

ADEQ OPERATING AIR PERMIT

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

Permit No. : 1659-AOP-R2

IS ISSUED TO:
JW Aluminum Company
777 Tyler Road
Russellville, AR 72802
Pope County
AFIN: 58-00272

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:

May 30, 2000

AND

May 29, 2005

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

Signed:

Michael Bonds
Chief, Air Division

Date Modified

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

Table of Contents

SECTION I: FACILITY INFORMATION	4
SECTION II: INTRODUCTION	5
Summary of Permit Activity	5
Process Description	5
Regulations	7
Emission Summary	8
SECTION III: PERMIT HISTORY	14
SECTION IV: SPECIFIC CONDITIONS	15
SN-18	15
SN-20A, SN-20B, SN-22A, SN-22B, SN-128, and 136	16
SN-30	19
SN-40, SN-41, SN-50, SN-51, SN-52, 137, 138, 139, 140, and 141	20
SN-45 and SN-58	24
SN-61	26
SN-71 through SN-77 and SN-90 through SN-93	28
SN-129	30
SN-131, SN-132, and SN-133	32
SN-134 and SN-135	35
SECTION V: COMPLIANCE PLAN AND SCHEDULE	38
SECTION VI: PLANTWIDE CONDITIONS	39
Permit Shield	41
Title VI Provisions	42
SECTION VII: INSIGNIFICANT ACTIVITIES	44
SECTION VIII: GENERAL PROVISIONS	45
Appendix A NSPS Subpart Kb	
Appendix B MACT Subpart RRR	
Appendix C CEM Standards	
Appendix D Sample Calculation	

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
PM10	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

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

SECTION I: FACILITY INFORMATION

PERMITTEE: JW Aluminum Company

AFIN: 58-00272

PERMIT NUMBER: 1659-AOP-R2

FACILITY ADDRESS: 777 Tyler Road
Russellville, AR 72802

MAILING ADDRESS: P.O. Box 29419-05
Charleston, SC 29419-9005

COUNTY: Pope

CONTACT POSITION: George Saville

TELEPHONE NUMBER: (843) 572-1100

REVIEWING ENGINEER: Michael H. Watt

UTM North South (Y): Zone 15: 3903.0 km

UTM East West (X): Zone 15: 492.3 km

SECTION II: INTRODUCTION

Summary of Permit Activity

JW Aluminum Company owns and operates an aluminum foil rolling mill located at 777 Tyler Road in Russellville. This facility receives cast aluminum foil from outside facilities and converts it to foil to be used primarily in packaging applications.

This modification is to install new equipment that will allow the facility to cast aluminum onsite. The new equipment for aluminum casting will include 3 Holding (MACT Group 2) Furnaces (SN-131, SN-132, and SN-133) with 2 Casters each, 2 Melting (MACT Group 1) Furnaces (SN-134 and SN-135) with 2 Casters each, an Intermediate Rolling Mill (SN-136), and 5 Annealing Furnaces (SN-137 through SN-141). In addition, an Aluminum Slitter (SN-130) is being added to the Insignificant Activities List.

This modification will also make this facility major in regards to PSD. This facility will also be considered a secondary aluminum processor which is a named source category in regards to PSD. Therefore, for this project to avoid PSD permitting, each pollutant increase must remain below 100 tons per year. The facility has taken a limit on SO₂ and NO_x emissions of 99 tons per year of each pollutant (see Plantwide Condition #9). Compliance with this limit will be demonstrated by maintaining records of fuel usage in the new equipment.

Process Description

Aluminum Sheet Casting Operation

The aluminum sheet casting operation involves melting and alloying of primary and scrap aluminum in Melting Furnaces (SN-134 and SN-135). The molten aluminum is transferred to a Holding Furnace (SN-131, SN-132, and SN-133) that will also keep the metal in a liquid state awaiting demand for casting. Final adjustments are also made to ensure that aluminum meets product specifications. There are two casters per furnace line. The maximum total casting rate for each furnace line is 5 tons/hour based on a 12-month rolling sum.

Cold Mill

Cast metal coil is received by the Cold Mill (SN-20A) to be rolled to the initial gauge for further processing. Cold rolling is used in the initial stages of foil manufacturing to reduce the thickness of the cast sheet to a gauge sufficient for introduction into the foil mill. Cold rolling is performed at metal temperatures below 265° F and at speeds of up to 2000 to 3000 feet per minute. Cold rolling is used to produce light gauge aluminum sheet. Aluminum sheet is cold rolled on a four-high rolling mill. The four steel rolls are stacked vertically which allows the aluminum to move horizontally between the rolls. The cold mill is equipped with a hooding system that discharges particulate matter to a cyclonic separator. The roll force is applied perpendicular to the surface of the aluminum sheet.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

Deformation occurs in two dimensions so that the metal is flattened and elongated. Rolling lubricant cools the rolls by controlling the friction between the metal strip and the work rolls. Heat is transferred from the rolls to the oil by direct contact. Lubricant overflow from the rolls is collected, filtered, cooled or heated, and recycled back to the mill.

Sheet Annealing

Sheet Annealing (SN-40, SN-41, SN-137 through SN-141) is a process that can occur in between passes on the cold mill or at the end of a production run on the cold mill. The annealing process occurs in a gas fired oven with an inert atmosphere. Inputs to this process are the rolled aluminum sheet and natural gas from the burners. Inert gas (nitrogen) is generated by an inert gas generator which uses controlled combustion to consume the oxygen to generate a nitrogen atmosphere for the ovens. Two sheet annealing ovens are associated with this process.

Foil Mill

Metal that has been processed by the cold mill is transferred to the Foil Mill (SN-22A) for finishing. The metal is rolled in a manner similar to the cold mill but at higher speeds. A lubricant is applied by sprays to the sheet and the work rolls to reduce heat. The mill is provided with equipment for handling and coiling the process metal. Lubricant overflow from the operation is collected, filtered, cooled or heated, and recycled back to the process. Metal rolled in this process can go through a series of anneals to impart the proper metal properties required by the customer. Annealing can occur at any time in the process or can occur at the end of the process.

Finish Annealing

Finish Annealing (SN-50, SN-51, and SN-137 through SN-141) is a process that occurs between passes on the foil mill or at the end of a production run on the mill. This process is similar to the sheet anneal but the cycles may be longer and the temperatures lower than the sheet anneals. Inputs to this process are rolled aluminum foil and natural gas for the burners. Inert gas (nitrogen) is generated by an inert gas generator which uses controlled combustion to consume oxygen to generate a nitrogen atmosphere for use in one of the three finish annealing ovens.

Bail Oven

The electric Bail Oven (SN-18) is a vacuum oven which uses heat under vacuum to dry saturated bails of scrap collected by the trim system on the rolling mills. Oil is driven off under vacuum and collected for recycling.

Separator

The separator system is used to separate the sheets of foil that come from the foil mill and put them into smaller coils or rolls that are easier to handle. Some trimming of the sheet may occur at this process and the trim is collected by the dry trim cyclone and baled as scrap.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

Trim Systems (wet and dry)

The Trim Systems (SN-30 and SN-61) collect the trimmed material from the sheet that is handled by the Foil Mill (wet) and the Separator (dry). The trim systems use a cyclone to collect the material and discharge it to a bailer.

Tank Farm

The Tank Farm (SN-71 through SN-77) consists of seven bulk storage tanks that store virgin, waste, and recycled rolling oil lubricants.

Vacuum Distillation

The plant has two Vacuum Distillation Units (SN-80 through SN-86) for the recycling of the recovered rolling oil lubricants. One distillation unit is dedicated to recovering oil from the cold mill while the other recovers oil from the foil mill.

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 60 Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
40 CFR 63, Subpart RRR – National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

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

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	36.90	159.8
		PM ₁₀	36.9	159.8
		SO ₂	83.1	99.8
		VOC	90.2	350.1
		CO	21.8	99.7
		NO _x	50.3	117.8
		Lead	0.20	0.85
HAPs		Chromium*	0.40	1.65
		Dioxin/Furans*	0.02	0.02
		HCl	15.0	65.7
		Manganese*	0.05	0.20
18	Bail Oven	VOC	0.1	0.1
20A	Cold Mill	PM	10.30	45.10
		PM ₁₀	10.3	45.1
		VOC	4.5	19.7
20B, 22B, and 128	Cold Mill and Intermediate Mill Oil Emissions and Parts Cleaning	VOC	19.8	86.7
22A	Finished Foil Mill and Regenerative Catalytic Oxidizer	PM	6.20	27.20
		PM ₁₀	6.2	27.2
		SO ₂	0.1	0.1
		VOC	8.0	35.0
		CO	0.5	2.1
		NO _x	0.8	3.5
30	Dry Trim System Bailer Cyclone	PM	1.00	4.40
		PM ₁₀	1.0	4.4

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
40	Sheet Annealer #10	PM	0.20	0.70
		PM ₁₀	0.2	0.7
		SO ₂	0.1	0.1
		VOC	9.9	36.1
		CO	0.4	1.6
		NO _x	0.6	2.7
41	Sheet Annealer #11	PM	0.20	0.70
		PM ₁₀	0.2	0.7
		SO ₂	0.1	0.1
		VOC	9.9	36.1
		CO	0.4	1.6
		NO _x	0.6	2.7
45	Exothermic Gas Generator	PM	0.10	0.10
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.2	0.7
		NO _x	0.2	0.9
50	Finish Annealer #40	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	1.9	8.3
		CO	0.4	1.6
		NO _x	0.6	2.7
51	Finish Annealer #41	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	1.9	8.3
		CO	0.4	1.6
		NO _x	0.6	2.7
52	Finish Annealer #42	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	1.9	8.3
		CO	0.4	1.6
		NO _x	0.6	2.7

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
58	Exothermic Gas Generator	PM	0.10	0.10
		PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.2	0.7
		NO _x	0.2	0.9
61	Wet Trim System Bailer	PM	1.00	4.40
		PM ₁₀	1.0	4.4
		VOC	1.2	5.1
70A	Rolling Oil Unloading Station	Insignificant Activity		
70B	Rolling Oil Unloading Station	Insignificant Activity		
71	Tank – Virgin 140 Oil	VOC	0.6	0.1
72	Tank – Virgin MSO	VOC	0.6	0.1
73	Tank – Used MSO	VOC	0.6	0.1
74	Tank – Virgin 140 Oil	VOC	0.6	0.1
75	Tank – Used Oil/Water	VOC	0.6	0.1
76	Tank – Used 140 Oil	VOC	0.6	0.1
77	Tank – Used MSO and 140 Oil (Fuel)	VOC	0.6	0.1
80, 81, and 82	140 Oil Distillation Unit	Insignificant Activity		
83, 85, and 86	MSO Oil Distillation Unit	Insignificant Activity		
90	Tank – Rolling Oil	VOC	0.6	0.1
91	Tank – Rolling Oil	VOC	0.6	0.1
92	Tank – Rolling Oil	VOC	0.6	0.1
93	Tank – Rolling Oil	VOC	0.6	0.1
129	Cooling Tower	PM	1.80	7.50
		PM ₁₀	1.8	7.5
130	Aluminum Slitter	Insignificant Activity		

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
131	Holding Furnace #1	PM	3.00	13.20
		PM ₁₀	3.0	13.2
		SO ₂	16.4	***
		VOC	0.3	1.0
		CO	2.6	11.1
		NO _X	6.3	***
		Lead	0.04	0.17
		Chromium*	0.08	0.33
		HCl	3.00	13.14
		Manganese*	0.01	0.04
132	Holding Furnace #2	PM	3.00	13.20
		PM ₁₀	3.0	13.2
		SO ₂	10.9	***
		VOC	0.2	0.7
		CO	1.7	7.4
		NO _X	4.2	***
		Lead	0.04	0.17
		Chromium*	0.08	0.33
		HCl	3.00	13.14
		Manganese*	0.01	0.04
133	Holding Furnace #3	PM	3.00	13.20
		PM ₁₀	3.0	13.2
		SO ₂	10.9	***
		VOC	0.2	0.7
		CO	1.7	7.4
		NO _X	4.2	***
		Lead	0.04	0.17
		Chromium*	0.08	0.33
		HCl	3.00	13.14
		Manganese*	0.01	0.04

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
134	Melting Furnace #1	PM	3.00	13.20
		PM ₁₀	3.0	13.2
		SO ₂	21.8	***
		VOC	0.3	1.3
		CO	3.4	14.8
		NO _X	8.4	***
		Lead	0.04	0.17
		Chromium*	0.08	0.33
		Dioxin/Furans*	0.01	0.01
		HCl	3.00	13.14
		Manganese*	0.01	0.04
135	Melting Furnace #2	PM	3.00	13.20
		PM ₁₀	3.0	13.2
		SO ₂	21.8	***
		VOC	0.3	1.3
		CO	3.4	14.8
		NO _X	8.4	***
		Lead	0.04	0.17
		Chromium*	0.08	0.33
		Dioxin/Furans*	0.01	0.01
		HCl	3.00	13.14
		Manganese*	0.01	0.04
136	Intermediate Rolling Mill	VOC	17.0	74.5
137	Annealing Furnace #6	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	***
		VOC	1.2	5.0
		CO	1.1	4.5
		NO _X	2.6	***
138	Annealing Furnace #7	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	***
		VOC	1.2	5.0
		CO	1.1	4.5
		NO _X	2.6	***

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
139	Annealing Furnace #8	PM	0.10	0.40
		PM ₁₀	0.1	0.4
		SO ₂	0.1	***
		VOC	1.2	5.0
		CO	1.1	4.5
		NO _x	2.6	***
140	Annealing Furnace #9	PM	0.20	0.60
		PM ₁₀	0.2	0.6
		SO ₂	0.1	***
		VOC	1.2	5.0
		CO	1.4	5.9
		NO _x	3.4	***
141	Annealing Furnace #10	PM	0.20	0.60
		PM ₁₀	0.2	0.6
		SO ₂	0.1	***
		VOC	1.2	5.0
		CO	1.4	5.9
		NO _x	3.4	***
131-141	New Holding, Melting, and Annealing Furnace Combined Limits	SO ₂	See above	99.0
		NO _x		99.0

* HAPs included in the VOC or PM totals. Other HAPs are not included in any other totals unless specifically stated.

** Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

*** Included in Plantwide Condition #9 and in Combined 131-141.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

SECTION III: PERMIT HISTORY

Permit #1659-A was issued to Alumax Foils, Inc. on March 26, 1996. This facility was not constructed or operating prior to the issuance of this permit.

Permit #1659-AOP-R0 was issued to Alumax Foils, Inc. on May 30, 2000. This was the first permit issued to Alumax Foils, Inc. under Regulation 26. Some permitted emission limits were revised based on tests conducted since the issuance of the original permit.

Permit #1659-AOP-R1 was issued to Alumax Foils, Inc. on March 28, 2002. The purpose of this modification was to address record keeping issues for both natural gas and rolling oil usage. Every natural gas burning source had its emissions calculated based on the source operating at capacity. Therefore, the facility will no longer be required to keep records of the amount of natural gas fired. The facility also proposed slightly increased emissions due to increased oil throughput in order to address exceedances of previous rolling oil throughput limits. The increased throughput limits also allowed the facility to increase production with the existing process equipment.

SECTION IV: SPECIFIC CONDITIONS

SN-18
Bail Oven

Source Description

The Bail Oven (SN-18) is used to remove tramp oil from bails of aluminum scrap generated at the facility. The oven is electrically heated and operates under a vacuum to remove the oil. Evaporated oil is condensed and collected for further processing.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by operating the condenser on the oven while processing aluminum scrap. [§19.501 et seq. of Regulation #19, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

SN-20A, SN-20B, SN-22A, SN-22B, SN-128, and 136
Mill Exhaust

Source Description

The Cold Mill (source SN-20A) processes approximately 277,000 tons of cast aluminum coil per year. Emissions are controlled through the use of a mist cyclone.

The Finish Foil Mill (SN-22A) produces approximately 21,300 tons of rolled aluminum sheet per year. Emissions from this source are generated through the cutting of the aluminum sheets, evaporation of the rolling oil on the sheets, and the products of combustion. Emissions at this source are controlled through the use of a mist cyclone and a regenerative catalytic oxidizer (RCO). The RCO utilizes the heating value of the VOCs in the mill exhaust to sustain combustion. The RCO is also supplemented with natural gas to preheat the unit after mill shutdowns and to maintain the destruction temperature in the chamber to account for fluctuations in the outside temperature, variability in the VOC concentration vented to the RCO, and short duration mill operation interruptions such as starting or ending a run.

The Intermediate Rolling Mill (SN-136) is a new mill that will use a new low-VOC, low-volatility, paraffin-based lubricant.

VOCs from the rolling oil used in the production of aluminum foil are lost to the atmosphere at multiple locations throughout the facility. The rolling mill fugitives (SN-20B and SN-22B) and the Parts Cleaner (SN-128) emissions are grouped together in this permit as it is not practical to try to individually quantify the loss from each area of the mill. In order to quantify the combined fugitive emissions from this source VOC testing was conducted at four different locations at the plant while the equipment was at normal operation. The locations tested were the north roof vent, north wall vent, south roof vent, and south wall vent.

Specific Conditions

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and testing. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
20A (with Mist Cyclone)	PM ₁₀	10.3	45.1
	VOC	4.5	19.7
20B, 22B, and 128	VOC	19.8	86.7
22A (with Mist Cyclone and RCO)	PM ₁₀	6.2	27.2
	SO ₂	0.1	0.1
	VOC	8.0	35.0
	CO	0.5	2.1
	NO _x	0.8	3.5
136	VOC	17.0	74.5

3. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and testing. [§18.801 of Regulation #18 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
20A	PM	10.30	45.10
22A	PM	6.20	27.20

4. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
20A	20%	§19.503 and 40 CFR Part 52, Subpart E
22A	20%	§19.503 and 40 CFR Part 52, Subpart E

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

5. The permittee shall conduct daily observations of the opacity from sources SN-20A and SN-22A and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
6. The rolling oil used at source SN-20A shall have an initial boiling point of at least 350° F while the rolling oil used at source SN-22A shall have an initial boiling point of at least 300° F. [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
7. The permittee shall obtain a Manufacturer's Certificate of Analysis for each incoming shipment of rolling oil in order to demonstrate compliance with Specific Condition #6 and which may be used by the Department for enforcement purposes. These records shall be kept on site and shall be made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
8. Only mill exhaust gas and pipeline quality natural gas shall be combusted in the Regenerative Catalytic Oxidizer (RCO). [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall operate the RCO at a minimum of 600 °F at all times while the finish mill is operating. [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
10. The permittee shall install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the RCO in order to demonstrate compliance with Specific Condition #9 and which may be used by the Department for enforcement purposes. These records shall be kept on site and made available to Department personnel upon request. [§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]
11. The permittee shall test sources SN-20A and SN-22A while each source is operating at least at 90% capacity for particulate matter and volatile organic compounds using EPA Reference Methods 5 and 202 for PM and 25A for VOC no later than April 2006. If the facility passes those tests, the tests shall than be repeated once every five years. Failure of any test will require the permittee to repeat the testing every other year. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-30
Dry Trim System Bailer Cyclone

Source Description

This cyclone collects edge and end trim scrap from the separator/slitter lines. Emissions from this cyclone are expected to consist only of particulate matter since the amount of oil on the foil at this point in the overall process is considered to be negligible.

Specific Conditions

12. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.0	4.4

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.00	4.40

14. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
30	20%	§19.503 and 40 CFR Part 52, Subpart E

15. The permittee shall conduct daily observations of the opacity from sources SN-30 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-40, SN-41, SN-50, SN-51, SN-52, 137, 138, 139, 140, and 141
Annealing Ovens

Source Description

The Sheet Annealers (SN-40 and SN-41) are used to heat treat or anneal the metal between runs on the cold mill or after a production run is completed on the cold mill. Emissions from these ovens consist of VOCs generated by the residual rolling oil on the metal and the products of combustion of natural gas.

The Finish Annealers (SN-50, SN-51, and SN-52) are used to heat treat or anneal the metal between runs on the finish foil mill or at the end of a production run prior to packaging. Emissions from this process consist of VOCs generated by the residual rolling oil on the metal and the products of combustion of natural gas.

The intermediate Annealers (SN-137, SN-138, SN-139, SN-140, and SN-141) will be used at various points in the process. Emissions from this process consist of VOCs generated by the residual rolling oil on the metal and the products of combustion of natural gas.

No control equipment is associated with these annealing ovens.

Specific Conditions

16. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by using only natural gas to fire the ovens. Compliance with the VOC emissions rates will be demonstrated through the minimum boiling points of the oil used at sources SN-20A for the sheet annealers and SN-22A for the finish annealers. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
40	PM ₁₀	0.2	0.7
	SO ₂	0.1	0.1
	VOC	9.9	36.1
	CO	0.4	1.6
	NO _x	0.6	2.7
41	PM ₁₀	0.2	0.7
	SO ₂	0.1	0.1
	VOC	9.9	36.1
	CO	0.4	1.6
	NO _x	0.6	2.7

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

Source	Pollutant	lb/hr	tpy
50	PM ₁₀	0.1	0.4
	SO ₂	0.1	0.1
	VOC	1.9	8.3
	CO	0.4	1.6
	NO _x	0.6	2.7
51	PM ₁₀	0.1	0.4
	SO ₂	0.1	0.1
	VOC	1.9	8.3
	CO	0.4	1.6
	NO _x	0.6	2.7
52	PM ₁₀	0.1	0.4
	SO ₂	0.1	0.1
	VOC	1.9	8.3
	CO	0.4	1.6
	NO _x	0.6	2.7
137	PM ₁₀	0.1	0.4
	SO ₂	0.1	***
	VOC	1.2	5.0
	CO	1.1	4.5
	NO _x	2.6	***
138	PM ₁₀	0.1	0.4
	SO ₂	0.1	***
	VOC	1.2	5.0
	CO	1.1	4.5
	NO _x	2.6	***
139	PM ₁₀	0.1	0.4
	SO ₂	0.1	***
	VOC	1.2	5.0
	CO	1.1	4.5
	NO _x	2.6	***
140	PM ₁₀	0.2	0.6
	SO ₂	0.1	***
	VOC	1.2	5.0
	CO	1.4	5.9
	NO _x	3.4	***
141	PM ₁₀	0.2	0.6
	SO ₂	0.1	***
	VOC	1.2	5.0
	CO	1.4	5.9
	NO _x	3.4	***

*** See Plantwide Condition #9 for bubbled limit.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

17. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through the minimum boiling points of the oil used at sources SN-20A for the sheet annealers and SN-22A for the finish annealers. [§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
40	PM	0.20	0.70
41	PM	0.20	0.70
50	PM	0.10	0.40
51	PM	0.10	0.40
52	PM	0.10	0.40
137	PM	0.40	0.40
138	PM	0.40	0.40
139	PM	0.40	0.40
140	PM	0.20	0.60
141	PM	0.20	0.60

18. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
40	20%	§19.503 and 40 CFR Part 52, Subpart E
41	20%	§19.503 and 40 CFR Part 52, Subpart E
50	20%	§19.503 and 40 CFR Part 52, Subpart E
51	20%	§19.503 and 40 CFR Part 52, Subpart E
52	20%	§19.503 and 40 CFR Part 52, Subpart E
137	20%	§19.503 and 40 CFR Part 52, Subpart E
138	20%	§19.503 and 40 CFR Part 52, Subpart E

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

SN	Limit	Regulatory Citation
139	20%	§19.503 and 40 CFR Part 52, Subpart E
140	20%	§19.503 and 40 CFR Part 52, Subpart E
141	20%	§19.503 and 40 CFR Part 52, Subpart E

19. The permittee shall conduct daily observations of the opacity from sources SN-40, SN-41, SN-50, SN-51, SN-52, and SN-137 through SN-141 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
20. Pipeline quality natural gas and propane shall be the only fuel used to fire any of the annealing ovens. [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
21. The permittee shall not exceed 7,300 hours of operation while processing aluminum product for each source at SN-40 and SN-41. Sources SN-50, SN-51, SN-52, and SN-137 through SN-141 are permitted at 8760 hours of operation per year and will require no record keeping. [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
22. The permittee shall maintain records that demonstrate compliance with Specific Condition #21 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the last day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
23. The permittee shall test one sheet annealer and one finish annealer while each source is processing aluminum at least at 90% equipment capacity for emissions of volatile organic compounds using EPA Reference Method 25A, no later than April 2006. If the facility passes those tests, the tests shall than be repeated once every five years thereafter. Failure of any test will require the permittee to repeat the testing every other year. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-45 and SN-58
Exothermic Gas Generators

Source Description

The exothermic gas generators produce the inert nitrogen atmosphere for the annealing ovens. The process uses controlled combustion to eliminate the oxygen in the air and create a nitrogen rich atmosphere.

These generators are fired with natural gas. No control equipment is associated with these sources.

Specific Conditions

24. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and burning only natural gas. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
45	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.2	0.7
	NO _x	0.2	0.9
58	PM ₁₀	0.1	0.1
	SO ₂	0.1	0.1
	VOC	0.1	0.1
	CO	0.2	0.7
	NO _x	0.2	0.9

25. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and burning only natural gas. [§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
45	PM	0.10	0.10
58	PM	0.10	0.10

JW Aluminum Company

Permit #: 1659-AOP-R2

AFIN: 58-00272

26. The permittee shall use only pipeline quality natural gas to fire the exothermic generators. [§19.705 of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-61
Wet Trim System Bailer

Source Description

This operation captures the edge trim from the foil exiting the finish foil mill. Emissions from this process consist of particulate matter and volatile organic compounds. Finish foil mill aluminum scrap will have some amount of lubricating oil on it from the mill. Therefore, VOC emissions result from the evaporation of oil from the metal traveling through the trim system.

A cyclone is associated with this source.

Specific Conditions

27. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.0	4.4
VOC	1.2	5.1

28. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.00	4.40

29. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
61	20%	§19.503 and 40 CFR Part 52, Subpart E

JW Aluminum Company

Permit #: 1659-AOP-R2

AFIN: 58-00272

30. The permittee shall conduct daily observations of the opacity from source SN-61 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

31. The permittee shall test source SN-61 for PM and VOC emissions using EPA Reference Methods 5 and 202 for PM and 25A for VOC. These tests shall take place within 90 days of permit issuance and in accordance with the Plantwide Conditions. Test results in excess of the permitted PM emission rate shall also be considered a violation of the permitted PM₁₀ emission rate. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-71 through SN-77 and SN-90 through SN-93
Oil Tank Operations

Source Description

The oil tank operations are used to receive, store, and distill the rolling oil needed for facility operations. No control equipment is associated with any of the equipment comprising the oil tank operations. Oil received at this facility is limited to a total of 500,000 gallons per twelve month period.

Specific Conditions

32. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
71	VOC	0.6	0.1
72	VOC	0.6	0.1
73	VOC	0.6	0.1
74	VOC	0.6	0.1
75	VOC	0.6	0.1
76	VOC	0.6	0.1
77	VOC	0.6	0.1
90	VOC	0.6	0.1
91	VOC	0.6	0.1
92	VOC	0.6	0.1
93	VOC	0.6	0.1

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

33. The permittee shall not exceed the throughputs set forth in the following table in any consecutive twelve month period. There is a plantwide limit of 500,000 gallons of oil to be received at the facility. The limits in table below correspond to reuse of the oil and, therefore, the refilling of the tanks. Each tank has been permitted to turn over 25 times in a consecutive twelve month period. [§19.705 et seq. of Regulation #19, 40 CFR §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	Oil Throughput (gallons)
71	500,000
72	500,000
73	500,000
74	500,000
75	500,000
76	500,000
77	500,000
90	500,000
91	500,000
92	500,000
93	500,000

34. The permittee shall maintain records of the throughput at each source by retaining bills of lading for incoming and outgoing oil shipments in order to demonstrate compliance with Specific Condition #33 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the last day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
35. Vessels with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 Kpa are exempt from the General Provisions (40 CFR Part 60, Subpart A) and from the provisions of this subpart. [§19.304 of Regulation 19 and 40 CFR §60.110b]
36. The permittee shall maintain documentation of the tanks' sizes and true vapor pressures in order to demonstrate that the tanks are exempt from 40 CFR Part 60, Subpart Kb. The documentation shall be kept on site and made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-129
Cooling Tower

Source Description

Particulate matter in the cooling water is emitted as the cooling water evaporates from the heat transfer process.

No control equipment is associated with the cooling tower.

Specific Conditions

37. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.8	7.5

38. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.80	7.50

39. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
129	20%	§19.503 and 40 CFR Part 52, Subpart E

JW Aluminum Company

Permit #: 1659-AOP-R2

AFIN: 58-00272

40. The permittee shall conduct daily observations of the opacity from source SN-129 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-131, SN-132, and SN-133
Holding Furnaces

Source Description

The Holding Furnaces #1, #2, and #3 (SN-131, SN-132, and SN-133) maintain the liquid state of the aluminum until casting. Each furnace line includes two casters, though the casters can be re-aligned such that a single furnace can feed up to three casters. Heat is supplied primarily through the combustion of natural gas, though propane or specification oil (which is a non-hazardous oil) may be used as backup fuels. The process is designed such that fugitive emissions from the loading and casting operations are captured and destroyed by combustion. Emissions from the furnaces and casters result primarily from the combustion process.

These furnaces are subject to 40 CFR 63, Subpart RRR – National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production. As defined in the MACT, the Holding Furnaces are classified as Group 2 Furnaces.

Specific Conditions

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and fuel usage. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
131	PM ₁₀	3.0	13.2
	SO ₂	16.4	***
	VOC	0.3	1.0
	CO	2.6	11.1
	NO _x	6.3	***
	Lead	0.04	0.17
132	PM ₁₀	3.0	13.2
	SO ₂	10.9	***
	VOC	0.2	0.7
	CO	1.7	7.4
	NO _x	4.2	***
	Lead	0.04	0.17
133	PM ₁₀	3.0	13.2
	SO ₂	10.9	***
	VOC	0.2	0.7
	CO	1.7	7.4
	NO _x	4.2	***
	Lead	0.04	0.17

*** See Plantwide Condition #9 for bubbled limit.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

42. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and fuel usage. [§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
131	PM	3.00	13.20
	Chromium*	0.08	0.33
	HCl	3.00	13.14
	Manganese*	0.01	0.04
132	PM	3.00	13.20
	Chromium*	0.08	0.33
	HCl	3.00	13.14
	Manganese*	0.01	0.04
133	PM	3.00	13.20
	Chromium*	0.08	0.33
	HCl	3.00	13.14
	Manganese*	0.01	0.04

* HAPs included in the VOC or PM totals. Other HAPs are not included in any other totals unless specifically stated.

43. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
131	20%	§19.503 and 40 CFR Part 52, Subpart E
132	20%	§19.503 and 40 CFR Part 52, Subpart E
133	20%	§19.503 and 40 CFR Part 52, Subpart E

44. The permittee shall conduct daily observations of the opacity from sources SN-131, SN-132, and SN-133 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

JW Aluminum Company

Permit #: 1659-AOP-R2

AFIN: 58-00272

45. This source is considered a Group 2 Furnace by 40 CFR §63.1503. As such, it is subject to all applicable requirements of 40 CFR 63 Subpart RRR - National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production with a compliance date of March 24, 2003. Before startup of this equipment, the permittee shall obtain a permit with the applicable requirements of Subpart RRR specified. [§19.304 of Regulation #19 and 40 CFR §63.1500(a)]

SN-134 and SN-135
Melting Furnaces

Source Description

The Melting Furnaces #1 and #2 (SN-134 and SN-135) melt the primary and scrap aluminum, which is then transferred to the holding furnaces until casting. Each furnace line includes two casters, though the casters can be realigned such that a single furnace can feed up to three casters. Heat is supplied primarily through the combustion of natural gas, though propane or specification oil (which is a non-hazardous oil) may be used as backup fuels. The process is designed such that fugitive emissions from the loading and casting operations are captured and destroyed by combustion. Emissions from the furnaces and casters result primarily from the combustion process.

These furnaces are subject to 40 CFR 63, Subpart RRR – National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production. As defined in the MACT, the Melting Furnaces are classified as Group 1 Furnaces.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and fuel usage. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Source	Pollutant	lb/hr	tpy
134	PM ₁₀	3.0	13.2
	SO ₂	21.8	***
	VOC	0.3	1.3
	CO	3.4	14.8
	NO _x	8.4	***
	Lead	0.04	0.17
135	PM ₁₀	3.0	13.2
	SO ₂	21.8	***
	VOC	0.3	1.3
	CO	3.4	14.8
	NO _x	8.4	***
	Lead	0.04	0.17

*** See Plantwide Condition #9 for bubbled limit.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by maximum equipment capacity and fuel usage. [§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
134	PM	3.00	13.20
	Chromium*	0.08	0.33
	Dioxin/Furans*	0.01	0.01
	HCl	3.00	13.14
	Manganese*	0.01	0.04
135	PM	3.00	13.20
	Chromium*	0.08	0.33
	Dioxin/Furans*	0.01	0.01
	HCl	3.00	13.14
	Manganese*	0.01	0.04

* HAPs included in the VOC or PM totals. Other HAPs are not included in any other totals unless specifically stated.

48. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
134	20%	§19.503 and 40 CFR Part 52, Subpart E
135	20%	§19.503 and 40 CFR Part 52, Subpart E

49. The permittee shall conduct daily observations of the opacity from sources SN-134 and SN-135 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

JW Aluminum Company

Permit #: 1659-AOP-R2

AFIN: 58-00272

50. This source is considered a Group 1 Furnace by 40 CFR §63.1503. As such, it is subject to all applicable requirements of 40 CFR 63 Subpart RRR - National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production with a compliance date of March 24, 2003. Before startup of this equipment, the permittee shall obtain a permit with the applicable requirements of Subpart RRR specified. [§19.304 of Regulation #19 and 40 CFR §63.1500(a)]

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

SECTION V: COMPLIANCE PLAN AND SCHEDULE

JW Aluminum Company 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 not receive more than 500,000 gallons of oil in a consecutive twelve (12) month period. [§19.705 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

8. The permittee shall maintain records that demonstrate compliance with Plantwide Condition #7 and which may be used by the Department for enforcement purposes. The permittee shall track throughput by obtaining a Bill of Lading for each shipment of oil. These records shall be updated no later than the last day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
9. The permittee shall not exceed the emission rates set forth in the following table for the Holding Furnaces (SN-131, SN-132, and SN-133) the Melting Furnaces (SN-134 and SN-135), and the new Annealing Furnaces (SN-137 through SN-141) combined. The permittee shall demonstrate compliance with this condition by Plantwide Condition #10 and standard fuel emission factors. These sources shall only burn natural gas, propane, or specification oil (which is a non-hazardous oil). A sample calculation is included in Appendix D. This is a PSD avoidance condition. Any violation of this condition triggers a PSD review for this facility. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	tpy
SO ₂	99.0
NO _x	99.0

10. The permittee shall maintain monthly records of fuel usage in the Holding Furnaces (SN-131, SN-132, and SN-133) the Melting Furnaces (SN-134 and SN-135), and the new Annealing Furnaces (SN-137 through SN-141). The permittee shall update these records by the fifteenth day of the month following the month. The permittee shall keep these records onsite, and make them available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
11. If calculated actual limits exceed 95.0 tpy, the permittee shall demonstrate that the degree of accuracy of the calculations used to determine emissions is sufficient to prove that the major source thresholds have not been exceeded. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

Permit Shield

12. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated July 20, 2004.

Applicable Regulations

Source No.	Regulation	Description
Facility	19	SIP
Facility	26	Title V
Tanks	40 CFR 60, Subpart Kb	40 CFR 60 Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
131, 132, and 133	40 CFR 63, Subpart RRR	40 CFR 63, Subpart RRR – National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production
134 and 135	40 CFR 63, Subpart RRR	40 CFR 63, Subpart RRR – National Emissions Standards for Hazardous Air Pollutants for Secondary Aluminum Production

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated July 20, 2004.

Inapplicable Regulations

Source No.	Regulation	Description
Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
Tanks	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

Title VI Provisions

13. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
 - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

14. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

- c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC like appliance” as defined at §82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
15. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
16. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.
17. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

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 July 20, 2004

Description	Category
Grinder- Water Evaporator	Group A, #13
Loading Stations (SN-70 and SN-70A)	Group A, #13
140 Distillation Operation (SN-80, SN-81, and SN-82)	Group A, #13
MSO Distillation Operation (SN-83, SN-85, SN-86)	Group A, #13
Aluminum Slitter (SN-130)	Group A, #13

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 August 10, 2000]
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.

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

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

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

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)]

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

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

JW Aluminum Company
Permit #: 1659-AOP-R2
AFIN: 58-00272

- 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 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]

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D