

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 1139-AOP-R7

Renewal #1

IS ISSUED TO:

Nucor Steel, Arkansas a division of Nucor Corporation

7301 East County Road 142

Blytheville, AR 72315

Mississippi County

AFIN: 47-00233

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

April 3, 2006 AND April 2, 2011

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

Date Modified

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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE: Nucor Steel, Arkansas a division of Nucor Corporation

AFIN: 47-00233

PERMIT NUMBER: 1139-AOP-R7

FACILITY ADDRESS: 7301 East County Road 142
Blytheville, AR 72315

MAILING ADDRESS: P.O. Box 30
Armored, AR 72310

COUNTY: Mississippi

CONTACT POSITION: Mr. Wayne Turney

TELEPHONE NUMBER: 870-762-2100

REVIEWING ENGINEER: Shawn Hutchings

UTM North South (Y): Zone 16: 3980.524

UTM East West (X): Zone 16: 255.389

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SECTION II: INTRODUCTION

Nucor Steel (Nucor), a Division of Nucor Corporation, owns and operates a scrap steel mill in Hickman, Mississippi County, Arkansas (approximately 10 miles east of Blytheville). Nucor produces flat-rolled steel primarily from steel scrap and scrap substitutes using the electric arc furnace (EAF) process.

Summary of Permit Activity

This permit includes a minor mod application which adds 3 bin vent filters to the Roof Flux Feed system. The original permit for the roof feed flux system had the dust from the three conveyor transfer points carried back to a baghouse but it was determined prior to installation that the distance was too great to provide sufficient airflow to the baghouse to control these sources. Therefore the bin vents were added. These bin vents were added as sources SN-75, 76, and 77. The lime storage silo baghouses SN-37 and SN-38 will be removed upon installation of Roof Flux Feed system. Each of these baghouses has two modules which allow the one module to be cleaned while the other is in operation. Nucor plans to move one of the modules from these baghouses to control the particulate emissions from the day bins inside the melt shop. Once the roof flux feed system is installed and the baghouses SN-37 and 38 are no longer needed the other module will be put in service with the module controlling dust from the day bins. The day bin baghouse will be designated as SN-78.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR 52.21, <i>Prevention of Significant Deterioration</i>
40 CFR Part 60, Subpart A General Provision
40 CFR Part 60, Subpart Dc - <i>Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</i>
40 CFR Part 60, Subpart AAa - <i>Standards of Performance for Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983</i>

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	62.9	261.5
		PM ₁₀	61.0	256.4
		SO ₂	180.1	782.7
		VOC	58.3	253.4
		CO	1012.9	5398.5
		NO _x	388.9	1701.9
		Lead	0.82	3.59
HAPs		Arsenic	0.01	0.05
		Cadmium	0.02	0.09
		Chromium	0.08	0.35
		Manganese	1.08	4.73
		Nickel	0.02	0.09
		HCl	0.2	0.8
SN	Description	Pollutant	lb/hr	tpy
01	Melt Shop Baghouse	PM	37.0	162.1
		PM ₁₀	37.0	162.1
		SO ₂	176.8	774.5
		VOC	53.8	235.5
		CO	1181.5	5174.6
		NO _x	304.0	1331.8
		Lead	0.82	3.59
		Arsenic	0.01	0.05
		Cadmium	0.02	0.09
		Chromium	0.08	0.35
		Manganese	1.08	4.73
		Nickel	0.02	0.09
02	#1 Tunnel Furnace, Section A	PM	1.3	5.7
		PM ₁₀	1.3	5.7
		SO ₂	0.1	0.3
		VOC	0.3	1.4
		CO	6.3	27.6
		NO _x	16.2	71.0
03	#1 Tunnel Furnace, Section B	PM	0.9	4.0
		PM ₁₀	0.9	4.0
		SO ₂	0.1	0.2
		VOC	0.2	0.9

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		CO	4.2	18.4
		NO _x	10.8	47.3
04	#2 Tunnel Furnace	PM	1.3	5.7
		PM ₁₀	1.3	5.7
		SO ₂	0.1	0.3
		VOC	0.3	1.4
		CO	6.3	27.6
		NO _x	16.2	71.0
05	Roof Monitor #5 (Shuttle Furnace)	PM	0.2	0.9
		PM ₁₀	0.2	0.9
		SO ₂	0.1	0.1
		VOC	0.1	0.5
		CO	0.8	3.5
		NO _x	1.9	8.4
18	Slag Pit Loadout	PM	1.4	5.8
		PM ₁₀	0.8	2.9
19	Roof Monitor #3 (Caster #1)	PM	2.4	10.3
		PM ₁₀	2.4	10.3
		SO ₂	0.6	0.8
		VOC	0.8	3.8
		CO	4.5	19.9
		NO _x	17.4	76.3
20	Roof Monitor #4 (Caster #2)	PM	1.1	4.4
		PM ₁₀	1.1	4.4
		SO ₂	0.2	0.3
		VOC	0.4	1.8
		CO	1.9	8.4
		NO _x	5.1	22.1
21	Roof Monitor #1 (EAF Melt Shop)	PM	4.4	19.3
		PM ₁₀	4.4	19.3
		SO ₂	1.2	5.2
		VOC	0.8	3.5
		CO	12.6	54.9
		NO _x	6.2	27.2
23	Slag Handling	PM	2.8	4.4
		PM ₁₀	1.5	2.2
27	Pelletized Lime Handling	PM	0.1	0.5
		PM ₁₀	0.1	0.5

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29	Coke Handling	PM PM ₁₀	0.1 0.1	0.5 0.5
37	Lime Dust Collector (North)	PM PM ₁₀	0.2 0.2	0.9 0.9
38	Lime Dust Collector (South)	PM PM ₁₀	0.2 0.2	0.9 0.9
42	Storage Dome	PM PM ₁₀	0.1 0.1	0.5 0.5
43-46	Charge Carbon (Coke) Silos	PM PM ₁₀	0.1 0.1	0.5 0.5
47	Cooling Tower	PM PM ₁₀	0.5 0.5	1.5 1.5
48	Cooling Tower	PM PM ₁₀	0.1 0.1	0.2 0.2
49	Cooling Tower	PM PM ₁₀	0.2 0.2	0.6 0.6
50	Cooling Tower	PM PM ₁₀	0.4 0.4	1.2 1.2
70	Cooling Tower	PM PM ₁₀	0.1 0.1	0.3 0.3
51	Pickle Line	PM PM ₁₀ HCl	0.2 0.2 0.2	0.5 0.5 0.8
52	Pickle Line Boilers (3 boilers at 12.6 MMBtu/hr ea.)	PM PM ₁₀ SO ₂ VOC CO NO _x	0.3 0.3 0.1 0.2 3.2 2.9	1.3 1.3 0.1 0.9 13.9 12.4
53	Cold Reversing Mill/Temper Mill	PM PM ₁₀	1.7 1.7	7.5 7.5
54	Galvanizing Line (78.3 MMBtu/hr)	PM PM ₁₀ SO ₂ VOC	0.6 0.6 0.1 0.5	2.6 2.6 0.2 1.9

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		CO	6.6	28.8
		NO _x	2.8	12.0
55	Scale Breaker	PM	0.3	1.2
		PM ₁₀	0.3	1.2
56	Entry Scale	PM	0.2	0.6
		PM ₁₀	0.2	0.6
57	Chromate Spray	PM	0.1	0.2
		PM ₁₀	0.1	0.2
58	Alkali Wash Burners (Two at 3.5 MMBtu/hr) (One at 2 MMBtu/hr)	PM	0.1	0.3
		PM ₁₀	0.1	0.3
		SO ₂	0.1	0.1
		VOC	0.1	0.3
		CO	0.8	3.3
		NO _x	0.6	2.5
59	Galvanizing Line Dryer (2.5 MMBtu/hr)	PM	0.1	0.1
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.2	0.9
		NO _x	0.2	0.7
60	Chromate Spray Dryer (1.5 MMBtu/hr)	PM	0.1	0.1
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.2	0.6
		NO _x	0.1	0.5
61	Annealing Furnaces (8 @ 4.8 MMBtu/hr each)	PM	0.3	1.3
		PM ₁₀	0.3	1.3
		SO ₂	0.1	0.1
		VOC	0.3	1.0
		CO	3.3	14.1
		NO _x	3.9	16.8
62	Hydrated Lime Silo	PM	0.1	0.1
		PM ₁₀	0.1	0.1
63	Alkali Wash Exhaust	PM	0.2	0.7
		PM ₁₀	0.2	0.7
64	Wastewater Lime Storage	PM	0.1	0.5

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	Silo	PM ₁₀	0.1	0.5
65	Steel Coil Cutting	PM PM ₁₀ SO ₂ VOC CO NO _x	0.5 0.5 0.1 0.1 0.2 0.3	2.0 2.0 0.1 0.1 0.9 1.1
67	Railcar Loading Station	PM PM ₁₀	0.3 0.3	1.3 1.3
68	Truck Conveyor Baghouse	PM PM ₁₀	0.1 0.1	0.3 0.3
69	Truck Conveyor Baghouse	PM PM ₁₀	0.1 0.1	0.3 0.3
71	Rice Hull Storage Silo	PM PM ₁₀	0.1 0.1	0.5 0.5
72	Railcar Truck Unloading Baghouse	PM PM ₁₀	1.8 1.8	7.9 7.9
73	Zinc Dross Recovery Furnace	PM PM ₁₀ SO ₂ VOC CO NO _x	0.1 0.1 0.1 0.1 0.1 0.1	0.1 0.1 0.1 0.1 0.3 0.2
74	Pickle Line Dryer	PM PM ₁₀ SO ₂ VOC CO NO _x	0.1 0.1 0.1 0.1 0.2 0.2	0.1 0.1 0.1 0.1 0.8 0.6
75	Roof Flux Feed Bin Vent BC4	PM PM ₁₀	0.1 0.1	0.3 0.3
76	Roof Flux Feed Bin Vent BC5	PM PM ₁₀	0.1 0.1	0.3 0.3
77	Roof Flux Feed Bin Vent BC6	PM PM ₁₀	0.1 0.1	0.3 0.3

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78	Day Bin Baghouse	PM	0.2	0.9
		PM ₁₀	0.2	0.9

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SECTION III: PERMIT HISTORY

Permit 1139-A

Air permit 1139-A was issued to this facility on May 14, 1991.

Permit 1139-AR-1

The permit was modified on August 12, 1992, to include changes due to revised design specifications, improved data, and to allow for potential mill expansion (air permit 1139-AR-1). This permit was issued under the *Prevention of Significant Deterioration* (PSD) regulations as found in 40 CFR 52.21.

Permit 1323-A

On July 22, 1992, Heckett Plant 49 was issued air permit 1323-A to operate the slag processing/metal reclaim operations under contract with Nucor. Heckett Plant was permitted to emit 10.84 tpy of PM./PM₁₀. Air permit #1323-A was rescinded upon issuance of air permit #1139-AR-3 on February 22, 1995.

Permit 1335-A

On September 8, 1992, Inorganic Recycling of Arkansas, Inc. (IRA) was permitted under air permit # 1335-A to operate the EAF dust processing facility. IRA was permitted to emit 180.69 tpy of PM₁₀, 162.94 tpy of SO₂, 87.6 tpy of CO, 7.01 tpy of PbO, 6.48 tpy of NO_x, 4.48 tpy of PM, and 0.088 tpy of HgO. Air permit #1335-A was rescinded upon issuance of air permit #1139-AR-3 on February 22, 1995. The IRA sources were assigned source numbers SN-30 and SN-36 and included in Nucor's permit. These sources were removed from Nucor's permit because this process was operated by IRA, which was a separate corporate entity that is not subject to Nucor's control.

Permit 1139-AR-2

On January 25, 1994, Nucor was issued air permit 1139-AR-2 to allow installation of thirteen oxy fuel burners with rated heat input capacity of 18 million British thermal units per hour (MM Btu/hr) each and one unit rated at 18 MM Btu/hr which was previously authorized by the Director (for a total of 252 MM Btu/hr rated heat input capacity from the oxy fuel burners). These burners were intended to provide a remedy for cold spots that were identified in the electric arc furnaces (EAFs). The oxy fuel burners were included in the original permit, but were not installed. The modification allowing installation of the oxy fuel burners was not considered a major modification to an existing major source because the increase in NO_x emissions were estimated to be less than the significance level of 40 tons per year (tpy) for *Prevention of Significant Deterioration* (PSD) as found in 40 CFR 52.21. Nucor has conducted stack testing for CO and NO_x from the oxy fuel burners to compare emissions with and without the oxy fuel burners during operation of the EAFs. The test results revealed that CO emissions decrease

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when the oxy fuel burners are in operation. NO_x emissions increased by 26.23 tpy which is less than the PSD significance level. The modification also revised the property boundary of the facility to reflect a potential sale of 120 acres located in the northwest corner of the Nucor property.

Permit 1139-AR-3

Air permit 1139-AR-3 issued on February 22, 1995 allowed Nucor to increase their steel production levels from 300 to 475 tons per hour. This permit was issued under the *Prevention of Significant Deterioration* (PSD) regulation as found in 40 CFR 52.21. That modification also permitted the use of iron carbide as a scrap supplement, the replacement of the oxy fuel burners with low NO_x burners, and the installation of two small baghouses to capture particulate emissions from the lime charging system. The EAF baghouse dust processing and slag processing operations, previously operated under separate permits, were consolidated into the Nucor permit with this revision. Air permits 1323-A and 1335-A were rescinded. Emission limits for criteria pollutants were rounded to one decimal place in 1139-AR-3 according to Department policy.

Air permit 1139-AR-3 also allowed MG Industries, a subcontractor to Nucor, to install and operate an air separation facility on the Nucor site. Ambient atmospheric air is compressed in a three or four stage centrifugal compressor with intercooling between each stage to remove contaminants. After the final compression stage, the air is cooled to ambient temperature to remove the heat of compression, and then cooled to approximately 40°F to condense most of the water contained in the air. The air will enter an air separation cold box where it is cooled to -270 °F. Part of the oxygen is condensed out by liquid reflux passing down the column and the remaining oxygen is boiled out of the liquid reflux by the air. Pure nitrogen is condensed from the top of the high pressure column by boiling pure liquid oxygen in a low pressure column. Oxygen product is withdrawn in either a gaseous state or a liquid state for transfer to storage. No emissions are associated with this process.

Permit 1139-AR-4

In September, 1996, air permit 1139-AR-4 was issued to Nucor. A third ladle metallurgy furnace (LMF) (SN-39) was installed to be used as a holding station. This station allowed Nucor the flexibility to continue to make steel in the Electric Arc Furnace (EAF) in the event that the caster is inoperable. The new LMF did not increase the maximum steel production of the EAFs. Emissions from the LMF are ducted to a separate baghouse.

An oxygen lancing station (SN-40) was authorized to be located in a building near the slag processing area. Slag skulls which are too large to break using the "breaking ball" were to be cut using an oxygen lance. This process generates iron oxide dust, thus, this operation will be performed within a building and emissions will be ducted to a baghouse (SN-40). This source was dismantled and removed shortly after it was constructed.

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Some of the Continuous Emissions Monitoring Systems (CEMS) required by previous permits, were replaced with semiannual testing requirements contingent upon continued compliance with the permit terms and conditions surrounding the issue. Removal of the CEMs for VOC, NO_x, and SO₂ was authorized by ADPC&E permit 1139-AR-4.

Permit 1139-AOP-R0

Permit 1139-AOP-R0 was issued on 9/7/99 and was the first permit issued to Nucor under the Arkansas Air Operating Permit Program. An administrative amendment was done on 12/10/99. The facility is subject to Title V requirements for PM₁₀, SO₂, VOC, CO, and NO_x emissions. The facility is a major source as defined in §52.21(b)(1)(i)(a) of 40 CFR 52.21 Prevention of Significant Deterioration of Air Quality. This permit included the following modifications:

1. The permit authorized the expansion of the EAF Baghouse. On June 20, 1997, Nucor Steel submitted a permit modification application for the expansion of the EAF Baghouse (SN-01). The facility proposed to add 18 baghouse compartments, install three (3) additional fans, and increase the maximum design air flow from 1.75 million acfm to 2.5 million acfm. Increased particulate matter (PM) emissions from the baghouse expansion were projected to be 49.1 TPY. Nucor Steel also submitted an application for exclusion from new source review for the proposed baghouse expansion. The baghouse expansion was approved to be excluded from new source review because it qualified as a pollution prevention project based on EPA memo dated July 1, 1994 concerning pollution control projects and new source review applicability. In February 2005, a U.S. Circuit Court ruling stated EPA did not have the authority to create pollution control project exemptions for PSD and vacated those portions of the 1992 and 2002 rules. The source which was modified as a pollution control project has under gone PSD review numerous times since this permit. The source currently meets a BACT level of control and its emissions have been analyzed to insure they meet the PM₁₀ NAAQS and PSD increment standards. Further review of this source due to vacation of the rule is not necessary.
2. The permit authorized the construction and operation of the Cold Rolling Mill. On August 18, 1997, Nucor Steel submitted an addendum to the Title V application for construction of a cold rolling mill. The cold mill consists of a pickle line, three (3) pickle line boilers, cold reversing mill/temper mill, galvanizing line, eight (8) annealing furnaces, three (3) alkali wash burners, hydrated lime silo, entry scale, scale breaker, alkali wash mist eliminator, galvanizing line dryer, chromate spray, and chromate dryer. The summary of pollutant emission rates associated with the cold roll mill project are shown in the following table.

Pollutant	Emission rate (tons per year)	PSD Significant Rate (tons per year)
PM	14.8	25

PM ₁₀	14.8	15
SO ₂	0.7	40
VOC	3.9	40
CO	55.6	100
NO _x	39.1	40

3. The permit incorporated the increase of the slag processing rate authorized previously by the Department. At that time, the facility also had requested to increase nitrogen oxide and sulfur dioxide emission limits from the vitrification unit (SN-36) and to install two charge carbon silos and an iron carbide storage dome, which changes were also approved. The EAF Dust Reclamation (SN-30 and SN-36) are no longer included in Nucor's permit. This process was owned and operated by a separate company which contracted by Nucor to process the baghouse dust.

Subsequently, Nucor Steel submitted an amendment to its Title V air permit application to further increase the monthly slag processing rate from 30,000 to 62,000 tons/month and to increase the annual slag production rate from 300,000 to 700,000 tons. The only physical change of this amendment was the installation of two charge carbon silos and an iron carbide storage dome. The installation of the charge carbon silos and iron carbide dome was unrelated to the requested increase in slag processing throughput. The increase in slag throughput was the result of emission factor changes, which allowed Nucor to increase the throughput without significantly affecting emissions. The crushed stone processing section of AP-42 was updated in January of 1995 in Section 11.19.2. The PM emission factor used in the previous permits for slag processing was 0.16 lb/ton. The new factor is 0.0315 lb/ton. SN-18 and SN-23 are the affected sources.

A summary of pollutant emission rates associated with this mill modification is shown in the following table.

Pollutant	Emission rate (tons per year)	PSD Significant Emission Rate (tons per year)
PM	9.4	25
PM ₁₀	3.7	15

4. The permit specified a number of existing but previously uninventoried sources. The total change in permitted emissions resulting from the previously uninventoried sources was 15.4 tpy of total particulate.

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- Several emission factors used to calculate emission were changed throughout the permit. The total change in permitted emissions resulting from the updated emission factors was 9.5 tpy of total particulate.
- The EAF Dust Reclamation (SN-30 and SN-36) was no longer included in Nucor's permit. This process was owned and operated by a separate company which contracted by Nucor to process the baghouse dust. This process accounted for 3.2 tpy of total particulate in the previous permit.

Permit 1139-AOP-R0 did not go through PSD review for the following reasons: Permitted emission increases from the last permit occurred due to use of updated emission factors, the addition of existing but previously uninventoried sources, and a slag processing throughput increase. The only physical changes were the addition of a new cold rolling mill process, a baghouse expansion, and the installation of two charge carbon silos and an iron carbide storage dome. The baghouse expansion was approved to be excluded from new source review because it qualified as a pollution prevention project based on an EPA memo dated July 1, 1994 concerning pollution control projects and new source review applicability. The new cold rolling mill addition resulted in a potential to emit increase less than the applicable PSD significant levels, therefore this project does not trigger new source review. The new storage domes' potential to emit was less than the PSD significant levels, therefore, did not trigger PSD review.

All of the above mentioned projects are unrelated to each other. The slag processing increase is a result of lower published emission factors. The baghouse expansion is being done to reduce the fugitive emissions from the melt shop. The construction of the cold roll mill is a totally new process which does not affect the existing steel-making process.

Permit 1139-AOP-R1

Permit 1139-AOP-R1 covered the installation of new equipment for loading railcars at the EAF baghouse dust silo, and tying the silo directly to the EAF baghouse and eliminating the bin vent. The new equipment will collect displaced air from railcars as the railcars are loaded with dust, and route the displaced air to the EAF baghouse. This will minimize the amount of dust that will accumulate in the load out area. Tying the silo directly to the EAF baghouse will eliminate the silo emission point (SN-17). The facility also added direct evacuation on the bucket elevator that feeds the silo. Previously, the elevator displaced air exhausted through the silo bin vent. These modifications result in a 0.9 ton per year decrease in potential particulate emissions. This method of handling and transferring baghouse dust to and from the baghouse dust silo for removal off-site is at least as effective in controlling air emissions as the method described in permit 1139-A.

Permit 1139-AOP-R2

Permit 1139-AOP-R2 was issued on September 11, 2000. The permit covered the installation of a wastewater lime storage silo which will be designated SN-64. The storage silo has a displacement air bin vent filter with an outlet emission rate of 0.01 gr/dscf. At 950 scfm, the maximum potential emission rate is 0.1 lb/hr and 0.5 tpy. This new source is included in the

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Auxiliary Operations Compliance Unit section of this permit. The bottom of the silo has a rotary air lock with a rubber hose attached to feed lime into a cement truck.

Permit 1139-AOP-R3

Permit 1139-AOP-R3 was issued on January 3, 2001. The permit covered the following modifications: Increase in the annual emissions from 25 to 37 for LMF#3 (SN-39), this increase accounts for periods of time when the LMF #1 or LMF #2 is down; the injection carbon silo vents (SN-43 and 44) were routed to the lime/carbon silo baghouses (SN-38 and 39); a 3.5 MMBTU/hr burner was added to the alkali wash (SN-58) section of the galvanizing line; six insignificant activities were added including 2 diesel storage tanks, 2 emergency generators, and 2 emergency pumps; and the roof monitor designations for SN-06, 19, 20, and 21 were revised.

Permit 1139-AOP-R4

Permit 1139-AOP-R4 was issued on October 23, 2001. This modification covers the addition of a new steel coil cutting building, SN-65, and a briquetting operation, SN-66. The predominate emission increase from the addition of these sources is 2.4 tpy of particulate matter. This permit is also to modify the galvanizing line (SN-54) to become a dual purpose line by adding the capability to continuously anneal cold rolled product without zinc coating. Nucor is not changing the emission limits for the source, SN-54. With this modification Nucor is also adding a 1.5 MMBTU/hr natural gas fired dryer to the new chromate section of the galvanizing line. This dryer is replacing the dryer SN-60 at the chromate section. The old dryer for SN-60 is now being used at the phosphate section of the galvanizing line. The two dryers cannot operate at the same time and are interlocked from an operation standpoint. Therefore the two dryers are both combined under SN-60 and the emission rates for these sources are unchanged. Nucor is also adding a second baghouse module to both of the lime dust collectors (SN-37 and SN-38). This will allow one module to be down for cleaning while the other module is in operation for both these sources. This will not effect emission from these sources.

Permit 1139-AOP-R5

Nucor made a number of changes with this permit modification. Nucor first submitted a minor modification to their permit; this minor modification included enclosing the railcar loadout of EAF dust and venting the enclosure through a baghouse, SN-67. Nucor also added an enclosed conveyor that will convey raw materials which will also be controlled by a baghouse, SN-68. Nucor also requested changing compliance conditions for two baghouses, SN-37 and 38, from pressure drop readings to opacity readings.

Nucor also submitted a modification which included ducting LMF No. 3 (SN-39) to the EAF baghouse (SN-01); updated the cooling tower emissions and inventory; added a second truck conveyor for lime and carbon unloading (SN-69); modified the EAF (SN-01) operations as specified in the permit application and supporting documents; modified the carbon exhaust silos (SN-43 and 44) so that their exhausts are returned to their silo bin vents exhaust; added a small

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(1 MMBTU) skid mounted boiler; removed the iron carbide silo SN-41; added sand to the oxygen torch cutting of coils (SN-65); and modified the slag processing plant to add a screening plant and a mill scale plant (SN-23). These changes will require a number of sources to undergo Prevention of Significant Deterioration (PSD) review.

Prevention of Significant Deterioration

The changes made to the facility in this permit are considered a major modification under PSD regulations. Because of these changes PSD review is required for the following pollutants NO₂, CO, SO₂, PM₁₀, VOC and Lead for a number of sources at the facility.

Best Available Control Technology

The PSD regulations mandate that a case-by-case Best Available Control Technology (BACT) analysis be performed on all new or modified affected sources at which a net emissions increase will occur. The following table is a summary of the BACT determinations made in this permit. BACT determinations for the facility made in previous permits can be found in the Permit History section of this permit. Note that SN-01 has a number of sources routed to a single baghouse. This BACT determination was only for the EAF associated with this baghouse, and therefore only the BACT limits for the EAF are listed in this section.

BACT Analysis Summary				
Source	Description	Pollutant	Control Technology	BACT Limit
SN-01	EAF's, LMF's, casters and canopies	NO _x	Natural gas fired oxy-fuel burners	0.51 lb/ton of steel
		CO	Direct Shell	2.0 lb/ton of steel
		VOC	Evacuation	0.088 lb/ton of steel
			Scrap management system	0.0018 gr/dscf
		PM ₁₀ SO ₂	Baghouse	0.2 lb/ton of steel
SN-70	Cooling Towers	PM ₁₀	No control	3.6 tpy
SN-65	Coil Cutting	PM ₁₀	Baghouse	0.0025 gr/dscf
SN-67	Railcar Loading Station	PM ₁₀	Baghouse	0.01 gr/dscf
SN-68 SN-69	Truck Conveyors	PM ₁₀	Baghouse	0.01 gr/dscf

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SN-37 SN-38	Lime Silos	PM ₁₀	Baghouse	0.0005 gr/dscf
SN-43 SN-44	Carbon Silos	PM ₁₀	Baghouse	0.01 gr/dscf
SN-23	Slag Processing Equipment	PM ₁₀	Keep material sufficiently damp	4.1 tpy

Permit 1139-AOP-R6

Was issued on April 3, 2006. This permit incorporates a number of changes to the facility. In addition to being the Title V renewal for the facility, Nucor is adding a roof feed metallics system to each EAF, which will decrease tap to tap time and increase slag and millscale throughputs. Also the operating restrictions on the pickle line boilers, SN-52, the Cold Reversing Mill/Temper Mill, SN-53, and the Annealing Furnaces, SN-61 were removed. Nucor is also adding a Zinc Dross furnace, SN-73; a Pickle Line Dryer, SN-74; and a Ladle Dryer, SN-20. These changes will require PSD review for all the criteria pollutants.

Summary of PSD issues Permit 1139-AOP-R6

The changes made to the facility in this permit are considered a major modification under PSD regulations. Because of these changes PSD review is required for the following pollutants NO₂, CO, SO₂, PM₁₀, VOC and Lead.

Best Available Control Technology

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

BACT Analysis Summary				
Source	Description	Pollutant	Control Technology	Bact Limit
SN-01	EAF, LMF, caster and canopies	NO _x	Natural gas fired oxy-fuel burners	0.51 lb/ton of steel
		CO	Direct Shell	2.0 lb/ton of steel
		VOC	Evacuation	0.088 lb/ton of steel
		PM ₁₀	Scrap management system	0.0018 gr/dscf
		SO ₂	Baghouse	0.2 lb/ton of steel

SN-52	Pickle Line Boilers	NO _x CO VOC PM ₁₀ SO ₂	Low NOx Burners Good Combustion Practice Good Combustion Practice Natural Gas Usage only/ Good combustion practice Natural Gas Usage only/ Good combustion practice	0.075 lb/MMBTU 0.084 lb/MMBTU 0.00055 lb/MMBTU 0.0076 lb/MMBTU 0.0006 lb/MMBTU
SN-53	Cold Reversing Mill/Temper Mill	PM ₁₀	Mist Eliminator	0.0025 gr/dscf
SN-51	Pickle Line	PM ₁₀	Mist Eliminator	0.0015 gr/dscf
SN-61	Annealing Furnaces	NO _x CO VOC PM ₁₀ SO ₂	Low NOx Burners Good Combustion Practice Good Combustion Practice Natural Gas Usage only/ Good combustion practice Natural Gas Usage only/ Good combustion practice	0.01 gr/dscf 0.084 lb/MMBTU 0.00055 lb/MMBTU 0.0076 lb/MMBTU 0.0006 lb/MMBTU
SN-54	Galvanizing Line	NO _x CO	SNCR (direct-fired section) SCR (radiant tube section) Good Combustion Practice Good Combustion	0.035 lb/MMBTU 0.084 lb/MMBTU

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		VOC	Practice	0.00055 lb/MMBTU
		PM ₁₀	Natural Gas Usage only/ Good combustion practice	0.0076 lb/MMBTU
		SO ₂	Natural Gas Usage only/ Good combustion practice	0.0006 lb/MMBTU
SN-56 SN-55 SN-54 SN-57 SN-62	Scale Removal Scale Breaker Chromate Spray Hydrated Lime Silo	PM ₁₀	Fabric Filter	0.003 gr/dscf
SN-63	Alkali Wash Section	PM ₁₀	Mist Eliminator	0.003 gr/dscf
SN-58, 59, 60, 73, and 74	Natural Gas Fired Burners and Dryers	NO _x CO	Low NOx Burners Good Combustion Practice	0.062 lb/MMBTU 0.084 lb/MMBTU
		VOC	Good Combustion Practice	0.00055 lb/MMBTU
		PM ₁₀	Natural Gas Usage only/ Good combustion practice	0.0076 lb/MMBTU
		SO ₂	Natural Gas Usage only/ Good combustion practice	0.0006 lb/MMBTU
SN-20	Ladle Dryer	NO _x CO	Low NOx Burners Good Combustion Practice	0.01 lb/MMBTU 0.084 lb/MMBTU
		VOC	Good Combustion Practice	0.00055 lb/MMBTU
		PM ₁₀	Natural Gas Usage only/ Good combustion practice	0.0076 lb/MMBTU
		SO ₂	Natural Gas Usage only/ Good combustion practice	0.0006 lb/MMBTU

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SN-18	Slag Processing	PM ₁₀	Water Sprays	
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SECTION IV: SPECIFIC CONDITIONS

EAF Melt Shop Compliance Unit

SN-01: Electric Arc Furnaces

SN-21: Roof Monitor #1 (EAF Melt Shop)

Source Description

The facility receives scrap iron and steel by barge, rail, and truck. The scrap is either unloaded and stockpiled on site or loaded directly into furnace charging buckets. The charging buckets (which are on rails) are loaded outside the melt shop. Once loaded, they travel into the building and stop beneath the lime silo where pebbled lime is added. The scrap, pebbled lime and coke are then charged into one of the two electric arc furnaces (EAF), which have a combined capacity or target production rate of 585 tons of steel per hour. There are no limitations which would preclude tapping both furnaces at the same time or charging one furnace while tapping the other. There are ten (10) EAF natural gas-fired low NO_x burners with maximum heat input capacities of 15 MMbtu/hr each. The EAF burners exhaust to the EAF baghouse.

After charging, graphite electrodes are positioned just above the steel in the furnaces. When electricity is applied, an arc jumps from the end of the electrodes to the steel. The heat generated from this arc, along with the heat from the coke and auxiliary burners, melts the scrap into molten steel. As the steel melts, additional coke is injected, limestone slag floats to the top of the furnace, and the steel sinks to the bottom. When the melt cycle is complete, the slag is poured off of the top of the furnace. The molten steel is then transferred to ladle metallurgy stations.

Hot gases are captured in “fourth hole” ducts (direct shell evacuation systems, or DSE) and via canopy hoods located in the overhead roof exhaust system. The combination of canopy hoods and a “dust wall” surrounds furnaces and evacuates furnace emissions during charging, tapping, and slagging operations through canopy hoods. The exhaust is ducted to a multi-compartment, positive-pressure, reverse air type baghouse (SN-01). The baghouse also controls exhaust from the No. 1, No. 2, and No. 3 ladle metallurgy stations (LMFs) and No. 1 and No. 2 continuous casters.

Emissions from the melt shop not captured by the DSE or roof canopy systems are released through a roof monitor (SN-21).

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Conditions 5 and 12-29. [Regulation 19, §19.901, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
SN-01	PM	37.0	162.1
	PM ₁₀	37.0	162.1
	SO ₂	176.8	774.5
	VOC	53.8	235.5
	CO	1181.5	5174.6
	NO _x	304.0	1331.8
	Lead	0.82	3.59
SN-21	PM	4.4	19.3
	PM ₁₀	4.4	19.3
	SO ₂	1.2	5.2
	VOC	0.8	3.5
	CO	12.6	54.9
	NO _x	6.2	27.2

2. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Conditions 5 and 12-29. [Regulation 19, §19.901, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	EAF BACT Limit	LMF BACT Limit
NO _x	0.51 lb/ton of steel	...
CO	2.0 lb/ton of steel	0.02 lb/ton of steel
VOC	0.088 lb/ton of steel	0.005 lb/ton of steel
PM ₁₀	0.0018 gr/dscf	0.0018 gr/dscf
SO ₂	0.2 lb/ton of steel	0.13 lb/ton of steel

3. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Conditions 5 and 12-23. [Regulation 18, §18.801, effective December 19, 2004, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source	Pollutant	lb/hr	tpy
SN-01	Arsenic	0.01	0.05
	Cadmium	0.02	0.09
	Chromium	0.08	0.35
	Manganese	1.08	4.73
	Nickel	0.02	0.09

4. The EAF Baghouse (SN-01), Railcar Loading (SN-67), and EAF Melt Shop (SN-21) are subject to 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart AAa, Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983 due to construction of the facility in 1991. A copy of Subpart AAa is provided in the Appendices of this permit. [40 CFR Part 60, Subpart A and Subpart AAa]
5. The permittee shall perform stack testing of SN-01 for PM emissions. Testing shall be performed annually in accordance with Specific Condition 6, Plantwide Condition 4, and EPA Reference Method 5D as found in 40 CFR, Part 60, Appendix A. The sampling time and sampling volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf). The permittee shall report all emissions measured as PM₁₀ or may conduct separate PM₁₀ testing using EPA Reference Method 201 or 201A as found in 40 CFR, Part 60, Appendix A. The report shall include information specified in §60.276a(f) of 40 CFR, Part 60, Subpart AAa. [§19.304 and §19.704 of Regulation 19, §60.275a(e)(1) of 40 CFR, Part 60, Subpart AAa, and 40 CFR Part 52, Subpart E]
6. Unless the presence of inclement weather makes concurrent testing infeasible, the permittee shall conduct the performance tests required by Specific Conditions 5, 9, and 14, concurrently. [§19.304 of Regulation 19 and 60.275a(e)(4) and 60.275a(j) of 40 CFR, Part 60, Subpart AAa]
7. The permittee shall submit to the Department a written report of the results of the performance test required by Specific Condition 5. The report shall include information specified in §60.276a(f) of 40 CFR, Part 60, Subpart AAa, and the information required under Plantwide Condition 4. [§19.304 and §19.705 of Regulation 19, §60.276a(f) of 40 CFR, Part 60, Subpart AAa, and 40 CFR Part 52, Subpart E]
8. The permittee shall not discharge into the atmosphere any gases from the EAF Baghouse (SN-01) exhibiting 3 percent opacity or greater. [§19.304 of Regulation 19 and §60.272a(a)(2) of 40 CFR, Part 60, Subpart AAa]
9. The permittee shall perform observations of the opacity of the visible emissions from EAF Baghouse (SN-01) by a certified visible emission observer as follows: Visible emission observations are conducted at least once per day when the furnace is operating in the melting and refining period. These observations shall be taken in accordance with Method 9, and, for at least three 6-minute periods, the opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of 3% opacity. Reports of exceedances shall be submitted in accordance with Specific Condition 10. [§19.304 of Regulation 19 and to §60.273a(c) and

§60.275a(e)(3) of 40 CFR, Part 60, Subpart AAa]

10. The permittee shall submit a written report of exceedances of the EAF baghouse opacity and the EAF Melt Shop opacity to the Department semi-annually in accordance with General Provision 7. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater at the EAF baghouse, and all 6-minute periods during which the average opacity is 6 percent or greater at the EAF Melt Shop due solely to the operations of the EAF. Opacity observations shall be recorded on a visible emissions observation form. The information presented in Figures 9-1 and 9-2 to EPA Method 9 shall be recorded. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
11. The permittee shall not discharge into the atmosphere any gases which exit from EAF Melt Shop Roof Monitor (SN-21) which exceed 6 percent opacity or greater due solely to the operations of the EAF. Exceedances shall be defined as all 6-minute periods during which the average opacity is 6 percent or greater. This opacity limit shall apply at all times that the EAF is in operation and due solely to the operations of the electric arc furnace. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
12. The permittee shall either (a) install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside each EAF to be monitored, pursuant to 40 CFR §60.274a(f), or (b) perform daily observations of shop opacity, pursuant to 40 CFR §60.273a(d). The permittee shall notify the Department which method it elects within 30 days after the effective date of this permit. If the permittee elects to conduct opacity observations, the permittee shall conduct daily opacity readings on the EAF Melt Shop Roof Monitor (SN-21) as follows: Shop opacity observations shall be conducted at least once per day when the furnace(s) is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 or more consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed in proximity to an affected EAF. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records of these opacity observations shall be kept on site and made available for inspection upon request. Reports of exceedances shall be submitted in accordance with Specific Condition 10. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
13. The permittee shall either:
 1. Check and record the control system fan motor amperes and damper positions on a once per shift basis;
 2. Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or

3. Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once per shift basis.

The permittee shall notify the Department which method it elects to use within 30 days after the effective date of this permit. If the permittee elects a method which uses a volumetric flow measuring device, the permittee shall comply with the pertinent provisions of 40 CFR §60.274a(b). If the permittee elects a method based on periodic monitoring of fan motor amperes, damper positions, or both, the permittee shall comply with 40 CFR §60.274a(c), and shall conduct a compliance test to re-establish these parameters as specified in 40 CFR §60.274a(c) within 180 days after the effective date of this permit. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]

14. The permittee shall determine baseline values of the fan motor amperes and damper positions, or volumetric flow rate during annual performance testing in accordance with Specific Condition 6, as may be required to demonstrate compliance according to the method chosen by the permittee pursuant to Specific Condition 13. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Appropriate level shall be defined as flow rates equal to or greater than those flow rates established as the baseline during the last annual performance testing on the EAF baghouse. The term appropriate period shall be defined as the time period between each annual performance testing on the EAF baghouse. Flow rates less than the baseline flow rate may be considered unacceptable operation by the Department, if operation at such flow rates results in opacity readings at SN-21 greater than 6%. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
15. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
16. The permittee shall visually inspect the upper chamber of the baghouse (SN-01) for visible emissions from individual bags on a monthly basis. Worn, frayed, or defective bags shall be replaced within two weeks following the inspection in which the defect is found. The permittee shall maintain a log of the inspection and maintenance activities. The log shall be signed and dated by the person responsible for making the inspection and/or repair. This log shall be kept on site and can be used by the Department for enforcement purposes. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
17. The permittee shall maintain records of the following information: (1) all data obtained under Specific Condition 14; and (2) all monthly operational status inspections performed

under Specific Condition 16. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]

18. If the permittee elects to install a device to measure the pressure in the free space inside the EAFs pursuant to Specific Condition 12, the pressure shall be recorded as 15-minute integrated averages. The monitoring device may be installed in any appropriate location in the EAF duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ± 5 mm of water gauge over its normal operating range and shall be calibrated according the manufacturer's instructions. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
19. If the permittee elects to install a device to measure the pressure in the free space inside the EAFs pursuant to Specific Condition 12, during each performance testing conducted in accordance with Specific Condition 5, the permittee shall determine baseline values of the pressure in the free space inside the furnace during the meltdown and refining period(s). The pressure determined during the most recent demonstration of particulate emission compliance shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures may be considered by the Department to be unacceptable operation and maintenance of the affected facility. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
20. If the permittee elects to install a device to measure the pressure in the free space inside the EAFs pursuant to Specific Condition 12, the permittee shall maintain records which demonstrate compliance with Specific Condition 19 and may be used by the Department for enforcement purposes. The records shall be updated on a daily basis, shall be kept on site, and shall be provided to Department personnel upon request. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
21. During any performance test conducted in accordance with Specific Condition 5, the owner or operator shall monitor the following information for all heats covered by the test:
 - (1) Charge weights and materials, and tap weights and materials;
 - (2) Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and, if the permittee has elected to measure the pressure inside the EAFs pursuant to Specific Condition 14, the pressure inside an EAF when direct-shell evacuation control systems are used;
 - (3) Control device operation log; and
 - (4) Continuous monitor or Reference Method 9 data. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
22. The permittee shall retain all records of the measurements required by Specific Conditions 13 through 21 for at least 2 years following the date of the measurement. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]

23. Operation of the EAFs at a furnace static pressure that exceeds the value established under Specific Condition 19 or at flow rates lower than those established under Specific Condition 14, may be considered by the Department to be unacceptable operation and maintenance of the affected facility, if operation at such rates results in opacity readings at SN-21 greater than 6%. Operation at such values shall be reported to the Department semiannually. [40 CFR, Part 60, Subpart AAa, and §19.304 of Regulation 19]
24. The permittee shall perform stack testing of SN-01 for NO_x, SO₂, CO, and VOC emissions. Testing shall be performed in accordance with Plantwide Conditions 3 and 4 and shall be repeated every six months thereafter. The permittee shall measure NO_x, SO₂, and CO emissions in accordance with EPA Reference Methods 7E, 6C, and 10, respectively. The permittee shall measure the total VOC emissions using EPA Reference Method 25A, from which it will subtract out methane (CH₄) and ethane (C₂H₆) emissions from the EAF baghouse using EPA Reference Method 18 to arrive at applicable VOC levels for purposes of this permit. Semiannual stack testing for a pollutant is not required if the permittee elects to operate a CEMS for that pollutant at SN-01. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]
25. For each stack test performed in accordance with Specific Condition 24 that demonstrates compliance with the lb/hr emission rates in Specific Condition 1, the permittee shall calculate an emission factor for NO_x, CO, SO₂, and VOC, that reflects the pounds of each pollutant emitted per ton of steel tapped during the stack test. The emission factor shall be calculated by dividing the emission rate by the production rate, and shall be expressed as lb/ton. The emission rate for each pollutant shall be the average of the emission rates established for each test run conducted during the stack test, expressed in pounds per hour. The production rate shall be determined by dividing the total tons of steel tapped from the EAFs during all test runs conducted during the stack test by the total amount of time of the test runs, and shall be expressed as tons per hour. The emission factor for each pollutant shall be reported to the Department together with the stack test results. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]
26. The permittee shall report to the Department each month the total number of tons of steel tapped from the EAFs during each of the previous twelve months. For each month, the emission factor from the nearest preceding stack test shall be multiplied by the total tons of steel tapped during that month, to establish the amount of each pollutant emitted during that month. The emissions so calculated for each of the last twelve months shall be added together and expressed as tons of pollutant per year. The sum of the last twelve months shall not exceed the ton per year limits for SN-01 in Specific Condition 1. If more than one stack test is conducted during a month, the calculation for that month shall be modified so that the total number of tons of steel tapped during the period between two consecutive stack tests shall be multiplied by the emission factor established by the stack test at the beginning of any such period. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]
27. The permittee shall perform stack testing of SN-01 for lead (Pb) emissions. Testing shall be performed in accordance with Plantwide Conditions 3 and 4 and shall be repeated annually

thereafter. The permittee shall measure lead emissions in accordance with EPA Reference Method 12 or other alternate method, provided the Department approves the alternate method prior to use. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

28. In lieu of, or in addition to calculating an emission factor for NO_x, SO₂, CO, and VOC and reporting EAF production each month as provided in Specific Conditions 25 and 26, the permittee may install and operate a monitoring device that continuously monitors and records NO_x, SO₂, CO, and VOC concentration of gases in the duct leading to the EAF baghouse. The NO_x and SO₂ monitors shall be operated in accordance with performance specification #2 which is found in 40 CFR Part 60, Appendix B, and the CEMS conditions in Attachment A of this permit. The CO monitor shall be operated in accordance with performance specification #4, which is found in 40 CFR Part 60, Appendix B, and the CEMS conditions in Attachment A of this permit. For purposes of measuring VOCs, the permittee may use an adjustment factor which will assume that the VOCs are 30% less than THC or, may take actual measurements of methane concentrations to subtract from the THC measurement to arrive at the VOC concentration. The VOC monitor shall be operated in accordance with the CEMS conditions in Attachment A of this permit. The permittee shall provide reporting from the CEMS in parts per million (ppm) and also in pounds per hour (lb/hr). The permittee shall indicate the methodology used to determine the lb/hr figure in the required reporting. Both ppm and lb/hr data shall be used for compliance purposes. The lb/hr value shall be determined using 3-hour block averages for compliance purposes. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
29. If the permittee elects to install CEMS, it shall give the Department 15 days advanced written notice. Thereafter, the permittee shall demonstrate compliance either by providing monthly production reports pursuant to Specific Conditions 25 and 26, or quarterly CEMS excess emission reports. If the permittee elects to discontinue use of CEMS, it shall give the Department 15 days advance written notice and shall resume or continue compliance with Specific Condition 25 and 26. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Mill Building Compliance Unit

SN-02: #1 Tunnel Furnace, Section A
SN-03: #1 Tunnel Furnace, Section B
SN-04: #2 Tunnel Furnace
SN-05: Roof Monitor #5 (Shuttle Furnace)
SN-06: Roof Monitor #2 (LMF Roof Monitor)
SN-19: Roof Monitor #3 (Caster #1)
SN-20: Roof Monitor #4 (Caster #2)
SN-22: Roof Monitor #6 (Rolling Mill Building)

Source Description

This compliance unit consists of the mill building exclusive of the EAF melt shop. Process units and exhaust points of this compliance unit include #1 Tunnel furnace, section A (SN-02), #1 Tunnel furnace, section B (SN-03), #2 Tunnel furnace (SN-04), Tunnel furnace shuttle (SN-05), LMF roof monitor (SN-06), #1 Ladle dryout station (SN-07), #1 Ladle preheat station (SN-08), #1 Vertical holding station (SN-09), #1 Tundish preheaters (SN-10), #1 Tundish dryer (SN-11), #2 Ladle dryout station (SN-12), #2 Ladle preheat station (SN-13), #2 Vertical holding station (SN-14), #2 Tundish preheaters (SN-15), #2 Tundish dryer (SN-16), Caster #1 (SN-19), Caster #2 (SN-20), Rolling Mill Building Roof Monitor (SN-22), Tundish nozzle preheaters, and #3 ladle Dryout Station.

When the steel has reached the proper composition, a ladle is moved by crane from the LMS to one of two continuous casters. The molten steel is poured from a ladle into a tundish, which funnels the molten steel into a mold. The steel solidifies as it passes through the water-cooled mold, providing immediate cooling of the outer skin. At this point, the center of the steel slab is still molten. The casters produce continuous slabs approximately two inches thick. The width of the slab varies between 36 and 61 inches. The slab is cut so that it is approximately 150 feet long. Emissions from the continuous casters are captured by canopy hoods positioned directly above each caster and routed to the EAF baghouse (SN-01). The remaining emissions are assumed to exhaust through caster roof monitors (SN-19 & SN-20).

The cut slabs then go to the rolling mill. The rolling process is initiated by heating the slab to a uniform temperature. This is accomplished using two tunnel furnaces and a shuttle system. The #1 Tunnel furnace has a maximum heat input capacity of 150 MMbtu/hr [90 MMbtu/hr for section A (SN-02) and 60 MMbtu/hr for section B (SN-03)] which is supplied by natural gas combustion. The #2 tunnel furnace has a maximum heat input capacity of 90 MMbtu/hr (SN-04) which is also supplied by natural gas combustion. The mill also utilizes a two shuttle systems to transfer slabs between the furnaces. The shuttles incorporate a 10.5 MMbtu/hr natural gas-fired burner (SN-05). All furnaces incorporate low-NO_x burners. Once the slabs have been rolled to the proper dimensions, they are cooled by a water spray and then wound into coils. The coiled steel is stored on site prior to sale. The rolling mill operations are associated with the generation of small amounts of PM emissions. Further, many of these operations are conducted using water sprays. The rolling building vents to the atmosphere through a roof monitor (SN-22).

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The mill uses eight natural gas-fired ladle preheaters equipped with low-NO_x burners, each with a maximum heat input capacity of 11 MMbtu/hr, to raise the temperature of the ladles prior to the transfer of molten steel from the EAFs. SN-08 and SN-13 each represent four ladle preheaters. For permitting purposes, it is assumed that exhaust gases exit the mill through the LMF roof monitor (SN-19).

The mill has approximately 8 ladles in service at any time. Each ladle is generally used for approximately 55 to 60 heats. After that, the refractory brick lining in the ladles needs to be replaced. The removal of the refractory lining is accomplished using jackhammers and is associated with the PM emissions within the mill building. As such, these operations are considered as de minimis emission source.

After removal of the old refractory lining, new refractory is applied and cured. The curing is accomplished at three stations which incorporate natural gas-fired low-NO_x burners with maximum heat input capacities of 11 MMbtu/hr each. Ladle Dryout Station #1 (SN-07) and ladle Dryout Station #2 (SN-12) and Ladle Dryout Station #3 each represent one ladle dryout station. For permitting purposes, it is assumed that exhaust gases exit the mill through the roof monitor #4 (SN-20).

The mill incorporates two vertical holding stations which are located adjacent to the EAFs. These stations allow the crane operator to place a preheated ladle near the EAFs and maintain the temperature of a ladle. The stations use natural gas-fired low-NO_x burners with maximum heat input capacity of 11 MMbtu/hr each. SN-09 and SN-14 each represent one vertical holding station. For permitting purposes, it is assumed that exhaust gases exit the mill through the roof monitor #1 (SN-21).

The mill utilizes four natural gas-fired low-NO_x tundish preheaters, each with a maximum heat input capacity of 8 MMbtu/hr. These units are used to raise the temperature of the tundishes prior to transfer of molten steel from the ladles. SN-10 and SN-15 each represent two tundish preheaters. For permitting purposes, it is assumed that exhaust gases exit the mill through the roof monitor #3 (SN-19).

The mill utilizes approximately 12 tundishes in service at any time. Each tundish is generally used for approximately 2 to 3 months. After that, the refractory brick lining of the tundishes needs to be replaced. The removal of the refractory lining is accomplished either by using jackhammers and is associated with the PM emissions within the mill building, or by mechanical means in the area between the melt shop and the slag processing area. As such, these operations are considered as de minimis emission source.

After removal of the old refractory lining, new refractory is applied and cured. The refractory is cured with two natural gas-fired burners with maximum heat input capacities of 8 MMbtu/hr each. SN-11 and SN-16 each represent one tundish dryer. For permitting purposes, it is assumed that exhaust gases exit the mill through the roof monitor #3 (SN-19) and roof monitor #4 (SN-20) respectively.

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The mill incorporates four natural gas-fired low-NO_x tundish nozzle preheaters, each with a maximum heat input capacity of 2.5 MMbtu/hr. For permitting purposes, it is assumed that exhaust gases exit the mill through the roof monitor #3 (SN-19).

There is a number of smaller natural gas-fired units, such as space heaters and torches, at the facility. The permittee estimates heat input capacity of these units as 10% of that of major natural gas fired sources or, approximately, 86 MMbtu/hr. Each of these units is considered an insignificant source.

The following table presents a summary of the roof monitor exhaust configuration.

Roof Monitor	Source	Sources Exhausted Through a Roof Monitor
1	SN-21	EAFs EAF Burners #1 Vertical Holding Station (SN-09) #2 Vertical Holding Station (SN-14) LMFs casters
2	SN-06	routed to Roof Monitor #1
3	SN-19	#1 Caster #1 Tundish Dryer (SN-11) #1 Tundish Preheater (SN-10) #2 Tundish Preheater (SN-15) Tundish Nozzle Preheaters #1 Ladle Preheat Station (SN-08) #2 Ladle Preheat Station (SN-13)
4	SN-20	#2 Caster #1 Ladle Dryout Station (SN-07) #2 Ladle Dryout Station (SN-12) #2 Tundish Dryer (SN-16) #3 Ladle Dryout Station
5	SN-05	Shuttle Furnace
6	SN-22	Mill Building

Specific Conditions

30. The permittee shall not exceed the emission rates set forth in the following table.
 Compliance with these rates shall be demonstrated by Specific Condition 31. [Regulation

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19, §19.901, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
SN-02	PM	1.3	5.7
	PM ₁₀	1.3	5.7
	SO ₂	0.1	0.3
	VOC	0.3	1.4
	CO	6.3	27.6
	NO _x	16.2	71.0
SN-03	PM	0.9	4.0
	PM ₁₀	0.9	4.0
	SO ₂	0.1	0.2
	VOC	0.2	0.9
	CO	4.2	18.4
	NO _x	10.8	47.3
SN-04	PM	1.3	5.7
	PM ₁₀	1.3	5.7
	SO ₂	0.1	0.3
	VOC	0.3	1.4
	CO	6.3	27.6
	NO _x	16.2	71.0
SN-05	PM	0.2	0.9
	PM ₁₀	0.2	0.9
	SO ₂	0.1	0.1
	VOC	0.1	0.5
	CO	0.8	3.5
	NO _x	1.9	8.4
SN-19	PM	2.4	10.3
	PM ₁₀	2.4	10.3
	SO ₂	0.6	0.8
	VOC	0.8	3.8
	CO	4.5	19.9
	NO _x	17.4	76.3
SN-20	PM	1.1	4.4
	PM ₁₀	1.1	4.4
	SO ₂	0.2	0.3
	VOC	0.4	1.8
	CO	1.9	8.4
	NO _x	5.1	22.1

31. The permittee shall perform annual stack testing of SN-02, SN-03, and SN-04 for carbon monoxide (CO) and nitrogen oxides (NO_x) emissions. This testing shall be conducted at least annually on the testing schedule established in previous permits, in accordance with Plantwide Condition 4, and EPA Reference Methods 10 and 7E, respectively, as found in 40 CFR Part 60, Appendix A. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]
32. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance for the sources with 5% opacity limits will be demonstrated through compliance by combustion of only pipeline quality natural gas.

SN	Limit	Regulatory Citation
02, 03, 04, 05, 19, and 20	5%	§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311
21	20%	§19.503 of Regulation 19 and 40 CFR, Part 52, Subpart E

33. The permittee shall conduct weekly observations of the opacity from SN-21 and keep a record of these observations. If visible emissions are detected, then the permittee shall immediately conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.705 of Regulation 19 and 40 CFR 52]

Slag Processing Compliance Unit

SN-18: Slag Pit Loadout
SN-23: Slag Processing Plant

Source Description

Slag processing compliance unit includes collection of slag from the metal shop and the screening, processing and shipping of slag, which is performed by an on-site independent contractor.

Slag is produced in the EAFs during the steel making process. The slag is discharged from the furnace and ladle and either cools naturally on the slag pit floor within the melt shop building or is directly poured into slag pots. Hot slag which is placed on the slag pit floor in the melt shop is dug out from the slag pit, placed into a front-end loader, and then loaded into a slag pot for transportation to the slag processing area.

At the slag processing area, the slag is first dumped and allowed to cool naturally. Then, water is applied. When sufficiently cooled and moistened, the slag is loaded out of the slag pit/cooling area with a front-end loader (historically, the process is denoted as SN-18) and is placed onto a slag pile. Slag that is too large to be processed, as well as other oversized material such as “skulls” and refractory, is first broken into small pieces by a breaking ball. Metallics are separated and returned to the EAFs. The remaining material is placed onto a slag pile. Water is applied to the slag pile to minimize emissions from wind erosion. Slag from the pile is then loaded into the processing feeder. Non-metallic materials are separated from metallic fractions and are screened to marketable sizes. Magnetic materials (scrap) continue to the magnetic screening section for separation into three size grades. Finally, magnetic materials are returned to be reprocessed in the EAFs. All described above operations, excluding slag pit loadout, are denoted as SN-23. SN-23 also includes emissions associated with wind erosion of slag pits and slag piles and various processing activities such as feeders, conveyors, screens, etc. Because the slag is kept sufficiently damp, it is assumed that 90% particulate controlled efficiency is achieved during all slag processing operations.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table.
Compliance with this emission limit shall be demonstrated by compliance with Specific Condition 35. [Regulation 19, §19.901, and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
SN-18	PM	1.4	5.8
	PM ₁₀	0.8	2.9

Source	Pollutant	lb/hr	tpy
SN-23	PM	2.8	4.4
	PM ₁₀	1.5	2.2

35. The permittee shall not exceed 862,120 tons for any consecutive twelve (12) month period of slag throughput at the slag processing area. The permittee shall not exceed 225,000 tons of production in the screening plant in any consecutive 12 month period, and the permittee shall not exceed 30,000 tons of production in the mill scale plant in any consecutive 12 month period. Slag processing throughput shall be determined based on final products production, including the metallic portion of the slag which is returned to the EAFs for reprocessing. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 & 40 CFR 70.6]
36. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 35 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]
37. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

Source	Limit	Regulatory Citation
Each Slag Processing transfer point	20%	§19.503 of Regulation 19 and 40 CFR, Part 52, Subpart E
Each conveyor at the Slag Processing Area	20%	§19.503 of Regulation 19 and 40 CFR, Part 52, Subpart E
Each loading and unloading operation in the Slag Processing Area	20%	§19.503 of Regulation 19 and 40 CFR, Part 52, Subpart E

38. The permittee shall conduct weekly observations of the opacity from each slag processing transfer point and conveyor at the slag processing area. If visible emissions are detected, the permittee shall conduct a 6-minute opacity reading in accordance with Method 9 at the point where visible emissions were detected. The results of these observations shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

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39. The permittee shall continuously water all storage piles at the slag processing area as needed to control dust emissions. All crushers and screens shall be equipped with water sprays, which shall be operated as needed to control dust emissions. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
40. The permittee shall conduct a weekly 6-minute opacity reading on each loading/unloading operation at the slag processing area in accordance with EPA Reference Method 9. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Cold Rolling Mill Compliance Unit

SN-51: Pickle Line
SN-52: Pickle Line Boilers
SN-53: Cold Reversing Mill/Temper Mill
SN-54: Galvanizing Line
SN-55: Scale Breaker
SN-56: Entry Scale
SN-57: Chromate Spray
SN-58: Alkali Wash Burners
SN-59: Galvanizing Line Dryer
SN-60: Chromate Spray Dryer
SN-61: Annealing Furnaces
SN-62: Hydrated Lime Silo
SN-63: Alkali Wash Exhaust
SN-73: Zinc Dross Recovery Furnace
SN-74 Pickle Line Dryer

Source Description

The cold mill will consist of a pickle line (SN-51), three (3) boilers (SN-52), cold reversing mill/temper mill (SN-53), galvanizing line (SN-54), scale breaker (SN-55), entry scale baghouse (SN-56), Chromate spray (SN-57), alkali wash burners (SN-58), galvanizing line dryer (SN-59), chromate dryer (SN-60), 16 annealing bases with 8 furnaces (SN-61), hydrated lime silo (SN-62), an alkali wash mist eliminator (SN-63), a zinc dross recovery furnace (SN-73) and a pickle line dryer (SN-74).

A fraction of Nucor's hot rolled steel will be further processed in the cold rolling mill. The rolled steel will be pickled in a hydrochloric acid bath to remove scale oxides. The pickle line will consist of a series of acid tanks at a temperature of approximately 180°F. After immersion in the acid, the steel will be rinsed with water. Exhaust from the pickle line will be ducted to a fume scrubber and mist eliminator and finally discharged to the atmosphere via a stack. There are fifteen (15) storage tanks associated with the pickle line. These tanks will be used to store water solutions of hydrochloric acid and potassium hydroxide. All fumes from the storage tanks are ducted to the fume scrubber of the pickle line (SN-51). Spent liquor is loaded into rail cars or truck and transported off-site. The pickle line will be supported by three (3) natural gas-fired boilers (SN-52) with maximum heat input capacity of 12.6 MMbtu/hr each. Exhaust from these boilers will be emitted to the atmosphere via stacks. The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling – HCl Process went into effect on June 22, 1999. Nucor is not subject to this requirement because Nucor is not a major source for hazardous air pollutants. The pickle line boilers are subject to the New Source Performance Standards (NSPS) Subpart Dc.

The cold mill will utilize a cold reversing mill/temper mill (SN-53) to reduce the steel slab thickness. Specifically, coils of steel will be unwound and passed between a set of work rolls

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which will be pressed together by hydraulically-forced backup rolls. The strip of steel will be passed between the work rolls in alternating directions to effectively reduce the thickness of the strip. A mist eliminator will be used to minimize emissions. Exhaust from the mist eliminator will be emitted to the atmosphere via a stack.

The cold mill will also incorporate a galvanizing line (SN-54) to produce galvanized strips. The line will include natural gas-fired preheat and radiant sections with maximum heat input capacities of 60 and 18.3 MMBtu/hr, respectively. NO_x emissions from the direct fired section will be controlled using selective noncatalytic reduction (SNCR), and NO_x emissions from the radiant tube furnace will be controlled using selective catalytic reduction (SCR). Nucor has modified the galvanizing line to double as a continuous annealing line. The continuous annealing process involves raising the steel strip temperature to relieve the built up stress in the strip during the thickness reduction at the cold reversing mill, SN-53.

Just prior to entering the pickle line, the coil is flexed to loosen iron oxide (scale) particles. These particles are ducted to a small baghouse (10,595 cfm) with an outlet grain loading of 0.003 grains/scf. This process is known as the scale breaker (SN-55).

The entry scale baghouse (SN-56) is a system to withdraw any loose iron oxide from the coil prior to entering the pickle line. This system is ducted to a small baghouse (5,000 cfm) with an outlet grain loading of 0.003 grain/scf.

The chromate spray (SN-57) is a process in which a thin film of chromate is intermittently applied to the galvanized steel coil, as required by the customer. Fumes are exhausted by a fan having a flow rate of 1300 cfm and an estimated grain loading of 0.003 grain/scf.

The alkali wash of the galvanizing line has three burners (SN-58) to heat the liquid. The three natural gas fired burners are rated at 3.5, 3.5, and 2 MMBtu/hr. Emissions were calculated using AP-42 factors, except for NO_x, which was based on the vendor estimate of 0.062 lb/MMBtu.

The alkali wash section of the galvanizing line has a small dryer (SN-59) rated at 2.5 MMBtu/hr. Emissions were calculated using AP-42 factors, except for NO_x, which was based on the vendor estimate of 0.062 lb/MMBtu.

The galvanizing line has a small dryer (SN-60) near the chromate spray section and one near the phosphate section. The dryers are natural gas fired and have a maximum heat input of 1.5 MMBtu/hr. Emissions were calculated using AP-42 factors, except for NO_x, which was based on the vendor estimate of 0.062 lb/MMBtu. The two dryers are interlinked and cannot be operated at the same time, and their emissions are combined under one source.

There are 16 annealing furnace bases, with a maximum of 8 single stack bell-type annealing furnaces (SN-61) operating simultaneously. About 4 steel coils are stacked vertically. The entire cycle is about 36 hours with 50% heating and 50% cooling. Each furnace is rated at 4.8 MMBtu/hr. Emissions were calculated using AP-42 factors, except for NO_x, which is based on

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the vendor estimate of 0.1 lb/MMBtu. The furnaces exhaust into the cold mill building and subsequently, through the roof monitor.

The hydrated lime silo (SN-62) has a small baghouse to prevent the material from escaping during filling operations. The baghouse has an estimated grain loading of 0.003 grain/scf. The alkali wash exhaust (SN-63) has a mist eliminator with an outlet grain loading of 0.003 grain/scf and volume flow rate of 6,000 cfm.

The Zinc Dross Furnace (SN-73) is rated at 0.75 MMBTU/hr and the Pickle Line Dryer is rated at 2.0MMBTU/hr.

Specific Conditions

41. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Conditions 48 through 51. [§19.901 of Regulation 19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
SN-51	PM	0.2	0.5
	PM ₁₀	0.2	0.5
SN-52	PM	0.3	1.3
	PM ₁₀	0.3	1.3
	SO ₂	0.1	0.1
	VOC	0.2	0.9
	CO	3.2	13.9
	NO _x	2.9	12.4
SN-53	PM	1.7	7.5
	PM ₁₀	1.7	7.5
SN-54	PM	0.6	2.6
	PM ₁₀	0.6	2.6
	SO ₂	0.1	0.2
	VOC	0.5	1.9
	CO	6.6	28.8
	NO _x	2.8	12.0
SN-55	PM	0.3	1.2
	PM ₁₀	0.3	1.2
SN-56	PM	0.2	0.6
	PM ₁₀	0.2	0.6

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Source	Pollutant	lb/hr	tpy
SN-57	PM	0.1	0.2
	PM ₁₀	0.1	0.2
SN-58	PM	0.1	0.3
	PM ₁₀	0.1	0.3
	SO ₂	0.1	0.1
	VOC	0.1	0.3
	CO	0.8	3.3
	NO _x	0.6	2.5
SN-59	PM	0.1	0.1
	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.2	0.9
	NO _x	0.2	0.7
SN-60	PM	0.1	0.1
	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.2	0.6
	NO _x	0.1	0.5
SN-61	PM	0.3	1.3
	PM ₁₀	0.3	1.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	3.3	14.1
	NO _x	3.9	16.8
SN-62	PM	0.1	0.1
	PM ₁₀	0.1	0.1
SN-63	PM	0.2	0.7
	PM ₁₀	0.2	0.7
SN-73	PM	0.1	0.1
	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.1	0.3
	NO _x	0.1	0.2

Source	Pollutant	lb/hr	tpy
SN-74	PM	0.1	0.1
	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.2	0.8
	NO _x	0.2	0.6

42. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this emission limit shall be demonstrated by compliance with Specific Conditions 43 and 45. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	HAP	lb/hr	tpy
SN-51	HCl	0.2	0.8

43. The permittee shall perform annual stack testing of SN-51 for HCl emissions. Testing shall be performed according to the testing schedule established in previous permits, in accordance with Plantwide Conditions 3 and 4 and EPA Reference Method 26 as found in 40 CFR Part 60, Appendix A. [§18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
44. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance for the sources with 5% opacity limits will be demonstrated by combusting only pipeline quality natural gas.

Source	Limit	Regulatory Citation
51 and 53	10%	§19.901 of Regulation 19 and 40 CFR, Part 52, Subpart E
52, 54, 58, 59, 60, 61, 73 and 74	5%	§19.901 of Regulation 19 and 40 CFR, Part 52, Subpart E

45. The permittee shall keep a minimum water flow rate of 5 gal/min in the pickle line scrubber (SN-51). [§18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
46. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 45, and may be used by the Department for enforcement purposes. The records shall be updated on a daily basis, shall be kept on site, and shall be provided

to Department personnel upon request. [§18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

47. The permittee shall conduct weekly observations of the opacity from SN-53. If visible emissions are detected, then the permittee shall immediately conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The result of these observations or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.705 of Regulation 19 and 40 CFR 52, Subpart E]
48. The permittee shall perform annual stack testing of SN-53 for PM emissions. Testing shall be performed according to the testing schedule established in previous permits, in accordance with Plantwide Conditions 3 and 4, and EPA Reference Method 5 as found in 40 CFR Part 60, Appendix A. All particulate emissions shall be reported as PM₁₀, otherwise the permittee may choose to perform stack testing in accordance with EPA Reference Method 201 or 201A. [§19.702 of Regulation 19 and 40 CFR 52, Subpart E]
49. The permittee shall perform annual stack testing of SN-54 for NO_x emissions. Testing shall be when the source is operating as a continuous annealing line and performed in accordance to the testing schedule established in previous permits, accordance with Plantwide Conditions 3 and 4, and EPA Reference Method 7E as found in 40 CFR Part 60, Appendix A. If the source is not being operated as a continuous annealing line at the time an annual stack test is due. The source need not be tested at that time but tested within 60 days of source beginning operation as a continuous annealing line and again annually after the date of that test. [§19.702 of Regulation 19 and 40 CFR 52, Subpart E]
50. If it has been more than 12 months since SN-54 was last tested in accordance with Specific Condition 49, the permittee shall maintain records of the operating status of SN-54. These records shall include all times when the source enters and leaves service as a continuous annealing line. If the permittee is required to keep records under this condition and performs the performance test as required under Specific Condition 49, the permittee no longer need maintain up to date records unless another 12 months passes. Previous records must be maintained for 3 years. These records shall be kept in accordance with General Provision 7. [§18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
51. The permittee shall record and maintain records of the amounts of natural gas combusted in the pickle line boilers during each month. These records shall be kept on site and available for inspection upon request. [§19.304 and 40 CFR Part 60 Subpart Dc]

Auxiliary Operations Compliance Unit

SN-27: Pelletized Lime Handling
SN-29: Coke Handling
SN-37: Lime Dust Collector (North)
SN-38: Lime Dust Collector (South)
SN-42: Storage Dome
SN-43 through SN-46: Charge Carbon (Coke) Silos
SN-47 through SN-50 and SN-70: Cooling Towers
SN-64: Wastewater Lime Storage Silo
SN-66: Briquetting Operation
SN-67: Railcar Loading
SN-68 and 69: Truck Conveyor Baghouse
SN-71 Rice Hull Storage Silo
SN-72 Railcar and Truck Flux Unloading
SN-75 through 77 Roof Flux Feed System Bin Vents, BC4, BC5, and BC6
SN-78 Day Bin Baghouse

Source Description

The facility receives pelletized lime and coke. These materials are stored in bulk form. The facility utilizes six (6) silos for the storage of lime and four (4) silos for the storage of carbon. Four (4) lime silos and one (1) charge carbon silo are connected to a dust collector designated as SN-38. Two (2) lime silos and one (1) charge carbon silo are connected to a dust collector designated as SN-37. The Storage Dome (SN-42) stores HBI/DRI fines. The two remaining injection carbon silos should be designated as SN-43 and SN-44. Each of the injection carbon silos is equipped with a displacement air bin vent filter to minimize emissions of the raw materials to the atmosphere. SN-45 and SN-46 are reserved for future use.

Scrap steel is received by barge, rail, and trucks. The scrap is stored in piles on mill property. Some scrap is stored in the scrap handling building. Periodically, in-house-produced scrap is cut with torches to facilitate charging. This operation is conducted infrequently. Due to relatively small amounts of emissions associated with scrap storage and handling, this source is considered a *de minimis* emissions source. Previous permits listed the scrap handling building as an insignificant source. The scrap handling building now houses the briquetting operation SN-66. Therefore, the name of the insignificant source was changed to the scrap handling not the building.

Nucor utilizes a briquetting operation which uses lime, carbon, mill scale, and other mill waste materials and combines them with molasses (as a binder) to form a briquette that will be used as charge material in the electric arc furnaces. The briquettes are air-dried. The briquetting operation is located in the scrap bay building.

Alloy materials such as silicon-manganese and ferro-silicon are received in screened form by barge. These materials are then unloaded using a grapple or clam-type bucket into trucks

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(denoted SN-26) and transported to an alloy storage building (denoted SN-25), where material is stored in bins. The building is enclosed. The alloys are then transported by front end loader to the melt shop area, where they are conveyed into a ladle, as needed. PM emissions are possible due to the handling of the alloy materials.

Charge coke is delivered to the mill via barge and truck. Coke delivered by barge is sprayed with water prior to shipment. It is unloaded into dump trucks using a clam-type bucket and stored in an enclosed building. Then the charge coke is placed into charge containers to be charged in the furnaces. Coke delivered by truck is delivered in a tanker truck and is pneumatically conveyed into the silo.

Injection coke is delivered to the mill by truck and pneumatically conveyed into the silos. Then, it is blown with an injection lance into the furnaces.

Nucor operates a lime storage silo (SN-64) at the wastewater treatment plant. Lime is loaded into the storage silo by truck. During this process there is a potential for particulate emissions. The storage silo has a displacement air bin vent filter with an outlet emission rate of 0.01 gr/dscf. At 950 scfm, the maximum potential emission rate is 0.1 lb/hr. The bottom of the silo will have a rotary air lock with a rubber hose attached to feed lime into a cement truck.

Dust collected by the EAF baghouse is loaded onto railcar or truck. The railcar loading equipment is vented back to the SN-67. The railcar loading occurs in an enclosed building which is exhausted to a baghouse (SN-67). The emissions from railcar and truck unloading of fluxes will be controlled by a baghouse (SN-72).

Nucor also conveys raw materials (e.g. pebble lime, carbon, etc.) from rail car to a tanker truck via an enclosed conveyor. This conveyor is equipped with a baghouse (SN-68). Nucor also has a second conveyor (SN-69) which is mobile and can operate at the same time as with SN-68.

The Rice Hull Storage Silo (SN-71) is controlled by a bin vent filter.

Transfer Points along the Roof Flux Feed system are controlled by Roof Flux Feed Bin Vent BC5, BC6, and BC7 (SN-75, 76 and 77)

The Day Bin Baghouse (SN-78) controls emissions from the day bins inside the melt shop.

Specific Conditions

52. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Plantwide Condition 5. [§19.901 of Regulation 19 and 40 CFR Part 52, Subpart E]

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Source	Pollutant	lb/hr	tpy
SN-27	PM	0.1	0.5
	PM ₁₀	0.1	0.5
SN-29	PM	0.1	0.5
	PM ₁₀	0.1	0.5
SN-37	PM	0.2	0.9
	PM ₁₀	0.2	0.9
SN-38	PM	0.2	0.9
	PM ₁₀	0.2	0.9
SN-42	PM	0.1	0.5
	PM ₁₀	0.1	0.5
SN-43 SN-44 SN-45 SN-46	PM	0.1	0.5
	PM ₁₀	0.1	0.5
SN-47	PM	0.5	1.5
	PM ₁₀	0.5	1.5
SN-48	PM	0.1	0.2
	PM ₁₀	0.1	0.2
SN-49	PM	0.2	0.6
	PM ₁₀	0.2	0.6
SN-50	PM	0.4	1.2
	PM ₁₀	0.4	1.2
SN-70	PM	0.1	0.3
	PM ₁₀	0.1	0.3
SN-64	PM	0.1	0.5
	PM ₁₀	0.1	0.5
SN-67	PM	0.3	1.3
	PM ₁₀	0.3	1.3
SN-68	PM	0.1	0.3
	PM ₁₀	0.1	0.3
SN-69	PM	0.1	0.3
	PM ₁₀	0.1	0.3

53. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Conditions 66 and 69. [19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
SN-66	PM ₁₀	0.2	0.9
SN-71	PM ₁₀	0.1	0.5
SN-72	PM ₁₀	1.8	7.9
SN-75	PM ₁₀	0.1	0.3
SN-76	PM ₁₀	0.1	0.3
SN-77	PM ₁₀	0.1	0.3
SN-78	PM ₁₀	0.2	0.9

54. The permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission limits shall be demonstrated by compliance with Specific Conditions 66 and 69. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	Pollutant	lb/hr	tpy
SN-66	PM	0.2	0.9
SN-71	PM	0.1	0.5
SN-72	PM	1.8	7.9
SN-75	PM	0.1	0.3
SN-76	PM	0.1	0.3
SN-77	PM	0.1	0.3
SN-78	PM	0.2	0.9

55. The permittee shall not exceed 20% opacity from the pelletized lime handling (SN-27). Compliance with this opacity limit shall be demonstrated by Specific Condition 58. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

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56. The permittee shall not exceed 10% opacity from SN-37 or SN-38. Compliance with this opacity limit shall be demonstrated by complying with Specific Condition 58. [§18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
57. The permittee shall not exceed 5% opacity from SN-67, 68, 71, 72, 75, 76, 77, and 78. Compliance with this opacity limit shall be demonstrated by complying with Specific Condition 58. [§18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
58. The permittee shall conduct weekly observations of the opacity from SN-27, 37, 38, 66, 67, 68, 71, 72, 75, 76, 77, and 78. If visible emissions are detected, then the permittee shall immediately conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Steel Coil Cutting Operations
SN-65

Source Description

The steel coil cutting operations are located in the steel coil cutting building. The cutting operations are conducted by 6 oxy-fuel torches. The torches are rated at 0.4 MMBtu/hr each. Hoods are installed over the cutting area and the exhaust is routed to four filter cartridges.

Specific Conditions

59. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by proper control equipment operation. [§19.501 et seq and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM	0.5	2.0
PM ₁₀	0.5	2.0
SO ₂	0.1	0.1
VOC	0.1	0.1
CO	0.2	0.9
NO _x	0.3	1.1

60. The permittee shall not exceed 5% opacity from SN-65. Compliance with this opacity limit shall be demonstrated by complying with Specific Condition 61. [18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
61. The permittee shall conduct weekly observations of the opacity from SN-65. If visible emissions are detected, then the permittee shall immediately conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Nucor Steel, Arkansas a division of Nucor Corporation will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
7. The permittee shall within 180 days of the date this permit is final submit a permit application which includes condensable particulate emissions for all sources which have such emissions. [§26.1011(A)(1) of Regulation 26]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated January 9, 2004.

Description	Category
Roof Monitor #6	A-13
Scrap Handling	A-13
Alloy Material Handling Building	A-13
Alloy Material Unloading	A-13
Baghouse dust handling/unloading	A-13
Scrap and coil torching	A-13
Scale pits	A-13
Primary clarifiers	A-13
Two 12,300 gal diesel tanks	A-13
One 10,000 gal diesel tank	A-13
Three 2,000 gallon diesel tanks	A-13
Four 1,000 gallon diesel tanks	A-13
One 1,000 gallon gasoline tank	A-13
One 750 gallon diesel tank	A-13
Three 500 gallon gasoline tanks	A-13
One 51 gallon gasoline tank	A-13
Caster steam vents	A-13
One 1 MMBTU skid mounted boiler	A-1

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective September 26, 2002]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample,

measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
 - a. For all upset conditions (as defined in Regulation 19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - i. The facility name and location
 - ii. The process unit or emission source deviating from the permit limit,
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs,
 - iv. The date and time the deviation started,
 - v. The duration of the deviation,
 - vi. The average emissions during the deviation,
 - vii. The probable cause of such deviations,
 - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
 - ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The

permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
- 11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]
- 14. The permittee must furnish to the Director, within the time specified by the Director, 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director

- along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]
 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also

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submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

- a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit;
 - e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee 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 §408(a) of the Act or,
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

