



MAJOR SOURCE OPERATING PERMIT

Permitee:	
Facility Name:	INTERNATIONAL PAPER PRATTVILLE
Facility No.:	201-0001
Location:	PRATTVILLE, ALABAMA

INTERNATIONAL PAPER CO

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, **Code of Alabama 1975**, §§22-28-1 to 22-28-23 (the "AAPCA") and the Alabama Environmental Management Act, as amended, **Code of Alabama 1975**, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described below.

Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Issuance Date:	November 12, 2015
Effective Date:	January 1, 2016
Most Recent Modification:	DRAFT
Expiration Date:	December 31, 2021

TABLE OF CONTENTS

GENERAL PERMIT PROVISOS	•••••	1-6
SUMMARY PAGE FOR DIGESTER SYSTEM	•••••	2-1
DIGESTER SYSTEM FEDERALLY ENFORCEABLE PROVISOS	• • • • • • • • • • • • • • • • • • • •	2-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	2-2 2-2 2-2 2-2 2-2	
CONTINUOUS DIGESTER SYSTEM STATE ONLY ENFORCEABLE PR	OVISOS .	2-3
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	2-3 2-3 2-3 2-3 2-3	
SUMMARY PAGE FOR WASH PLANTS	•••••	3-1
WASH PLANTS FEDERALLY ENFORCEABLE PROVISOS		3-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	3-2 3-2 3-2 3-2 3-2 3-2	
SUMMARY PAGE FOR EVAPORATOR SYSTEM		4-1
EVAPORATOR SYSTEM FEDERALLY ENFORCEABLE PROVISOS		4-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	4-2 4-2 4-2 4-2 4-2	
EVAPORATOR SYSTEM STATE ONLY ENFORCEABLE PROVISOS	• • • • • • • • • • • • • • • • • • • •	4-3
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	4-3 4-3 4-3 4-3 4-3	
SUMMARY PAGE FOR NO. 1 LIME KILN SYSTEM	• • • • • • • • • • • • • • • • • • • •	5-1
NO. 1 LIME KILN SYSTEM FEDERALLY ENFORCEABLE PROVISOS	•••••	5-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	5-2 5-2 5-2 5-2 5-3	

NO. 1 LIME KILN SYSTEM STATE ONLY ENFORCEABLE PROVISOS	5-5
 Applicability Emission Standards Compliance and Performance Test Methods and Procedures Emission Monitoring Recordkeeping and Reporting Requirements 	5-5 5-5 5-5 5-5 5-5
SUMMARY PAGE FOR NO. 2 LIME KILN SYSTEM	6 -1
NO. 2 LIME KILN SYSTEM FEDERALLY ENFORCEABLE PROVISOS.	6-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	6-2 6-2 6-3 6-3 6-4
SUMMARY PAGE FOR NO. 1 POWER BOILER	7- 1
NO. 1 POWER BOILER FEDERALLY ENFORCEABLE PROVISOS	7-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	7-2 7-2 7-3 7-3 7-4
SUMMARY PAGE FOR NO. 2 POWER BOILER	8-1
NO. 2 POWER BOILER FEDERALLY ENFORCEABLE PROVISOS	8-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	8-2 8-2 8-3 8-3 8-4
SUMMARY PAGE FOR PET COKE AND COAL UNLOADING AND STO	RAGE9-1
PET COKE AND COAL UNLOADING AND STORAGE FEDERALLY ENFORCEABLE PROVISOS	9-2
 Applicability Emission Standards Compliance and Performance Test Methods and Procedures Emission Monitoring Recordkeeping and Reporting Requirements 	9-2 9-2 9-2 9-2 9-2
SUMMARY PAGE FOR NO. 1 RECOVERY FURNACE	10- 1
NO. 1 RECOVERY FURNACE FEDERALLY ENFORCEABLE PROVISO	s10-2
 Applicability Emission Standards Compliance and Performance Test Methods and Procedures Emission Monitoring Recordkeeping and Reporting Requirements 	10-2 10-2 10-2 10-3 10-3

NO. 1 RECOVERY FURNACE STATE ONLY ENFORCEABLE PROVIS	OS10-5
 Applicability Emission Standards Compliance and Performance Test Methods and Procedures Emission Monitoring Recordkeeping and Reporting Requirements 	10-5 10-5 10-5 10-5 10-5
SUMMARY PAGE FOR NO. 1 SMELT TANK SYSTEM	11-1
NO. 1 SMELT TANK SYSTEM FEDERALLY ENFORCEABLE PROVIS	OS11-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	11-2 11-2 11-2 11-2 11-3
NO. 1 SMELT TANK SYSTEM STATE ONLY ENFORCEABLE PROVIS	SOS11-5
 Applicability Emission Standards Compliance and Performance Test Methods and Procedures Emission Monitoring 	11-5 11-5 11-5 11-5
SUMMARY PAGE FOR NO. 2 RECOVERY FURNACE	
NO. 2 RECOVERY FURNACE FEDERALLY ENFORCEABLE PROVISO	DS 12-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	12-2 12-2 12-2 12-2 12-3
NO. 2 SMELT TANK SYSTEM FEDERALLY ENFORCEABLE PROVIS	0S13-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	13-2 13-2 13-2 13-2 13-3
SUMMARY PAGE FOR NO. 1 PAPER MACHINE	14-1
NO. 1 PAPER MACHINE FEDERALLY ENFORCEABLE PROVISOS	14-2
1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements	14-2 14-2 14-2 14-2 14-2
SUMMARY PAGE FOR NO. 1 PAPER MACHINE	15-1
NO. 1 PAPER MACHINE FEDERALLY ENFORCEABLE PROVISOS	15-2

1. Applicability	15-2	
2. Emission Standards 2. Compliance and Performance Test Methods and Presedures	15-2 15-2	
<i>3. Compliance and Performance Test Methods and Procedures</i> <i>4. Emission Monitoring</i>	15-2 15-2	
5. Recordkeeping and Reporting Requirements	15-2 15-2	
SUMMARY PAGE FOR PULPING SYSTEM PROCESSES		
PULPING SYSTEM PROCESSES FEDERALLY ENFORCEABLE PROVI		
1. Applicability	16-2	
2. Emission Standards	16-2 16-2	
3. Compliance and Performance Test Methods and Procedures	16-3	
4. Emission Monitoring	16-3	
5. Recordkeeping and Reporting Requirements	16-3	
SUMMARY PAGE FOR PROCESS CONDENSATES		17-1
PROCESS CONDENSATES FEDERALLY ENFORCEABLE PROVISOS.		17-2
1. Applicability	17-2	
2. Emission Standards	17-2	
3. Compliance and Performance Test Methods and Procedures	17-3	
4. Emission Monitoring	17-3	
	17-3 17-3	
4. Emission Monitoring	17-3	18-1
<i>4. Emission Monitoring</i> <i>5. Recordkeeping and Reporting Requirements</i>	17-3	18-1
4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS	17-3	18-1 18-2
4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC PROVISOS	17-3	
4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC	17-3 EABLE	
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC PROVISOS 1. Applicability 	17-3 EABLE 18-2	
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 	17-3 EABLE 18-2 18-2	
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 	17-3 EABLE 18-2 18-2 18-3	
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 	17-3 EABLE 18-2 18-2 18-3 18-3 18-3 18-5	
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORC PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements 	17-3 EABLE 18-2 18-2 18-3 18-3 18-3 18-5	18-2
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR RICE MACT UNITS RICE MACT UNITS FEDERALLY ENFORCEABLE PROVISOS	17-3 EABLE 18-2 18-2 18-3 18-3 18-3 18-5	18-2
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR RICE MACT UNITS	17-3 EABLE 18-2 18-2 18-3 18-3 18-3 18-5	18-2
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR RICE MACT UNITS RICE MACT UNITS FEDERALLY ENFORCEABLE PROVISOS 1. Applicability 	17-3 EABLE 18-2 18-2 18-3 18-3 18-3 18-5 19-2	18-2
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR RICE MACT UNITS RICE MACT UNITS FEDERALLY ENFORCEABLE PROVISOS 1. Applicability 2. Emission Standards Interpret Standards Summary PAGE FOR RICE MACT UNITS Interpret Standards Interpret Standards Summary PAGE FOR RICE MACT UNITS Interpret Standards Interpret Standards Interpret Standards Interpret Standards Summary PAGE FOR RICE MACT UNITS Interpret Standards	17-3 EABLE 18-2 18-3 18-3 18-3 18-5 19-2 19-2 19-2	18-2
 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR ENCLOSURES AND CLOSED-VENT SYSTEMS ENCLOSURES AND CLOSED-VENT SYSTEMS FEDERALLY ENFORCE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 4. Emission Monitoring 5. Recordkeeping and Reporting Requirements SUMMARY PAGE FOR RICE MACT UNITS RICE MACT UNITS FEDERALLY ENFORCEABLE PROVISOS 1. Applicability 2. Emission Standards 3. Compliance and Performance Test Methods and Procedures 	17-3 EABLE 18-2 18-3 18-3 18-3 18-5 19-2 19-2 19-2 19-3	18-2

No. 1 Recovery Furnace Informational Summary

Description:	No. 1 Recovery Furnace		
Emission Unit No:	Z001		
Installation Date:	1967	Reconstruction / Modification date:	2007
Operating Capacity:	132,000 lb BLS/hr		
Operating Schedule :	8760 hours/year.		

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z001	No. 1 Recovery Furnace	Particulate	No Greater than the more stringent of 1.11	Rule 335-3-407(5) and Rule
TV 901		matter	lb/air dried ton of pulp and 60 pounds per	335-3-14 (9)
			hour.	
Air Permit Z001	No. 1 Recovery Furnace	Total	No Greater than 20 parts per million	Rule 335-3-504 and Rule
TV 901		reduced	corrected to 8 percent oxygen on a daily	335-3-14 (9)
		sulfur	twelve-hour basis.	
Air Permit Z001	No. 1 Recovery Furnace	Opacity	35 percent	Rule 335-3-1001
TV 901				
Air Permit Z001	No. 1 Recovery Furnace	HAPS	Particulate matter as a surrogate for HAPs	Rule 335-3-1106 (38)
TV 901			shall not exceed 0.023 gr/dscf @ 8% oxygen	

Fuel	% Sulfur
Black Liquor Solids	
2, 4, 5 & 6 Fuel Oil	2.9
Used Oil	1.0

No. 1 Recovery Furnace Provisos

		Regulations		
Applicability				
1.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603		
2.	The No. 1 Recovery Furnace is subject to the requirements of ADEM Admin. Code 335-3-407 particulate matter from kraft pulp mills and a Prevention of Significant Deterioration review.	Rule 335-3-407 and Rule 335-3-1404		
3.	The No. 1 Recovery Furnace is subject to the applicable requirements of Rule 335- 3-1001, such that the opacity limit is the same as, but the source is not subject to, the New Source Performance Standards as listed in 40 CFR Part 60, Subpart BB.	Rule 335-3-1404		
4.	The No. 1 Recovery Furnace is subject to the applicable requirements of Rule 335- 3-504 for total reduced sulfur emissions from kraft pulp mills and a Prevention of Significant Deterioration review.	Rule 335-3-504 and Rule 335-3-1404		
5.	This source is subject to the requirements of National Emission Standards for Hazardous Pollutants as listed in 40 CFR Part 63, Subpart MM.	Rule 335-3-1106(38)		
Emis	sion Standards			
1.	Particulate matter emissions shall not exceed the more stringent of 1.11 pounds per air dried ton of pulp and/or 60 pounds per hour.	Rule 335-3-407(5) and Rule 335-3-1404		
2.	Total reduced sulfur emissions shall not exceed 20 parts per million, corrected to 8 percent oxygen, on a daily twelve-hour basis. If an owner or operator demonstrates to the satisfaction of the Director, that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed, startups, shutdowns, or unavoidable malfunctions, these emissions will not constitute a violation.	Rule 335-3-504 and Rule 335-3-1404		
3.	In accordance with 40 CFR Part 63, Subpart MM, as a surrogate for HAPs, the particulate matter emissions from this unit shall not exceed 0.023 gr/sdcf at 8% oxygen. This alternative limit was established under the provisions of §63.862 (a)(1)(ii).	Rule 335-3-1106(38)		
4.	In accordance with 40 CFR Part 63, Subpart MM, this unit's opacity shall not exceed 35 percent for 2 percent or more of the operating time when spent pulping liquor is fed within any semiannual period.	Rule 335-3-1106(38)		
Comj	pliance and Performance Test Methods and Procedures			
1.	Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department.	Rule 335-3-1402		
2.	Compliance with the total reduced sulfur emission limit shall be determined in accordance with the continuous emission monitor, 40 CFR Part 60, Method 16, 16A, or 16B.	Rule 335-3-1402		
3.	Compliance with the opacity limit shall be determined by a continuous opacity monitoring system (COMS) installed, calibrated, and maintained in accordance with Performance Specification 1 (PS-1) in Appendix B to 40 CFR Part 60 and the provisions in 40 CFR §63.6(h), §63.8, and §63.864(d).	Rule 335-3-401		

cu	erally Enforceable Provisos	Regulations	
Emis	sion Monitoring		
1.	A particulate matter emission test shall be performed at least once per year.	Rule 335-3-1402	
2.	An opacity monitor shall be installed, calibrated, operated, and maintained. Pursuant to 40 CFR Part 63, Subpart MM, the COMs shall meet the provisions of $63.6(h)$, 63.8 , and $63.864(d)(1)$ through (d)(4).	Rule 335-3-1605 Rule 335-3-1106(38)	
3.	The black liquor firing rate shall be monitored on a three-hour rolling average basis. If any three-hour rolling average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the liquor firing rate is to be lowered until compliance is successfully demonstrated at the higher rate.	Rule 335-3-1605	
4.	A continuous emission monitoring system for the measurement of total reduced sulfur and oxygen shall be installed, operated, and maintained.	Rule 335-3-1402	
5.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(38)	
6.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to §63.865 and every 5 years thereafter.	Rule 335-3-1106(38)	
	Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.		
7.	The facility must maintain proper operation of the ESP's automatic voltage control (AVC).	Rule 335-3-1106(38)	
Reco	rdkeeping and Reporting Requirements		
1.	A particulate matter emission test report shall be submitted to the Department at least once per year.	Rule 335-3-1402	
2.	Records of all three-hour rolling average liquor firing rates shall be made and maintained on file, available for inspection for at least five years.	Rule 335-3-1402	
3.	A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:	Rule 335-3-504(9)	
	a. The magnitude of excess emissions 20 parts per million adjusted to 8 percent oxygen and over computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).		
	b. The date and time of commencement and completion of each time period of excess emissions.		
	c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.		
	d. The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.		
	e. When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.		

ede	erally Enforceable Provisos	Regulations
ecol	rdkeeping and Reporting Requirements Continued	
4.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of any occurrence when corrective action is required when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when a violation is noted (when opacity is greater than 35 percent for 2 percent or more of the operating time when spent pulping liquor is fed within any semiannual period).	Rule 335-3-1106(38)
	For each failure to meet the opacity standard, the date, start time, and duration of each failure must be recorded, along with the actions taken to minimize emissions, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.	
	The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.	
5.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of the black liquor firing rates in terms of tons/day or MG/day.	Rule 335-3-1106(38)
6.	In accordance with 40 CFR Part 63, Subpart MM, the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867 (c), including the number and duration of occurrences when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when the opacity is greater than 35 percent for 2 percent or more of the operating time within any semiannual period. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to §63.864(k)(2) occurred, information from both the Summary Report and the Excess Emissions Report must be submitted.	Rule 335-3-1106(38)
	Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.	
	Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.	
7.	The facility must maintain records demonstrating compliance with the requirement in $63.864(e)(1)$ to maintain proper operation of an ESP's AVC.	Rule 335-3-1106(38)

No. 1 Recovery Furnace Provisos

Stat	e Only]	Regulations	
Appl	icability	(State Only)	
1.		b. 1 Recovery Furnace is subject to the requirements of ADEM Admin. Code 1605(c) concerning monitoring and record keeping requirements.	Rule 335-3-1605(c)
Emis	sion Star	dards (State Only)	
1.		dance with 40 CFR Part 60, Subpart BB, this unit's opacity shall not exceed ent for 6 percent or more of the operating time within any quarterly period.	Rule 335-3-1001
Reco	rdkeepin	g and Reporting Requirements (State Only)	
1.	Departn	t of excess opacity emissions, as defined below, will be submitted to the nent for each calendar quarter within the month following the end of the The reports will include the following information:	Rule 335-3-1605(c)
	a.	The magnitude of emissions greater than 35 percent computed on a six- minute average (data recorded during periods of opacity monitor breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).	
	b.	The date and time of commencement and completion of each time period of excess emissions.	
	c.	The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.	
	d.	The date and time identifying each period during which the opacity monitor was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.	
	e.	When no excess emissions have occurred and the opacity monitor was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	

No. 1 Smelt Tank Informational Summary

Description:	No. 1 Smelt Tank	
Emission Unit No:	Z002	
Installation Date:	1967	Reconstruction / Modification date:
Operating Capacity:	132,000 lb BLS/hr	
Operating Schedule:	8760 hours/year.	

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z002	No. 1 Smelt Tank	Particulate	No Greater than 0.5 lb/air dried ton of pulp	Rule 335-3-407
TV 902 & 903		matter		
Air Permit Z002 TV 902 & 903	No. 1 Smelt Tank (State only)	Total reduced	No Greater than 0.033 lb/ton of black liquor solids	Rule 335-3-504
1 v 902 & 903	omy)	sulfur	sonus	
Air Permit Z002 TV 902 & 903	No. 1 Smelt Tank	Opacity	No Greater than 20 percent with one six- minute period up to 40 percent in any one hour period	Rule 335-3-401
Air Permit Z002 TV 902	No. 1 Smelt Tank	HAPS (Stack 1)	Particulate matter as a surrogate for HAPS shall not exceed 0.25 pounds per ton of black liquor solids.	Rule 335-3-1106 (1) and (38)
Air Permit Z002 TV 903	No. 1 Smelt Tank	HAPS (Stack 2)	Particulate matter as a surrogate for HAPS shall not exceed 0.25 pounds per ton of black liquor solids.	Rule 335-3-1106 (1) and (38)

No. 1 Smelt Tank Provisos

oplicability	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603
 The No. 1 Smelt Tank is subject to the requirements of ADEM Admin Code 335-3- 407 (2)(b) for particulate matter from kraft pulp mill smelt tanks. 	Rule 335-3-407(2)(b)
3. This source is subject to the requirements of National Emission Standards for Hazardous Pollutants as listed in 40 CFR Part 63, Subpart MM.	Rule 335-3-1106(38)
nission Standards	
1. Particulate matter emissions shall not exceed 0.5 pounds per air dried ton of pulp.	Rule 335-3-407(2)(b)
 Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent. 	
 In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPs, shall not exceed 0.25 pounds per ton of black liquor solids fired (stack 1 &2). This alternative limit was established under the provisions of §63.862 (a)(1)(ii). 	
ompliance and Performance Test Methods and Procedures	
1. Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department.	
 Compliance with the opacity limit shall be determined in accordance with the 40 CFR Part 60 Method 9 or other method approved by the Department. 	Rule 335-3-401
nission Monitoring	
1. A particulate matter emission test shall be performed at least once per year.	Rule 335-3-1402
2. For particulate matter periodic monitoring, if any three-hour rolling average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the liquor firing rate is to be lowered until compliance is successfully demonstrated at the higher rate.	
 In accordance with 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber liquid supply flow rate and the pressure drop during times when spent pulping liquor is fed. The parametric monitoring system shall meet the requirements listed in §63.8(c). 	
This unit shall not have 6 or more 3-hour average parameter values within any 6- month reporting period that are below the minimum operating limits established in accordance with §63.864(j) during times when spent pulping liquor is fed, with the exception of scrubber differential pressure during periods of startup and shutdown.	
No more than one exceedance will be attributed in any given 24-hour period	

	erally Enforceable Provisos	Regulations	
Emis	sion Monitoring Continued		
4.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(38)	
5.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to §63.865 and every 5 years thereafter.	Rule 335-3-1106(38)	
	Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.		
Reco	rdkeeping and Reporting Requirements		
1.	A particulate matter emission test report shall be submitted to the Department at least once per year.	Rule 335-3-1402	
2.	Records of all three-hour rolling average liquor firing rates shall be made and maintained on file, available for inspection for at least five years.	Rule 335-3-1402	
3.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of any occurrence when corrective action is required (when a 3-hour average flow rate or pressure drop is below the minimum operating limit established according to §63.864(j) during times when spent pulping liquor is fed, with the exception of scrubber differential pressure during periods of startup and shutdown), and when a violation is noted (when six or more 3-hour average flow rates or pressure drops within any 6-month period are below the minimum operating limit established according to §63.864(j) during times when spent pulping liquor is fed, with the exception of scrubber differential pressure during periods of startup and shutdown).	Rule 335-3-1106(38)	
4.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of parametric monitoring data required under §63.864, including any period when the 3-hour average flow rate or pressure drop, during times when spent pulping liquor is fed, were inconsistent with the levels established during the initial or subsequent performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, and the time corrective action was initiated and completed, and the corrective action taken. The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit for each failure to meet an operating limit. The information must be sufficient to provide a reliable emissions estimate if requested by the Administrator. The facility must also maintain records and documentation of supporting calculations for compliance determination made under §63.865(a) through (d). The facility must also maintain records of the monitoring parameter ranges for the scrubber flow rates and pressure drops.	Rule 335-3-1106(38)	

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements Continued	
5. In accordance with 40 CFR Part 63, Subpart MM, the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867(c), including the number and duration of three hour averages when the flow rate or pressure drop were below the minimum operating limit during times when spent pulping liquor is fed. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting time, information from both the Summary Report and Excess Emissions Report must be submitted.	Rule 335-3-1106(38)
Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.	
Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.	

No. 1 Smelt Tank Provisos

 Applicability The No. 1 Smelt Tank is subject to the requirements of ADEM Admin. Code 335-3-5.04(7) concerning total reduced sulfur from kraft pulp mill smelt tanks Emission Standards Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids. If an owner or operator demonstrates to the satisfaction of the Director that emissions in exceess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation Compliance and Performance Test Methods and Procedures Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet surbber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at least five years. 	State	e Only Enforceable Provisos	Regulations
 504 (7) concerning total reduced sulfur from kraft pulp mill smelt tanks Emission Standards Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids. If an owner or operator demonstrates to the satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of property performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation Compliance and Performance Test Methods and Procedures Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least is for years. 	Appli	icability	
 Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids. If an owner or operator demonstrates to the satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation Compliance and Performance Test Methods and Procedures Compliance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. Records every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at least 	1.		Rule 335-3-504(7)
 solids. If an owner or operator demonstrates to the satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation. Compliance and Performance Test Methods and Procedures Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. Recordkeeping and Reporting Requirements A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Results of the daily analytical tests to assure that a dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. 	Emis	sion Standards	
 Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	1.	solids. If an owner or operator demonstrates to the satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these	Rule 335-3-504(7)
 accordance with 40 CFR Part 60, Method 16, 16A, or 16B Emission Monitoring For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	Comj	pliance and Performance Test Methods and Procedures	
 For total reduced sulfur periodic monitoring, if any three-hour rolling average wet scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. A total reduced sulfur emission test shall be performed at least once every five years. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	1.		Rule 335-3-1605
 scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. 2. A total reduced sulfur emission test shall be performed at least once every five years. 1. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. 2. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	Emis	sion Monitoring	
 Recordkeeping and Reporting Requirements 1. A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. 2. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	1.	scrubber dilute caustic recirculation flow rate is less than 90 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to	Rule 335-3-1605
 A total reduced sulfur emission test report shall be submitted to the Department at least once every 5 years. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	2.	A total reduced sulfur emission test shall be performed at least once every five years.	Rule 335-3-1605
 least once every 5 years. 2. Records of all three-hour rolling average wet scrubber dilute caustic recirculation flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at 	Reco	rdkeeping and Reporting Requirements	
flow rates shall be made and maintained on file, available for inspection for at least five years. Results of the daily analytical tests to assure that a dilute caustic solution is maintained shall be recorded and maintained on file, available for inspection for at	1.		Rule 335-3-1605
maintained shall be recorded and maintained on file, available for inspection for at	2.	flow rates shall be made and maintained on file, available for inspection for at least	Rule 335-3-1605
		maintained shall be recorded and maintained on file, available for inspection for at	
			1

No. 2 Recovery Furnace Informational Summary

Description:	No. 2 Recovery Furnace	
Emission Unit No:	Z011	
Installation Date:	1980	Reconstruction / Modification date:
Operating Capacity:	159,000 lb BLS/hr	
Operating Schedule :	8760 hours/year.	

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 60 Subpart BB 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z011 TV 904 & 905	No. 2 Recovery Furnace	Particulate matter	No Greater than the more stringent of 0.044 grains per SDCF at 8 % oxygen or 73 pounds per hour	Rule 335-3-1002 (1) and (28)
Air Permit Z011 TV 904 & 905	No. 2 Recovery Furnace	Total reduced sulfur	No Greater than the more stringent of 5 parts per million by volume at 8% oxygen or 7 pounds per hour	Rule 335-3-1002 (1) and (28)
Air Permit Z011 TV 904 & 905	No. 2 Recovery Furnace	Sulfur dioxide	No Greater than the more stringent of 250 parts per million by volume at 8% oxygen or 482 pounds per hour (Three-hour average)	Rule 335-3-1404 (9)
Air Permit Z011 TV 904 & 905	No. 2 Recovery Furnace	Opacity	35 percent	Rule 335-3-1001
Air Permit Z011 TV 904	No. 2 Recovery Furnace	HAPS (Stack 1)	Particulate matter as a surrogate for HAPs shall not not exceed 0.024 gr/dscf @8% oxygen	Rule 335-3-1106 (1) and (38)
Air Permit Z011 TV 905	No. 2 Recovery Furnace	HAPS (Stack 2)	Particulate matter as a surrogate for HAPs shall not not exceed 0.024 gr/dscf @8% oxygen	Rule 335-3-1106 (1) and (38)

Fuel	% Sulfur
Black Liquor Solids	
2, 4, 5 & 6 Fuel Oil	2.9
Used Oil	1.0

No. 2 Recovery Furnace Provisos

reae	rally Enforceable Provisos	Regulations
Appli	cability	
1.	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603
2.	The No. 2 Recovery Furnace is subject to the applicable requirements of the Federal New Source Performance Standards found in 40 CFR Part 60, Subpart BB.	Rule 335-3-1002(28)
3.	This source is subject to the requirements of National Emission Standards for Hazardous Pollutants as listed in 40 CFR Part 63, Subpart MM.	Rule 335-3-1106(38)
Emis	sion Standards	
1.	In accordance with 40 CFR Part 60, Subpart BB, particulate matter emissions shall not exceed the more stringent of 0.044 grains per SDCF at 8% oxygen or 73 pounds per hour.	Rule 335-3-1002(28)
2.	In accordance with 40 CFR Part 60, Subpart BB, total reduced sulfur emissions shall not exceed the more stringent of 5 parts per million by volume at 8% oxygen, or 7 pounds per hour.	Rule 335-3-1002(28)
3.	In accordance with 40 CFR Part 63, Subpart MM, as a surrogate for HAPs, the particulate matter emissions from this unit shall not exceed 0.024 gr/sdcf at 8% oxygen (Stack 1) and 0.024 gr/sdcf at 8% oxygen (Stack 2). This alternative limit was established under the provisions of §63.862 (a)(1)(ii).	Rule 335-3-1106(38)
4.	In accordance with 40 CFR Part 63, Subpart MM, this unit's opacity shall not exceed 35 percent for 2 percent or more of the operating time when spent pulping liquor is fed within any semiannual period.	Rule 335-3-1106(38)
5.	Sulfur dioxide emissions shall not exceed the more stringent of 250 parts per million by volume at 8% oxygen or 482 pounds per hour (three-hour average)	Rule 335-3-1404(9)
Comj	liance and Performance Test Methods and Procedures	
1.	Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department.	Rule 335-3-1402
2.	Compliance with the total reduced sulfur emission limit shall be determined in accordance with the continuous emission monitor, 40 CFR Part 60, Method 16, 16A, or 16B.	Rule 335-3-1402
3.	Compliance with the sulfur dioxide emission limit shall be determined in accordance with 40 CFR Part 60, Method 6.	Rule 335-3-1402
4.	Compliance with the opacity limit shall be determined by a continuous opacity monitoring system (COMS) installed, calibrated, and maintained in accordance with Performance Specification 1 (PS-1) in Appendix B to 40 CFR Part 60 and the provisions in 40 CFR §63.6(h), §63.8, and §63.864(d).	Rule 335-3-401
Emis	sion Monitoring	
1.	A particulate matter emission test shall be performed at least once per year.	Rule 335-3-1402
2.	An opacity monitor shall be installed, calibrated, operated, and maintained. Pursuant to 40 CFR Part 63, Subpart MM, the COMs shall meet the provisions of $63.6(h)$, 63.8 , and $63.864(d)(1)$ through (d)(4).	Rule 335-3-1605 Rule 335-3-1106(38)

Emis	sion Monitoring Continued	
3.	The black liquor firing rate shall be monitored on a three-hour rolling average basis. If any three-hour rolling average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the liquor firing rate is to be lowered until compliance is successfully demonstrated at the higher rate.	Rule 335-3-1605
4.	A continuous emission monitoring system for the measurement of total reduced sulfur and oxygen shall be installed, operated, and maintained.	Rule 335-3-1402
5.	A sulfur dioxide emission test shall be performed at least once every five years.	Rule 335-3-1402
6.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(38)
7.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to §63.865 and every 5 years thereafter.	Rule 335-3-1106(38)
	Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.	
8.	The facility must maintain proper operation of the ESP's automatic voltage control (AVC).	Rule 335-3-1106(38)
Reco	rdkeeping and Reporting Requirements	
1.	A particulate matter emission test report shall be submitted to the Department at least once per year.	Rule 335-3-1402
2.	Records of all three-hour rolling average liquor firing rates shall be made and maintained on file, available for inspection for at least five years.	Rule 335-3-1402
3.	A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:	Rule 335-3-504(9)
	a. The magnitude of excess emissions 20 parts per million adjusted to 8 percent oxygen and over computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).	
	b. The date and time of commencement and completion of each time period of excess emissions.	
	c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.	
	d. The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.	
	e. When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	

'ede	erally Enforceable Provisos	Regulations	
lecoi	rdkeeping and Reporting Requirements Continued		
4.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of any occurrence when corrective action is required when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when a violation is noted (when opacity is greater than 35 percent for 2 percent or more of the operating time when spent pulping liquor is fed within any semiannual period).	Rule 335-3-1106(38)	
	For each failure to meet the opacity standard, the date, start time, and duration of each failure must be recorded, along with the actions taken to minimize emissions, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.		
	The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.		
5.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of the black liquor firing rates in terms of tons/day or MG/day.	Rule 335-3-1106(38)	
6.	In accordance with 40 CFR Part 63, Subpart MM, the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867 (c), including the number and duration of occurrences when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity when spent pulping liquor is fed, and when the opacity is greater than 35 percent for 2 percent or more of the operating time within any semiannual period. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, on any violations according to §63.864(k)(2) occurred, information from both the Summary Report and the Excess Emissions Report must be submitted.	Rule 335-3-1106(38)	
	Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.		
	Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.		
7.	A sulfur dioxide emission test report shall be submitted to the Department at least once every five years.	Rule 335-3-1402	
8.	The facility must maintain records demonstrating compliance with the requirement in $63.864(e)(1)$ to maintain proper operation of an ESP's AVC.	Rule 335-3-1106(38)	

No. 2 Smelt Tank Informational Summary

Description:	No.2 Smelt Tank	
Emission Unit No:	Z012	
Installation Date:	1980	Reconstruction / Modification date:
Operating Capacity:	159,000 lb BLS/hr	
Operating Schedule :	8760 hours/year.	

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 60 Subpart BB 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z012 TV 906	matter g/kg black liquor soilds (dry weight) [0.2 and lb/ton black liquor solids (dry weight)} or 16 pounds per hour		Rule 335-3-1002 (1) and (28) and Rule 335-3-14	
Air Permit Z012 TV 902 & 903	No. 2 Smelt Tank (State only)	Total reduced sulfur	No Greater than the more stringent of 0.033 lb/ton of black liquor solids or 2.6 pounds per hour	Rule 335-3-1002 (1) and (28) and Rule 335-3-14
Air Permit Z012 TV 902 & 903	Air Permit Z012 No. 2 Smelt Tank Opacity No Greater than 20 percent with one six- R		Rule 335-3-401	
Air Permit Z012 TV 902 & 903	No. 2 Smelt Tank	HAPS	Particulate matter as a surrogate for HAPS shall not exceed 0.19 lbs/ton of black liquor solids	Rule 335-3-1102(38)

No. 2 Smelt Tank Provisos

cability	
This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603
This source is subject to the requirements of ADEM Admin. Code 335-3-401 for opacity.	Rule 335-3-401
This source is subject to the applicable requirements of the Federal New Source Performance Standards found in 40 CFR Part 60, Subpart BB.	Rule 335-3-1002(28)
This source is subject to the requirements of National Emission Standards for Hazardous Pollutants as listed in 40 CFR Part 63, Subpart MM.	Rule 335-3-1106(38)
ion Standards	
Particulate matter emissions shall not exceed 0.2 lb/ton black liquor solids (dry weight) or 16 pounds per hour.	Rule 335-3-1002(1) and (28) and Rule 335-3-14
Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.	Rule 335-3-401
Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids.	Rule 335-3-1002(1) and (28 and Rule 335-3-14
In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPs, shall not exceed 0.19 pounds per ton of black liquor solids fired. This alternative limit was established under the provisions of §63.862 (a)(1)(ii).	Rule 335-3-1106(38)
liance and Performance Test Methods and Procedures	
Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department.	Rule 335-3-1402
Compliance with the opacity limit shall be determined in accordance with the 40 CFR Part 60 Method 9 or other method approved by the Department.	Rule 335-3-401
Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B.	Rule 335-3-1402
ion Monitoring	
A particulate matter emission test shall be performed at least once per year.	Rule 335-3-1402
For particulate matter periodic monitoring, if any three-hour rolling average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the liquor firing rate is to be lowered until compliance is successfully demonstrated at the higher rate.	Rule 335-3-1605
	This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-1603, "Major Source Operating Permits". This source is subject to the requirements of ADEM Admin. Code 335-3-401 for opacity. This source is subject to the applicable requirements of the Federal New Source Performance Standards found in 40 CFR Part 60, Subpart BB. This source is subject to the requirements of National Emission Standards for Hazardous Pollutants as listed in 40 CFR Part 63, Subpart MM. ion Standards Particulate matter emissions shall not exceed 0.2 lb/ton black liquor solids (dry weight) or 16 pounds per hour. Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent. Total reduced sulfur emissions shall not exceed 0.033 pounds per ton of black liquor solids. In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPs, shall not exceed 0.19 pounds per ton of black liquor solids. Inaccordance with the OFR Part 60 Method 5 or other method approved by the Department. Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department. Compliance with the total reduced sulfur emission limit shall be determined in accordance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B. ion Monitoring A particulate matter emission test shall be performed at least once per year. For particulate matter periodic monitoring, if any three-hour rolling average liquor fring rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the liquor fring rate is to be lowered until compliance is successfully demonstrated at

Fede	erally Enforceable Provisos	Regulations
Emis	sion Monitoring Continued	
3.	In accordance with 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber liquid supply flow rate and fan amperage during times when spent pulping liquor is fed. The parametric monitoring system shall meet the requirements listed in §63.8(c). This unit shall not have 6 or more 3-hour average parameter values within any 6-month reporting period that are below the minimum operating limits established in accordance with §63.864(j) during times when spent pulping liquor is fed. No more than one exceedance will be attributed in any given 24-hour period	Rule 335-3-1106(38)
4.	For TRS periodic monitoring, in any three-hour rolling average total weak wash flow to the scrubber and rod deck is less than 90 percent of its respective average value set by the required complying periodic test or a complying test approved by the Department or if fan amp readings indicate the fan is not operating, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours.	Rule 335-3-1605
	An appropriate analytical test will be performed daily to assure that a weak wash solution is maintained. If the test indicates a loss of weak wash solution, the cause is to be investigated and appropriate corrective action is to be taken.	
5.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(38)
6.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to §63.865 and every 5 years thereafter. Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.	Rule 335-3-1106(38)
Reco	rdkeeping and Reporting Requirements	
1.	A particulate matter emission test report shall be submitted to the Department at least once per year.	Rule 335-3-1402
2.	Records of all three-hour rolling average liquor firing rates shall be made and maintained on file, available for inspection for at least five years.	Rule 335-3-1402
3.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of any occurrence when corrective action is required (when a 3-hour average flow rate or fan amperage is below the minimum operating limit established according to §63.864(j) during time when spent pulping liquor is fed), and when a violation is noted (when six or more 3-hour average flow rates or fan amperage values within any 6-month period are below the minimum operating limit established according to §63.864(j) during times when spent pulping liquor is fed).	Rule 335-3-1106(38)

ede	erally Enforceable Provisos	Regulations
leco	rdkeeping and Reporting Requirements Continued	
4.	In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of parametric monitoring data required under §63.864, including any period when the 3-hour average flow rate or fan amperage, during times when spent pulping liquor is fed, were inconsistent with the levels established during the initial or subsequent performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, and the time corrective action was initiated and completed, and the corrective action taken. The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit for each failure to meet an operating limit. The information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.	Rule 335-3-1106(38)
	The facility must also maintain records and documentation of supporting calculations for compliance determination made under §63.865 (a) through (d).	
	The facility must also maintain records of the monitoring parameter ranges for the scrubber flow rates and fan amperage.	
5.	In accordance with 40 CFR Part 63, Subpart MM, the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867(c), including the number and duration of three hour averages when the flow rate or fan amperage were below the minimum operating limit during times when spent pulping liquor is fed. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting time, or any violations according to §63.864(k)(2) occurred, information from both the Summary Report and Excess Emissions Report must be submitted.	Rule 335-3-1106(38)
	Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.	
	Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.	
6.	Records of all three-hour rolling average total weak wash flow to the scrubber and rod deck and indication of fan amps shall be made and maintained on file available for inspection for at least five years.	Rule 335-3-1402
	In both cases, results of the daily analytical tests to assure that a weak wash solution is maintained shall be recorded and maintained on file available for inspection for at least five years.	

RICE MACT UNITS Informational Summary

Description: No. 1 Lime Kiln Auxiliary Drive, No. 2 Lime Kiln Auxiliary Drive, No. 1 Fire Pump, No. 2 Fire Pump

Emission Unit LK1 - No. 1 Lime Kiln Auxiliary Drive LK2 - No. 2 Lime Kiln Auxiliary Drive FP1 - No. 1 Fire Pump FP2 - No. 2 Fire Pump	Installation Da 2012 2015 2016 2018	ite: Reco	nstruction / Modification date: N/A N/A N/A N/A
Operating Capacity:			
Unit	HP	Туре	Fuel
No. 1 Lime Kiln Auxiliary Drive	46 hp	Compression	ULSD
No. 2 Lime Kiln Auxiliary Drive	46 hp	Compression	ULSD
No. 1 Fire Pump	305 hp	Compression	ULSD
No. 2 Fire Pump	305 hp	Compression	ULSD
Operating Schedule : No. 1 Lime Kiln Auxiliary Drive No. 2 Lime Kiln Auxiliary Drive	Calendar Yea <u><500 hours/ye</u> <500 hours/ye	ar	Non-Emergency Use
No. 1 Fire Pump	<100 hours/ye		<50 hours/year
No. 2 Fire Pump	≤ 100 hours/ye		≤50 hours/year

These units contain equipment that is subject to the following NSPSs, NESHAPs, or MACTs:

40 CFR Part 60 Subpart IIII (LK1, LK2, FP1, & FP2 only)

40 CFR Part 63 Subpart ZZZZ(all units)

Pollutants E	Emitted
---------------------	---------

Poliutants Emitted					
Emission Point #	Point Description	Pollutant	Emission Limit	Standard	
LK1, LK2, FP1, FP2	RICE Engines	Opacity	\leq 20% as determined by six-minute average, with one six-minute period up to 40% in any one hour period.	Rule 335-3-401	
LK1, LK2	RICE Engines	HAPs	Comply with 40 CFR 60.4204(b) which reference CFR 89.112, specifically: Max Engine Power : 19 <u>k</u> W<37 (Tier 2) Emission Standards (g/kW-hr) NMHC+ NOx : 7.5(5.59 g/hp-hr) CO: 5.5 (4.10 g/hp-hr) PM: 0.60 (0.45 g/hp-hr)	Rule 335-3-1002(87)	
FP1, FP2RICE EnginesHAPsNMHC + NOx: 3.0 g/hp-hr CO: 2.6 g/hp-hr PM: 0.15 g/hp-hr		Rule 335-3-1002(87)			
FP1, FP2	RICE Engines	HAPs	Per 40 CFR 63.6640(f)(1) maintenance checks and readiness testing is limited to 100 hours per year and non-emergency use is limited to 50 hours per year, which count towards the 100 hour per year limit provided for maintenance and testing. There is no time limit on usage in emergency situations.	Rule 335-3-1002(87)	

RICE MACT Generators Provisos

eae	rally Enforceable Provisos	Regulations
ppli	cability	
1.	These sources are subject to the applicable requirements of Rule 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603
2.	These sources are subject to the requirements of ADEM Admin. Code 335-3-4 01 for opacity.	Rule 335-3-401
3.	All sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1106(103), "National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Hazardous Air Pollutant (HAP) Emissions from Stationary Reciprocating Internal Combustion Engines" (40 CFR Part 63 Subpart ZZZZ).	Rule 335-3-1106 (1) and (103)
4.	No. 1 Lime Kiln Auxiliary Drive, No. 2 Lime Kiln Auxiliary Drive, No. 1 Fire Pump, and No. 2 Fire Pump are subject to the applicable requirements of ADEM Admin. Code R. 335-3-1002(87), "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" (40 CFR Part 60 Subpart IIII).	Rule 335-3-1002(87)
5.	Pursuant to 63.6590(c), the LK1, LK2, FP1, & FP2 must meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII.	Rule 335-3-1106(1) and (103)
mis	sion Standards	
1.	For all units, opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.	Rule 335-3-401
2.	All units beginning on or before May 3, 2013, shall comply with the emission limitations in 40 CFR 63 Subpart ZZZZ Table 2c (4).	Rule 335-3-1106(1) and (103)
3.	All units beginning on or before May 3, 2013, shall be operated according to the requirements in $63.6640(f)(1)(2)(i)$ through (iii).	Rule 335-3-1106(1) and (103)
4.	All units and after-treatment control device (if any), beginning on or before May 3, 2013, shall be operated and maintained according to the manufacturer's emission-related written instructions, or the facility develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.	Rule 335-3-1106(1) and (103)
5.	Beginning on or before May 3, 2013, the facility must minimize engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The emission standards in Table 2c of 40 CFR 63 Subpart ZZZZ apply to all times other than startup.	Rule 335-3-1106(1) and (103)

Fede	rally Enforceable Provisos	Regulations
6.	Pursuant to 40 CFR 60.4204(b) and 60.4201(a), the permittee shall not cause or allow the emissions from LK1 and LK2 to exceed the applicable emission standards in 40 CFR §89.112, specifically:	Rule 335-3-1002(87)
	(a) The sum of the emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NO _x) shall not exceed 7.5 g/kW-hr (5.59 g/hp-hr)	
	(b) Carbon monoxide emissions shall not exceed 5.5 g/kW-hr (4.10 g/hp-hr)	
	(c) Particulate Matter emissions shall not exceed 0.6 g/kW-hr (0.45 g/hp-hr)	
7.	In accordance with 40 CFR Part 60.4205(c), the permittee shall not cause or allow the emissions from the FP1 and FP2 to exceed the applicable emission standards in Table 4, specifically:	Rule 335-3-1002(87)
	i. The sum of the emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NOx) shall not exceed 4.0 g/kW-hr (3.0 g/hp-hr).	
	ii. The carbon monoxide (CO) emission rate shall not exceed 3.5 g/kW-hr (2.6 g/hp-hr).	
	iii. The particulate matter (PM) emission rate shall not exceed 0.20 g/kW-hr (0.15 g/hp-hr).	
8.	For LK1 and LK2, Pursuant to 40 CFR 60.4211(c), the facility shall comply with the emission standards of Subpart IIII by purchasing an engine that is certified by the manufacturer to meet the requirements of 60.4204(b).	Rule 335-3-1002(87)
9.	Pursuant to 40 CFR 60.4207(b), the permittee shall not burn any diesel fuel in LK1, LK2, FP1, or FP2 CI engines that does not meet the following per-gallon standards of 40 CFR §80.510(b):	
	i. Sulfur content shall not exceed 15 parts per million (ppm); and	
	ii. Cetane index shall be a minimum of 40 <u>or</u> the aromatic content shall not exceed 35 volume percent	
Com	liance and Performance Test Methods and Procedures	
1.	The facility must demonstrate continuous compliance with the operating limitations in Tables 2c according to the methods specified in Table 6 (9) to 40 CFR 63 Subpart ZZZZ for all units	Rule 335-3-1106(1) and (103)
2.	For the LK1, LK2, FP1, and FP2 CI engines, pursuant to 40 CFR 60.4211(a), the facility shall operate and maintain the stationary CI ICE and control device according to the manufacturer's written instructions or procedures. Only changes to those emission-related settings permitted by the manufacturer are allowed to be made. Also, the Requirements of 40 CFR parts 89, 94, and/or 1068 shall be adhered to, as they apply.	Rule 335-3-1002(87)
Emis	ion Monitoring	
1.	The facility must install a non-resettable hour meter and monitor all applicable units according to the requirements of §63.6625(f), §63.6635, §60.4209, and §60.4211.	Rule 335-3-1106(1) and (103) Rule 335-3-1002(87)
2.	No later than May 3, 2013, the facility shall monitor and collect data according to the requirements of 63.6635 and $60.4214(b)$.	Rule 335-3-1106(1) and (103);
Reco	dkeeping and Reporting Requirements	
1.	The facility shall keep records of the operation of the applicable engines in emergency and non-emergency service, which is recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the	Rule 335-3-1106(1) and (103) Rule 335-3-1002(87)

'ed	erally Enforceable Provisos	Regulations	
	reason the engine was in operation during that time. These records shall be retained onsite for inspection purposes for a period of at least five years.		
2.	To demonstrate compliance with the fuel limitations, the permittee shall only purchase fuels subject to meeting the fungible specifications for diesel fuel. Records of these fuel purchases shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of 5 years from the date of generation of each record.	Rule 335-3-1002(87)	
3.	The facility shall keep records in accordance with 63.6655 and $60.4214(b)$ for the all units.	Rule 335-3-1106(1) and (103) Rule 335-3-1002(87)	
4.	If any of the existing units are reconstructed, the facility shall submit an Initial Notification.	Rule 335-3-1102(1) and (103)	

No. 1 Lime Kiln Informational Summary

Description:	No. 1 Lime Kilr	l
Emission Unit No:	Z003	
Installation Date:	1967	Reconstruction / Modification date: N/A
Operating Capacity:	21,242 lb/hr Ca	0
Operating Schedule :	8760 hours/year	

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z003	No. 1 Lime Kiln	Particulate Matter	No Greater than 1.0 lb/air dried	Rule 335-3-407
TV Application 501			ton of pulp	
Air Permit Z003	No. 1 Lime Kiln (State only)	Total reduced sulfur	No Greater than 20 parts per	Rule 335-3-504
TV Application 501			million at 10 percent oxygen	
Air Permit Z003 No. 1 Lime Kiln Opacity No Greater than 20 percent		No Greater than 20 percent with	Rule 335-3-401	
TV Application 501			one six-minute period up to 40	
			percent in any one hour period	
Air Permit Z003	No. 1 Lime Kiln	Particulate Matter	0.36 grains/dry standard cubic	Rule 335-3-1106 (38)
TV Application 501		(surrogate for	foot at 10 percent oxygen	
		HAPs)		

Fuel	% Sulfur
No. 2 -6 Fuel Oil	2.9
Natural Gas	
Reclaimed Oil	1.0

No. 1 Lime Kiln Provisos

Appli	cability	
1.	This source is subject to the applicable requirements of Rule 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603
2.	This source is subject to the requirements of ADEM Admin. Code 335-3-407(2)(c) particulate matter from kraft pulp mill lime kilns.	Rule 335-3-407(2)(c)
3.	This source is subject to the requirements of ADEM Admin. Code 335-3-401 for opacity.	Rule 335-3-401
4.	This source is subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM as referenced in ADEM Admin. Code 335-3-1106(38).	Rule 335-3-1106(1) and (33
Emis	sion Standards	
1.	Particulate matter emissions shall not exceed 1.0 pounds per air-dried ton of pulp.	Rule 335-3-407(2)(c)
2.	In accordance with 40 CFR Part 63 Subpart MM, particulate matter emissions, as a surrogate for HAPS, shall not exceed 0.36 gr/dscf corrected to 10% oxygen. This alternative limit was established under the provisions of §63.862(a)(1)(ii).	Rule 335-3-1106(1) and (3
	The No. 1 Lime Kiln may be included in the bubble provisions of $(3.862(a)(1)(i))$ regardless of the number of hours that it operates. This alternative was approved, through the provisions of (3.94) , as equivalent to the standards of 40 CFR Part 63, Subpart MM. All other requirements of 40 CFR Part 63, Subpart MM remain in effect.	
3.	Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.	Rule 335-3-401
Comp	pliance and Performance Test Methods and Procedures	
1.	Compliance with the particulate emission limit shall be determined in accordance with the 40 CFR 60 Method 5 or other method approved by the Department.	Rule 335-3-1402
2.	Compliance with the opacity limit shall be determined in accordance with the 40 CFR 60 Method 9.	Rule 335-3-401
Emis	sion Monitoring	
1.	A particulate matter emission test shall be performed at least once per year.	Rule 335-3-502
2.	For particulate matter periodic monitoring, if any three-hour rolling average lime mud flow rate is greater than 110 percent of its average value recorded at the time of a required periodic test that showed compliance or a test approved by the Department that showed compliance, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate.	Rule 335-3-1605
3.	Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.	Rule 335-3-1605

No.	1 Lime Kiln Federally Enforceable Provisos	Regulations	
Emis	sion Monitoring Continued		
4.	In accordance with 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber liquid supply flow rate and pressure drop during times when lime mud is fed. The parametric monitoring system shall meet the requirements listed in §63.8(c).	Rule 335-3-1106(1) and (38)	
	This unit shall not have 6 or more 3-hour average parameter values within any 6- month reporting period that are below the minimum operating limits established in accordance with §63.864(j) during times when lime mud is fed, with the exception of pressure drop during periods of startup and shutdown. No more than one exceedance will be attributed in any given 24-hour period.		
5.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(1) and (38)	
6.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to 63.865 and every 5 years thereafter.	Rule 335-3-1106(1) and (38)	
	Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.		
Reco	rdkeeping and Reporting Requirements		
1.	A particulate matter emission test report shall be submitted to the Department at least once per year.	Rule 335-3-1402	
2.	Records of all three-hour rolling average lime mud flow rates shall be made and maintained on file available for inspection for at least five years.	Rule 335-3-1402	
3.	Records of all three-hour block average wet scrubber pressure drops across the scrubber inlet and liquid flow rates shall be made and maintained on file available for inspection for at least five years.	Rule 335-3-1402	
4.	Pursuant to 40 CFR Part 63, Subpart MM the facility must maintain records of the CaO production rates in units of Mg/d or ton/d.	Rule 335-3-1106(1) and (38)	
5.	In accordance with 40 CFR Part 63, Subpart MM the facility must maintain records of any occurrence when corrective action is required (when a 3-hour average flow rate or pressure drop is below the minimum operating limit established according to §63.864 (j) during times when lime mud is fed, with the exception of pressure drop during periods of startup and shutdown), and when a violation is noted (when six or more 3-hour average flow rate or pressure drop values within any 6-month reporting period are below the minimum operating limit established according to §63.864(j) during times when lime mud is fed, with the exception of pressure drop during periods of startup and shutdown).	Rule 335-3-1106(1) and (38)	

No. 1 Lime Kiln Federally Enforceable Provisos	Regulations	
Recordkeeping and Reporting Requirements Continued		
6. In accordance with 40 CFR Part 63, Subpart MM the facility must maintain records of parametric monitoring data required in §63.864, including any period when the 3-hour average flow rate or pressure drop, during times when lime mud is fed, were inconsistent with the levels established during the initial or subsequent performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and corrective action taken.	Rule 335-3-1106(1) and (38	
The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit for each failure to meet an operation limit. The information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.		
The facility must also maintain records and documentation of supporting calculations for compliance determinations made under §63.865(a) through (d).		
The facility must also maintain records of the monitoring parameter ranges for the pressure drop and scrubber flow rates.		
7. In accordance with 40 CFR Part 63, Subpart MM the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867(c), including the number and duration of three hour averages when the flow rate or pressure drops were below the minimum operating limit. If the Total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period is 5 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or the total CMS downtime for the summary Report and Excess Emissions Report must be submitted.	Rule 335-3-1106(1) and (33	
Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.		
Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.		

No. 1	Li	me Kiln State Only Enforceable Provisos	Regulations	
Appli	cabi	lity (State Only)		
	tota	is source is subject to the requirements of ADEM Admin. Code 335-3-504 (6) al reduced sulfur from kraft pulp mill lime kilns. Standards (State Only)	Rule 335-3-504(6)	
1.	oxy der lev per	cal reduced sulfur emissions shall not exceed 20 parts per million at 10 percent or year averaged over discrete 12 hour periods. If an owner or operator nonstrates to the satisfaction of the Director that emissions in excess of the els otherwise authorized in this regulation occur as a result of properly formed startups, shutdowns or unavoidable malfunctions these emissions will constitute a violation.	Rule 335-3-504	
Comp	olian	ce and Performance Test Methods and Procedures (State Only)		
1.	acc	mpliance with the total reduced sulfur emission limit shall be determined in ordance with the continuous emission monitor, 40 CFR Part 60 Method 16, 16A 16B or other method approved by the Department.	Rule 335-3-1402	
Emiss	ion 1	Monitoring (State Only)		
1.	ma	otal reduced sulfur continuous emissions monitor shall be installed, calibrated, intained, and operated in accordance with 40 CFR §60.284, except that nitoring spans may be approved by the Director.	Rule 335-3-504(8)	
Recor	dke	eping and Reporting Requirements (State Only)		
1.	1. A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:		Rule 335-3-504(9)	
	a.	The magnitude of excess emissions greater than 20 parts per million adjusted to 10 percent oxygen computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).		
	b.	The date and time of commencement and completion of each time period of excess emissions.		
	c.	The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.		
	d.	The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.		
	e.	When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.		

No. 2 Lime Kiln Informational Summary

Description:	No. 2 Lime Kilr	1
Emission Unit No:	Z013	
Installation Date:	1980	Reconstruction / Modification date: N/A
Operating Capacity:	39,829 lbs/hr C	aO
Operating Schedule:	8760 hours/year	

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs: 40 CFR Part 60 Subpart BB 40 CFR Part 63 Subpart MM

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
Air Permit Z013 TV Application 502	No. 2 Lime Kiln	Particulate Matter	Particulate emission shall not exceed either 0.13 gr/sdcf at 10 percent oxygen when firing petroleum coke and/or liquid fossil fuel or 42 pounds per hour and 0.067 gr/sdcf at 10 percent oxygen when gaseous fossil fuel is fired and/or 21 pounds per hour measured in accordance with the 40 CFR Part 60 Method 5. When petroleum coke and gaseous fossil fuel are fired simultaneously in any combination, the allowed particulate emissions rate (in grains	Rule 335-3-1002 (28) and Rule 335-3-1404 (9)
			per standard dry cubic foot at 10 percent oxygen) shall be determined by proration	
Air Permit Z013 TV Application 502	No. 2 Lime Kiln	Total reduced sulfur	No Greater than 8 parts per million at 10 percent oxygen	Rule 335-3-1002 (28)
Air Permit Z013 TV Application 502	No. 2 Lime Kiln	Sulfur dioxide	39 tons per year	Rule 335-3-1404 (9)
Air Permit Z013 TV Application 502	No. 2 Lime Kiln	Opacity	No Greater than 20 percent with one six-minute period up to 40 percent in any one hour period	Rule 335-3-401
Air Permit Z013 TV Application 502	No. 2 Lime Kiln	HAPS	0.1 grains per dry standard cubic foot at 10 percent oxygen	Rule 335-3-1106 (38)

Fuel	% Sulfur
No. 2 -6 Fuel Oil	2.9
Natural Gas	
Pet Coke	10.0
Reclaimed Oil	1.0

No. 2 Lime Kiln Provisos

Fede	rally Enforceable Provisos	Regulations	
Appli	cability		
1.	This source is subject to the applicable requirements of Rule 335-3-1603, "Major Source Operating Permits".	Rule 335-3-1603	
2.	This source is subject to federal New Source Performance Standards 40 CFR 60 Subpart A and Subpart BB.	Rule 335-3-1002(1) and (28)	
3.	This source is subject to the requirements of ADEM Admin. Code 335-3-401 for opacity.	Rule 335-3-401	
4.	This source is subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM as referenced in ADEM Admin. Code 335-3-1106 (38).	Rule 335-3-1106(1) and (38)	
5.	This source is subject to the requirements of ADEM Admin. Code 335-3-1404(9) Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits for particulate and sulfur dioxide.	Rule 335-3-1404(9)	
Emis	ion Standards		
1.	Particulate emissions shall not exceed 0.13 gr/sdcf at 10 percent oxygen when liquid fossil fuel is fired. $60.282(a)(3)(i) 0.15$ g/dscm (0.066 gr/dscf) corrected to 10 percent oxygen, when gaseous fossil fuel is burned	Rule 335-3-1002(1) and (28)	
2.	Particulate emissions shall not exceed the more stringent of 0.13 gr/sdcf at 10 percent oxygen and/or 42 pounds per hour when firing petroleum coke and liquid fossil fuel. Particulate emissions shall not exceed the more stringent of 0.067 gr/sdcf at 10 percent oxygen, and/or 21 pounds per hour when gaseous fossil fuel is fired.	Rule 335-3-1404(9)	
3.	When petroleum coke and gaseous fossil fuel are fired simultaneously in any combination, the allowed particulate emissions rate (in grains per standard dry cubic foot at 10 percent oxygen) shall be determined by proration using the following equation:	Rule 335-3-1404(9)	
	PSPM = [Y(0.067) + Z(0.13)] Y + Z		
	Where: PSPM is the prorated standard for particulate matter when firing natural gas and petroleum coke simultaneously, in grains per standard dry cubic feet at 10 percent oxygen;		
	Y is the percentage of total heat input from natural gas; and		
	Z is the percentage of total heat input derived from petroleum coke.		
4.	Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.	Rule 335-3-401	
5.	The No. 2 Lime Kiln shall not emit more than 39 tons of sulfur dioxide per year.	Rule 335-3-1404(9)	
6.	In accordance with 40 CFR Part 60, Subpart BB total reduced sulfur emissions shall not exceed 8 parts per million at 10 percent oxygen, averaged over discrete 12 hour periods.	Rule 335-3-1002(28)	

rea	erally Enforceable Provisos	Regulations	
Emis	sion Standards Continued		
7.	In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPS, shall not exceed 0.1 gr/dscf, corrected to 10 percent oxygen. This alternative limit was established under the provisions of §63.862 (a)(1)(ii).	Rule 335-3-1106(1) and (38)	
Com	pliance and Performance Test Methods and Procedures		
1.	Compliance with the particulate matter emission limit shall be determined in accordance with the 40 CFR Part 60 Method 5 or other method approved by the Department.	Rule 335-3-1002(28) and Rule 335-3-1402	
2.	Compliance with the opacity limit shall be determined in accordance with the 40 CFR Part 60, Method 9.	Rule 335-3-401	
3.	Compliance with the total reduced sulfur emission limit shall be determined in accordance with 40 CFR Part 60, Method 16, 16A, or 16B.	Rule 335-3-1002(28)	
Emis	sion Monitoring		
1.	A particulate matter emission test shall be performed at least once per year.	Rule 335-3-502	
2.	For particulate matter periodic monitoring if any three-hour rolling average lime mud flow rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the lime mud flow rate is to be lowered until compliance is successfully demonstrated at the higher rate.	Rule 335-3-1605	
3.	For sulfur dioxide periodic monitoring, the facility shall obtain fuel oil and petroleum coke vendor certification of sulfur in fuel for every load received by the mill.	Rule 335-3-1402	
4.	A total reduced sulfur continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR §60.284, except that monitoring spans may be approved by the Director.	Rule 335-3-1002(28)	
5.	In accordance with 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber liquid supply flow rate and the pressure drop during times when lime mud is fed. The parametric monitoring system shall meet the requirements listed in §63.8(c).	Rule 335-3-1106(38)	
	This unit shall not have 6 or more 3-hour average parameter values within any 6-month reporting period that are below the minimum operating limits established in accordance with 63.864 (j) during times when lime mud is fed, with the exception of pressure drop during periods of startup and shutdown. No more than one exceedance will be attributed in any given 24-hour period.		
6.	As specified in §63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.	Rule 335-3-1106(38)	
7.	The first periodic particulate matter performance test shall be performed by October 13, 2020 pursuant to 63.865 and every 5 years thereafter.	Rule 335-3-1106(38)	
	Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.		

Federally Enforceable Provisos			Regulations
Reco	rdkeepin	g and Reporting Requirements	
1.	-	culate matter emission test report shall be submitted to the Department at ce per year.	Rule 335-3-1402
2.		s of all three-hour rolling average lime mud flow rates shall be made and ned on file available for inspection for at least five years.	Rule 335-3-1402
3.	Records of the fuel usage and sulfur content of fuels, sufficient to calculate sulfur dioxide emissions, must be made and remain on file for five years.		Rule 335-3-1402
4.	A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information:		Rule 335-3-1402
	a)	The magnitude of excess emissions greater than 8 parts per million adjusted to 10 percent oxygen computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).	
	b)	The date and time of commencement and completion of each time period of excess emissions.	
	c)	The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.	
	d)	The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.	
	e)	When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.	
5.	of any rate or p §63.864 during p more 3- are belo times w	rdance with 40 CFR Part 63, Subpart MM, the facility must maintain records occurrence when corrective action is required (when a 3-hour average flow pressure drop is below the minimum operating limit established according to (j) during times when lime mud is fed, with the exception of pressure drop periods of startup and shutdown), and when a violation is noted (when six or hour average flow rate or pressure drop within any 6-month reporting period by the minimum operating limit established according to §63.864(j) during then lime mud is fed, with the exception of pressure drop during periods of and shutdown).	Rule 335-3-1106(38)

ederally Enforceable Provisos	Regulations	
Recordkeeping and Reporting Requirements Continued		
6. In accordance with 40 CFR Part 63, Subpart MM, the facility must maintain records of parametric monitoring data required under §63.864, including any period wher the 3-hour average flow rate or pressure drop, during times when lime mud is fed were inconsistent with the levels established during the initial or subsequent performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and corrective action taken.	Rule 335-3-1106(38)	
The facility must also maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit for each failure to meet an operation limit. The information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.		
The facility must also maintain records and documentation of supporting calculation for compliance determinations made under §63.865 (a) through (d).		
The facility must also maintain the records of the monitoring parameter ranges for the scrubber's pressure drop and scrubber flow rates.		
7. In accordance with 40 CFR Part 63, Subpart MM, the facility must submit a semiannual Excess Emissions Report and/or Summary Report containing the information required in §63.867 (c), including the number and duration of three hour averages when the flow rate or pressure drop were below the minimum operating limit. If the Total duration of excess emissions or process control system parameter exceedances for the reporting period is less than 1 percent of the total reporting period operating time, and CMS downtime is less than 5 percent of the total reporting period operating time, only the Summary Report is required to be submitted. If the total duration of excess emissions or process control system parameter exceedances for the reporting period is 1 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or the total CMS downtime for the reporting period is 5 percent or greater of the total reporting period operating time, or any violations according to §63.864(k)(2) occurred, information from both the Summary Report and Excess Emissions Report must be submitted.		
Excess Emissions and Summary Reports must be reported electronically via CEDRI per §63.867(d)(2) once the reporting form specific to 40 CFR Part 63, Subpart MM has been available in CEDRI for one year.		
Reports shall be submitted within 30 days following the end of the semiannual periods ending on June 30 and December 31.		