Eliminator	Facility	-	-
S-165	CE-CMIL0165: Demister	NA	NA	-
S-272 S-284 S-291	NA	NA	Weekly Opacity Monitoring	RRR
S-441	NA	NA	Stack Testing – CP required: PM, NOx, HCl, D/F	RRR

S-288 S-289	CE HMIL0288: 4 Stage Mist Eliminator	NA	-	RRR
S-344	CE HMIL0344: 3 Stage Mist Eliminator	NA	NA	-
S-349	CE HMIL0349: 3 Stage Mist Eliminator	NA	NA	-
S-119	CE HMIL0119: Chevron Screens	NA	NA	-
S-120	CE HMIL0119: Chevron Screens	NA	NA	-
S-071	CE HMIL0071: Demister	NA	NA	-
S-314	LHLT05-P1: Bin Vent Filter	NA	NA	-
S-271 S-283 S-290	NA	NA	Weekly Opacity Monitoring	RRR
S-439 S-440	CE MFRN10: Baghouse	Facility ⁽¹⁾	Stack Testing – CP required: PM, NOx, HCl, D/F	RRR
S-315	NA	NA	NA	ZZZZ
S-319	NA	NA	NA	ZZZZ
S-320	NA	NA	NA	ZZZZ
S-335	NA	NA	NA	ZZZZ
S-048	NA	NA	Stack Testing – CP required: PM, HCl, D/F	RRR
S-118 S-117	NA	NA	Weekly Opacity Monitoring	-
PNTS01	CE PNTS01: Filters	Agency	-	-
S-099	SCLP099: Fabric Filter	Facility	-	-
S-338	SKIM0338L: Fabric Filter	Facility	-	-
S-363	ATL363A & ATL363B: Packed Bed Scrubber & Demister	Facility ⁽¹⁾	-	-
S-133	WWRK02: Cyclone	Facility	-	-

(1) Operational limits meet the requirements of a Facility O&M Plan.

Insignificant Units List

Emergency Engines HHT10, HHT11, HHT12, and HHT15 are insignificant units. HHT10, HHT11, and HHT12 are natural gas fired emergency SI engines rated at 22.5hp, constructed in 2009. These units would satisfy the requirements of NESHAP ZZZZ by complying with the requirements of NSPS JJJJ. Per 60.4230(a)(4)(iv) these units are not subject to NSPS JJJJ because they do not exceed 25hp. HHT15 is a natural gas fired emergency SI engine rated at 30hp, constructed in 2008. This engine would satisfy the requirements of NESHAP ZZZZ by complying with the requirements of NSPS JJJJ. Per 60.4230(a)(4)(iv) this engine is not subject to NSPS JJJJ because it was constructed prior to the January 1, 2009 applicability date. Therefore these engines have no applicable requirements.