STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

ND Paper Inc. **Oxford County** **Rumford, Maine** **A-214-70-K-R/A**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Renewal with Amendment**

FINDINGS OF FACT

After review of the Part 70 License renewal and amendment applications, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	ND Paper Inc. (NDP)
LICENSE TYPE	Part 70 License Renewal and Part 70 Significant Modification
NAICS CODES	322110, 322121
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	35 Hartford Street, Rumford, Maine

ND Paper Inc. (NDP) is an integrated pulp and paper manufacturing facility that began operation in 1901. The mill consists of a Kraft (chemical) pulping system, a paper production process system, a pulp dryer process system, and supporting industrial systems, including power and steam production, landfill operations, and wastewater treatment.

NDP has the potential to emit more than 100 tons per year (tpy) of particulate matter (PM), particulate matter under 10 micrometers (PM_{10}), particulate matter under 2.5 micrometers ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO) and volatile organic compounds (VOC); therefore, the facility is classified as a major source for criteria pollutants.

NDP has the potential to emit 10 tpy or more of a single hazardous air pollutant (HAP) and 25 tpy or more of combined HAP; therefore, the facility is classified as a major source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Boilers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel Type	Manuf. Date	Stack #
Power Boiler #3	300	fuel oil, natural gas, LVHCs, HVLCs, SOGs, specification and off-spec. waste oil	1948	3
Cogen Boiler #6	610 (annual) 630 (24-hr)	fuel oil, natural gas, biomass, coal, TDF, DPC, CDD, CTW, specification and off-spec. waste oil, lime kiln rejects, LVHCs, HVLCs, SOGs, OCC residuals	1986 (started operation in 1990)	6&7
Cogen Boiler #7	610 (annual) 630 (24-hr)			

TDF – Tired-Derived Fuel	SOGs – Stripper Off-Gases
CDD – Construction & Demolition Debris	
CTW – Creosote Treated Wood from Railroad Ties	
LVHCs –Low Volume, High Concentration Gases	
HVLCs – High Volume, Low Concentration Gases	
DPC – Delayed Petroleum Coke, a byproduct of petroleum refining	
OCC – Old Corrugated Cardboard and Double-lined Kraft	

Fuel-Burning Process Equipment

Equipment	Max. Capacity (MMBtu/hr)	Rate / Capacity	Fuel Type	Control Equipment	Stack #
Lime Kiln	100 (fuel oil) 110 (natural gas)	350 tons/day CaO	fuel oil, spec. waste oil, natural gas, LVHCs	Wet Scrubber	KILN
Recovery Boiler C	759 (fuel oil)	4.4 MMlb BLS/day	fuel oil, spec. waste oil, natural gas, black liquor, soap	Electrostatic Precipitator (ESP)	CREC
R-10 Dryers #1, #2, #3, and #4	#1 & #3 @ 6.4 #2 & #4 @ 8.05	–	propane, natural gas	–	fugitive

The previously licensed Landfill Flare has been permanently shutdown and removed from the license.

Production Equipment

Equipment	Production Rate/Capacity	Pollution Control Equipment	Exhaust or Stack #
Smelt Tank C	4.4 MMlb BLS/day	2 Venturi scrubbers	CR15, 18
Lime Slaker	1,050 gpm	Static scrubber	LK16
Bleach Plant	–	Wet scrubber system	SCRB
Bleach Plant – R8 ClO_2 Plant		Scrubber	S16
Kamyr Continuous Digester System		Collection system, then incineration	LVHC/HVLC System
Batch Digester System			LVHC System
A Line and B Line Brownstock Washers			HVLC System
Multiple Effect Evaporators	4.4 MMlb BLS/day		LVHC System
Recycle Pulp Operations	300 ADTPD	–	fugitive
Bulk Handling Systems	–	baghouses	fugitive
Steam Stripper System		–	SOG System
SOG System		Collection system, then incineration	–
LVHC System			
HVLC System			
R-10, R-12, and R-15 Paper Machines and On-Machine Coaters		–	fugitive
R-9 Pulp Dryer			

The previously licensed Groundwood Pulp Mill has been permanently shut down and removed from the Air Emission License (A-214-77-18-A, issued 11/18/2020).

Natural Gas-Fired Building Air Heaters

Equipment	Max.Capacity (MMBtu/hr)	Maximum Firing Rate (scf/hr)	Installation Date
NG Unit 1	6.54	6,350	2003
NG Unit 2	9.62	9,340	2004
NG Unit 3	5.51	5,353	
NG Unit 4	5.51	5,353	
NG Unit A	2.05	1,992	
NG Unit B	14.11	13,700	2003
NG Unit C	6.41	6,225	2004
NG Unit D	6.32	6,136	
NG Unit E	5.13	4,980	

Equipment	Max.Capacity (MMBtu/hr)	Maximum Firing Rate (scf/hr)	Installation Date
NG Unit F	4.62	4,482	2004
NG Unit G	6.41	6,225	
NG Unit H	14.12	13,695	
NG Unit I	7.69	7,466	2003
NG Unit J	12.83	12,456	
NG Unit K	7.69	7,470	2004
NG Unit L	6.32	6,136	
NG Unit RB	10.0	9,709	2007

Generators and Engines

Equipment	Maximum Input Capacity (MMBtu/hr)	Output (kW or Hp)	Fuel Type, % sulfur	Install. Date
Cogen Emergency Generator	1.5	150 kW	Distillate Fuel, 0.0015%	2002
R15 Emergency Generator	1.2	125 kW		2001
Mill Emergency Generator	5.4	558 kW		1999
Diesel Fire Water Pump	1.6	230 Hp		1984
Lift Pump Emergency Generator	5.1	779 Hp		2008
Lime Kiln Auxiliary Drive	0.6	62 kW	Natural Gas / Propane, neg.	1990
Upper Gate Emergency Generator	0.3	30 kW		2012

Storage Tanks

Tank ID	Tank Size
Methanol Storage Tank	20,000 gallons
Steam Plant Day Tank #1 (#6 fuel oil)	20,000 gallons
Steam Plant Day Tank #2 (#6 fuel oil)	20,000 gallons
#6 Oil Bulk Storage Tank	640,000 gallons

NDP has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

C. Acronyms and Units of Measure

ADTP	Air-Dried Ton of Pulp
AGL	Above Ground Level
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
BLS/day	Black Liquor Solids per Day
BPT	Best Practical Treatment
CaO	Calcium Oxide
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CAM	Compliance Assurance Monitoring
CDD	Construction & Demolition Debris
CEMS	Continuous Emissions Monitoring System
CFB	Circulating Fluidized Bed
Cl2	Chlorine
ClO2	Chloring Dioxide
CMS	Continuous Monitoring System
CO	Carbon Monoxide
CO_2e	Carbon Dioxide equivalent
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
CTW	Creosote-Treated Wood
DPC	Delayed Petroleum Coke
EPA or US EPA	United States Environmental Protection Agency
ESP	Electrostatic Precipitator
FGR	Flue Gas Recirculation
g/dscm	grams per dry standard cubic meter
g/kW-hr	grams per kilowatt hour
GHG	Greenhouse Gases
gr/dscf	grains per dry standard cubic feet
H2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HCl	Hydrogen Chloride or Hydrochloric Acid
Hg	Mercury
HVLC	High Volume Low Concentration
lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
LVHC	Low Volume High Concentration
M.R.S.	Maine Revised Statutes

MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
MMlb	million pounds
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	Oxygen
OCC	Old Corrugated Cardboard and Double-lined Kraft
ODP	Oven Dried Pulp
ORP	Oxidation/Reduction Potential
OTR	Ozone Transport Region
PM	Particulate Matter less than 100 microns in diameter
PM_{10}	Particulate Matter less than 10 microns in diameter
$PM_{2.5}$	Particulate Matter less than 2.5 microns in diameter
ppmdv	parts per million on a dry volume basis
ppmv	parts per million on a volume basis
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
SO_2	Sulfur Dioxide
SOG	Stripper Off-Gases
TDF	Tire Derived Fuel
tpy	ton per year
TRS	Total Reduced Sulfur
VOC	Volatile Organic Compounds
WESP	Wet Electrostatic Precipitator
$\mu g/m^3$	micrograms per cubic meter

D. Definitions

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (*e.g.,* trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings). This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. NDP should consult with the Department before adding any new biomass type to its fuel mix.

Clean Fuels means natural gas, distillate fuel, propane, fuel oil-soaked rags, kerosene, paper, cardboard, clean dry biomass, or any other fuel listed in 40 C.F.R. Part 63, Subpart DDDDD, Table 3, Row 5(b) which the boiler is licensed to fire.

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Fuel Oil means either distillate fuel or residual fuel.

Residual Fuel means fuel oil that complies with the specifications for fuel oil numbers 4, 5, or 6 as defined by ASTM D396-19a.

Specification Waste Oil and *Off-Specification Waste Oil* means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as these terms are defined in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or *Logs* mean either hardcopy or electronic records.

E. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for NDP is for the renewal of their existing Part 70 Air Emission License and incorporation of subsequent Part 70 amendments. Pursuant to Section 2(A) of *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

NDP has also requested incorporation into the Part 70 Air License the relevant terms and conditions of the New Source Review (NSR) licenses issued to NDP pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, including the following:

License	Issued	Description
A-214-77-13-A	11/12/2015	Addition of firing concentrated soap and spec waste oil in Recovery Boiler C
A-214-77-15-A	9/14/2018	Pulp Mill Reliability Project
A-214-77-17-A	11/6/2019	Recycle Pulp Project
A-214-77-18-A	11/18/2020	Unbleached Kraft Project
A-214-77-19-A	3/29/2024	ClO_2 Plant Emergency Generator
A-214-77-20-A	5/9/2024	Modification to Unbleached Kraft Project

Therefore, this license is considered to be a Part 70 License renewal with a Part 70 Significant Modification for the incorporation of NSR requirements.

F. Facility Description

NDP produces bleached and unbleached Kraft pulp and recycle pulp. The Kraft pulp is produced in the Pulp Mill. Recycle pulp is produced in a separate process using a hydropulper and screen system. Hydropulpers, repulpers, and pulp handling processes are considered insignificant activities pursuant to 06-096 C.M.R. ch. 140, Appendix B, § A(84). NDP produces a wide variety of both bleached and unbleached paper grades, linerboard, and market pulp.

Hardwood and softwood chips received at the mill are stored in piles for eventual processing and use in the Pulp Mill. Chips from the piles are screened and then sent on to the Pulp Mill. Fines from chip handling are burned as biomass in Cogen Boilers #6 and #7.

The Pulp Mill consists of two separate, parallel, Kraft chemical pulping process lines. Screened chips from the storage piles are sent to one of the two process lines. In the Kraft process, pulp is produced by reaction of the chips with steam and white liquor for a period of time in a pressurized vessel called a digester. The digester chemicals separate the

fibers and dissolve lignin while maintaining fiber strength. The resulting pulp, called brownstock, is washed and screened in the brownstock washer systems to clean the fibers and remove spent pulping chemicals and lignin. Unbleached washed pulp may be sent directly on for use on the paper machines or to the Bleach Plant for further processing.

The mixture of spent pulping chemicals and lignin from the digesters, referred to as weak black liquor, is collected and conveyed to the Recovery area. Here, weak black liquor is concentrated using a multiple-effect evaporation system. The resulting concentrated black liquor, with a black liquor solids (BLS) content of 70% or more, is burned in a recovery furnace (Recovery Boiler C) for recovery of pulping chemicals and to generate steam. The pulping chemicals left over after combustion of black liquor are collected in the bottom of the Recovery Boiler as molten "smelt". The smelt flows out of the bottom of Recovery Boiler C to a Smelt Dissolving Tank, where the hot smelt mixes with weak wash or water to form green liquor. Steam generated from this process is vented from the Smelt Tank through two smelt tank scrubbers. Green liquor is conveyed to the causticizing area, where lime is added, forming white liquor and lime mud. The white liquor is reused in the pulping process, and the lime mud is washed, filtered, and sent to the lime kiln for lime reclamation.

Pulp which is sent to the Bleach Plant passes through a multi-staged bleaching processes to achieve the whiteness and brightness levels required for various products. Chlorine dioxide (ClO_2) used in the elemental chlorine-free bleaching process is manufactured onsite using an R-8 process which uses methanol as a reducing agent to oxidize sodium chlorate.

Pulp produced at NDP is either used in the Paper Mill area or dried and baled on the Pulp Dryer. The Paper Mill area consists of all the equipment and operations used to convert pulp to paper, including stock preparation, coating preparation, starch handling, paper machines, finishing, storage, and shipping.

Low-volume, high-concentration (LVHC) non-condensable gas streams are collected throughout the process from certain units in the Pulp Mill and Recovery area, which are conveyed to either Power Boiler #3, Cogen Boilers #6 or #7, or to the Lime Kiln for treatment by combustion. High-volume, low-concentration (HVLC) gases from certain other units are collected and conveyed to Power Boiler #3 or Cogen Boilers #6 or #7 for treatment by combustion.

The Condensate Steam Stripper removes methanol and total reduced sulfur (TRS) compounds from pulping condensates from the Pulp Mill and Recovery areas. The stripper off-gases (SOG), which is methanol, TRS, and other HAPs removed from the condensates, are treated by combustion in either Power Boiler #3 or Cogen Boilers #6 and #7.

NDP produces steam and electricity for mill operations using Recovery Boiler C, Cogen Boilers #6 and #7, and Power Boiler #3. Electricity is also purchased from the grid. Mill

operations are also served by a water treatment plant, a wastewater treatment plant, an offsite landfill, a quality control print laboratory, and several maintenance and repair shops.

G. General Facility Requirements

NDP is subject to the following state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

Citation	Requirement Title
06-096 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 109	Emergency Episode Regulations
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques
06-096 C.M.R. ch. 117	Source Surveillance – Emissions Monitoring
06-096 C.M.R. ch. 124	Total Reduced Sulfur Control from Kraft Pulp Mills
06-096 C.M.R. ch. 130	Solvent Cleaners
06-096 C.M.R. ch. 134	Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 138	Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
40 C.F.R. Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
40 C.F.R. Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 61, Subpart E	National Emission Standards for Mercury
40 C.F.R. Part 63, Subpart S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry
40 C.F.R. Part 63, Subpart MM	National Emission Standards for Hazardous Air Pollutants For Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill
40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 70	State Operating Permit Programs
40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 C.M.R. ch. 138 (NO_x RACT), is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons per year. Air Emission License Amendment A-214-71-U-A, issued 12/20/1995, addressed NO_x RACT requirements for equipment at the facility. The existing low NO_x burners and flue gas recirculation on Power Boiler #3, the circulating fluidized bed technology for Cogen Boilers #6 and #7, the NO_x CEMS on Recovery Boiler C, in addition to the established NO_x emission limits, were determined to meet NO_x RACT requirements. The NO_x RACT requirements are incorporated in this renewal.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment. Air Emission License Amendment A-214-71-X-A, issued 12/20/1995, addressed VOC RACT requirements for the Bleach Plant, Wastewater Treatment Facility, Pulp Stock Washer Systems, Pulp Liquor Storage Tanks, Digesters and Multiple Effect Evaporators, Smelt Tank C, and the Lime Kiln. VOC RACT requirements are incorporated in this license renewal.

D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98, is applicable to some facilities as addressed in *General Provisions, Who must report?*, 40 C.F.R. § 98.2. These are not considered "applicable requirements" for the purposes of Part 70 licenses. Therefore, this information is presented for informational purposes only.

E. Best Available Retrofit Technology (BART)

With the removal of Boiler #5 in A-214-77-11-O (2/27/2013), the facility no longer has any unit subject to BART requirements.

F. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (100 tpy for any pollutant).

This regulation's 40 C.F.R. § 64.2(b)(1)(vi) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. Furthermore, 40 C.F.R. § 64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission unit subject to emission limitations or standards in a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation proposed by the Administrator after November 15, 1990. [40 C.F.R. Part 64 § 64.2(b)]

The following table lists all the specific pollutants for each unit meeting CAM applicability criteria and the determination of the applicability of CAM requirements for each.

40 C.F.R. Part 64 Applicability Table

Units	Pollutant	CAM Required	Reason	Regulatory Authority
Power Boiler #3	PM/PM_{10}	No	Subject to emissions limits in NESHAP 40 C.F.R. Part 63, Subpart DDDDD proposed after November 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
	SO_2	No	Operating a SO_2 CEMS	40 C.F.R. § 64.2(b)(1)(vi)
	NO_x	No	Operating a NO_x CEMS	40 C.F.R. § 64.2(b)(1)(vi)

Units	Pollutant	CAM Required	Reason	Regulatory Authority
Cogen Boilers #6 & #7	PM/PM_{10}	No	Operating a COMS; Subject to standards in NSPS 40 C.F.R. Part 60, Subpart Db and NESHAP 40 C.F.R. Part 63, Subpart DDDDD proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 CFR § 64.2(b)(1)(i)
	SO_2	No	Operating a SO_2 CEMS; Subject to standard in NSPS 40 C.F.R. Part 60, Subpart Db proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(b)(1)(i)
	NO_x	No	Operating a NO_x CEMS; Subject to standard in NSPS 40 C.F.R. Part 60, Subpart Db proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 CFR § 64.2(b)(1)(i)
Lime Kiln	PM/PM_{10}	No	Subject to standards in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990, and NESHAP 40 C.F.R. Part 63, Subpart MM proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
	SO_2	No	No SO_2-specific control device	40 C.F.R. § 64.2(a)
	NO_x	No	No NO_x-specific control device	40 C.F.R. § 64.2(a)
	TRS	No	Operating a TRS CEMS and Subject to standard in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(b)(1)(i)
Recovery Boiler C	PM/PM_{10}	No	Operating a COMS; Subject to standards in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990 and NESHAP 40 C.F.R. Part 63, Subpart MM proposed after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(b)(1)(i)
	SO_2	No	Operating a SO_2 CEMS and No SO_2-specific control device	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(a)
	NO_x	No	Operating a NO_x CEMS and No NO_x-specific control device	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(a)
	TRS	No	Operating a TRS CEMS and Subject to standard in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990	40 C.F.R. § 64.2(b)(1)(vi) 40 C.F.R. § 64.2(b)(1)(i)

Units	Pollutant	CAM Required	Reason	Regulatory Authority
Smelt Tank C	PM/PM_{10}	No	Subject to standards in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990, and NESHAP 40 C.F.R. Part 63, Subpart MM proposed after November 15, 1990	40 C.F.R. § 64.2(b)(1)(i)
	TRS	No	No TRS-specific control device, pre-control emissions less than 100 tpy, and Subject to standard in NSPS 40 C.F.R. Part 60, Subpart BB reissued after Nov. 15, 1990	40 C.F.R. § 64.2(a) 40 C.F.R. § 64.2(b)(1)(i)

Therefore, there are no units at this facility subject to CAM requirements.

G. Fuel Sulfur Content Requirements

Some equipment at NDP is licensed to fire distillate fuel. Pursuant to 38 M.R.S. § 603-A(2)(A)(3) no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, the distillate fuel purchased or otherwise obtained for use at this facility shall not exceed 0.0015% by weight (15 ppm).

Some equipment at NDP is licensed to fire residual fuel. Pursuant to 38 M.R.S. § 603-A(2)(A)(1) and (2) no person shall import, distribute, or offer for sale any residual fuel with a sulfur content greater than 0.5% by weight unless it will be combusted in a source that installs an approved flue gas desulfurization system or other prescribed sulfur removal device such that after control total SO_2 emissions do not exceed 1.92 lb/MMBtu in any 24-hour period. Power Boiler #3, Cogen Boilers #6 and #7, the Lime Kiln, and Recovery Boiler C all have approved sulfur control systems.

H. Power Boiler #3

Power Boiler #3 is used to provide steam for the manufacturing process. The boiler was manufactured in 1948 by Combustion Engineering and is licensed at a capacity of 300 MMBtu/hour. Power Boiler #3 is licensed to fire natural gas, non-condensable gases including LVHC and HVLC gases, stripper off-gases (SOG), specification and off-specification waste oil, and fuel oil. Emissions from Power Boiler #3 exit through Stack 3, which has an inside diameter of 96 inches and above ground level (AGL) height of 362 feet.

1. Control Equipment

Power Boiler #3 is equipped with low NO_x burners and flue gas recirculation (FGR) for the control of NO_x and a variable venturi scrubber for the removal of particulate matter and SO_2. The boiler is also equipped with a combustion system designed to ensure the optimal balance between control of NO_x and limitation of CO and VOC. The FGR system experiences downtime during soot blows due to several potential operational and safety issues, including plugging of the flue orifices with soot fines, thus rendering them inoperable; fouling the series of linkages which modulate air to the burner front, which in turn would hinder burner performance; and the risk of causing burner flame-out, which in turn may cause a boiler Master Fuel Trip.

Flue gas recirculation system downtime shall not be considered pollution control equipment downtime if it does not exceed 5% of boiler operating time per quarter (excluding downtime for soot blows). The Mill need not operate the associated Venturi Scrubber System for those periods of time when Boiler #3 is firing natural gas only.

2. Visible Emissions

a. 06-096 C.M.R. ch. 115, BACT

Power Boiler #3 is subject to the following visible emission limit established under BACT:

Visible emissions from Power Boiler #3 shall not exceed 20% opacity for more than 5 minutes in any one-hour period. [A-214-71-O-A (2/12/1993)]

b. 06-096 C.M.R. ch. 101

Power Boiler #3 is subject to 06-096 C.M.R. ch. 101. Pursuant to this rule, Power Boiler #3 is subject to the following visible emissions standards:

When firing only residual fuel, visible emissions from Power Boiler #3 shall not exceed an opacity of 20% on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction Power Boiler #3 shall not exceed 30% opacity for more than one hour (10 consecutive six-minute block averages) per event. Records must be kept of the date, time, and duration of each startup, shutdown, or malfunction event. [06-096 C.M.R. ch. 101, § 4(A)(1)(a)]

When firing only distillate fuel, visible emissions from Power Boiler #3 shall not exceed an opacity of 20% on a six-minute block average basis.
[06-096 C.M.R. ch. 101, § 4(A)(2)]

When firing only natural gas, visible emissions from Power Boiler #3 shall not exceed an opacity of 10% on a six-minute block average basis.
[06-096 C.M.R. ch. 101, § 4(A)(3)]

When firing more than one fuel simultaneously (including fuel oil, natural gas, and/or LVHCs, HVLCs, and SOGs), visible emissions from Power Boiler #3 shall not exceed an opacity of 30% on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction Power Boiler #3 shall not exceed 40% opacity for more than one hour (10 consecutive six-minute block averages) per event. Records must be kept of the date, time, and duration of each startup, shutdown, or malfunction event. [06-096 C.M.R. ch. 101, § 4(A)(6)(a)]

c. 06-096 C.M.R. ch. 140, BPT

With this license, the Department is establishing the following visible emissions standard through BPT:

When firing any fuel or combination of fuels other than only natural gas or only distillate fuel, visible emissions from Power Boiler #3 shall not exceed an opacity of 20% on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction Power Boiler #3 shall not exceed 30% opacity for more than one hour (10 consecutive six-minute block averages) per event. Records must be kept of the date, time, and duration of each startup, shutdown, or malfunction event.

d. Streamlining

The Department has determined that the BPT visible emissions standard is more stringent than the applicable limits in 06-096 C.M.R. ch. 101 and the previously licensed BACT standard when firing any combination of fuels other than only natural gas or only distillate fuel. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limits with the federally enforceable limits in 06-096 C.M.R. ch. 101 makes the BPT limit federally enforceable.

Power Boiler #3 continues to be subject to the visible emissions limits established pursuant to 06-096 C.M.R. ch. 101 when firing only natural gas or only distillate fuel.

3. Flue Gas Desulfurization

NDP operates a venturi scrubber on the exhaust from Power Boiler #3 for SO_2 control, which is an approved flue gas desulfurization system. The SO_2 lb/MMBtu emission

limits established for Power Boiler #3 is lower than the lb/MMBtu limit required by 06-096 C.M.R. ch. 106 §5; thus, NDP shall continue to be licensed to fire in this boiler residual fuel with a sulfur content in excess of 0.5% by weight, providing that the approved flue gas desulfurization system is operated and SO_2 emissions do not exceed the applicable lb/MMBtu limit.

4. *NO_x RACT*, 06-096 C.M.R. ch. 138

   NO_x RACT for Power Boiler #3 was determined to be the current control equipment (a low-NO_x burner system and flue gas recirculation (FGR)), use of a NO_x CEMS to continuously monitor emissions, and compliance with the unit's licensed emissions limits. [A-214-71-U-A (12/20/1995)]

   Power Boiler #3 is considered a mid-size boiler. NDP is not located in a moderate nonattainment area for ozone, nor was it when 06-096 C.M.R. ch. 138 was promulgated in 1995. Therefore, pursuant to 06-096 C.M.R. ch. 138, § 1(A)(1), Power Boiler #3 is subject to the standards in §§ 3 and 6 of this rule.

   Section 3(B)(2)(a) of 06-096 C.M.R. ch. 138 contains a standard for mid-size boilers not located in a 1995 Moderate Nonattainment Area that fire oil unless the facility installs low-NO_x burners or equivalent control strategies. Boiler #3 is equipped with low-NO_x burners and FGR. Therefore, this standard does not apply.

   Section 6 of 06-096 C.M.R. ch. 138 addresses alternative emission limits for periods of startup and shutdown for affected units with an applicable standard pursuant §§ 3 or 4 of this rule and that demonstrate compliance through use of a CEMS. There is no applicable standard for Boiler #3 in §§ 3 or 4 of this rule; therefore, § 6 of this rule is not applicable to Boiler #3.

5. *NO_x Control Program*, 06-096 C.M.R. ch. 145

   Power Boiler #3 is not subject to *NO_x Control Program*, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located both within the Ozone Transport Region (OTR) and in a county that has not received a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act Amendments. NDP is located in a portion of the state that is no longer located in the OTR pursuant to approval of a Clean Air Act Section 176A petition effective March 14, 2022.

6. New Source Performance Standards

   Due to its age, Power Boiler #3 is not subject to the NSPS titled *Standards of Performance for Fossil-Fuel-Fired Steam Engines*, 40 C.F.R. Part 60, Subpart D. These standards apply to fossil-fuel and wood-residue-fired steam generating units

capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hr and constructed after August 17, 1971.

Similarly, due to its age, Power Boiler #3 is not subject to the NSPS titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. These standards apply to steam generating units greater than 100 MMBtu/hr constructed after June 19, 1984.

7. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Power Boiler #3 is located at a major source of HAP and therefore is not subject to *NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers,* 40 C.F.R. Part 63, Subpart JJJJJJ.

Power Boiler #3 is subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,* 40 C.F.R. Part 63, Subpart DDDDD. Power Boiler #3 has the potential to be classified in more than one subcategory. At the time of this license renewal, Power Boiler #3 is considered an existing boiler in the "units designed to burn gas 1 fuel" subcategory.

However, Power Boiler #3 could also operate as an existing boiler in the "units designed to burn liquid fuels" subcategory if it were to switch back to firing fuel oil. If more than 10% of the liquid heat input on an annual basis comes from heavy liquids (i.e., #6 fuel oil), Power Boiler #3 would be in the "units designed to burn heavy liquid fuels" subcategory. Otherwise, when firing fuel oil, Power Boiler #3 would be in the "units designed to burn light liquid fuels" subcategory.

Requirements for all potentially applicable subcategories are described below. Additionally, NDP may elect to demonstrate compliance under any other applicable subcategory in accordance with the requirements of 40 C.F.R. Part 63, Subpart DDDDD.

a. Gas 1 Fuel Subcategory

Boilers in the "units designed to burn gas 1" subcategory are not subject to the emission limits in Tables 1 and 2, or Tables 11 through 15, or the operating limits in Table 4. [40 C.F.R. § 63.7500(e)]

Fuel analyses are not required for boilers that fire a single type of fuel. [40 C.F.R. § 63.7510(a)(2)(i)]

b. Liquid Fuels Subcategories

When firing fuel oil, Power Boiler #3 uses a wet venturi scrubber to comply with the PM emission limit demonstrated through stack testing and is therefore subject to operating limits in Table 4 for scrubber pressure drop and flow rate as well as requirements in Tables 7 and 8 for establishing and demonstrating compliance with operating limits.

Power Boiler #3 is subject to emission limits for PM, hydrogen chloride (HCl), mercury (Hg), and CO pursuant to Tables 2 and 15 of 40 C.F.R. Part 63, Subpart DDDDD. Compliance with the PM and CO emission limits are demonstrated through periodic stack testing. Compliance with the HCl and Hg emission limits may be demonstrated either through periodic stack testing or fuel analysis. NDP elected to use fuel analysis to demonstrate compliance with Hg emission limits and stack testing to demonstrate compliance with HCl, but may opt for fuel analysis as allowed by the rule.

The following monitors are considered Continuous Monitoring Systems (CMS) for Power Boiler #3 under 40 C.F.R. Part 63, Subpart DDDDD:

- Scrubber Liquid Flow (gpm)
- Scrubber Pressure Drop (inches)
- SO_2 CEMS
- Oxygen (O_2) CEMS
- Power Boiler #3 Operating Load

Power Boiler #3 does not have a continuous oxygen trim system.

NDP does not utilize emissions averaging or efficiency credits to comply with Subpart DDDDD.

Power Boiler #3 uses paragraph (2) of the definition of “startup” as follows: The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling, or process purposes, or producing electricity, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends four hours after when the boiler supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier.

(1) Emission Limits, Heavy Liquid Fuels Subcategory

If Power Boiler #3 fires fuel oil and 10% or more of the fuel oil fired on an annual heat input basis is heavy oil, NDP shall comply with the following:

(i) Until October 6, 2025, Power Boiler #3 is subject to the following emission limits at all times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

Pollutant	Emission Limit
PM (filterable)	6.2×10^{-2} lb/MMBtu
CO	130 ppm by volume on a dry basis corrected to 3% O_2, 3-run average
HCl	1.1×10^{-3} lb/MMBtu
Hg	2.0×10^{-6} lb/MMBtu

[40 C.F.R. §§ 63.7500(a)(1) and (f) and Table 15, Rows 14 and 15]

(ii) Beginning October 6, 2025, Power Boiler #3 is subject to the following emission limits at all times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

Pollutant	Emission Limit
PM (filterable)	5.9×10^{-2} lb/MMBtu
CO	130 ppm by volume on a dry basis corrected to 3% O_2, 3-run average
HCl	1.1×10^{-3} lb/MMBtu
Hg	7.3×10^{-7} lb/MMBtu

[40 C.F.R. §§ 63.7500(a)(1) and (f) and Table 2, Rows 14 and 15]

(2) Emission Limits, Light Liquid Fuels Subcategory

If Power Boiler #3 fires fuel oil and less than 10% of the fuel oil fired on an annual heat input basis is heavy oil, NDP shall comply with the following:

(i) Until October 6, 2025, Power Boiler #3 is subject to the following emission limits at all times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

Pollutant	Emission Limit
PM (filterable)	7.9×10^{-3} lb/MMBtu
CO	130 ppm by volume on a dry basis corrected to 3% O_2, 3-run average
HCl	1.1×10^{-3} lb/MMBtu
Hg	2.0×10^{-6} lb/MMBtu

[40 C.F.R. §§ 63.7500(a)(1) and (f) and Table 15, Rows 14 and 16]

(ii) Beginning October 6, 2025, Power Boiler #3 is subject to the following emission limits at all times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

Pollutant	Emission Limit
PM (filterable)	7.9×10^{-3} lb/MMBtu
CO	130 ppm by volume on a dry basis corrected to 3% O_2, 3-run average
HCl	1.1×10^{-3} lb/MMBtu
Hg	7.3×10^{-7} lb/MMBtu

[40 C.F.R. §§ 63.7500(a)(1) and (f) and Table 2, Rows 14 and 16]

(3) Operating Limits

(i) Power Boiler #3 is subject to the following operating limits at all operating times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

1. The 30-day rolling average pressure drop on the wet scrubber shall be maintained at or above the lowest one-hour pressure drop measured during the most recent successful PM performance test of representative conditions. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 1]
2. The 30-day rolling average liquid flow rate on the wet scrubber shall be maintained at or above the lowest one-hour liquid flow rate measured during the most recent successful PM performance test of representative conditions. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 1]

3. The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]
4. The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test.
   [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]
5. The 30-day rolling average SO_2 emission rate shall not exceed the highest hourly average SO_2 concentration measured during the most recent successful HCl performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 9]

(4) Work Practice Standards

(i) In accordance with paragraph (2) of the definition of "startup," startup begins when fuel is fired in Power Boiler #3 and ends four hours after steam or heat is supplied for heating, cooling, process purposes, or electricity generation, whichever is earlier. Power Boiler #3 is subject to the following work practice standards during startup:

1. NDP shall operate all CMS during startup.
2. NDP shall use only clean fuels during startup. (See Definitions section.)
3. Once Power Boiler #3 starts firing fuels that are not clean fuels, NDP shall engage all applicable control devices so as to comply with the emission limits within four hours of starting to supply useful thermal energy.
4. NDP shall engage and operate the PM control (venturi scrubber) within one hour of firing fuels that are not clean fuels.
5. NDP shall develop and implement a written startup and shutdown plan as specified in 40 C.F.R. § 63.7505(e).

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 5]

(ii) Shutdown begins when Power Boiler #3 no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler (whichever is earlier) and ends when Power Boiler #3 is no longer supplying useful thermal energy and no fuel is being combusted in the boiler. NDP is subject to the following work practice standards during shutdown:

1. NDP shall operate all CMS during shutdown.
2. When firing fuels that are not clean fuels during shutdown, NDP shall operate all applicable control devices.

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 6]

(5) Performance Tests

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. NDP has elected to use performance tests for HCl and fuel analysis for Hg for Power Boiler #3. However, NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

(i) Except as provided in the next paragraph, NDP shall conduct performance stack tests for PM and CO annually. If electing to demonstrate compliance with HCl and/or Hg through performance testing, such tests shall be conducted annually. Annual performance tests must be completed no more than 13 months after the previous performance test.
[40 C.F.R. § 63.7515(a)]

(ii) If the performance tests for a given pollutant for at least 2 consecutive years show that emissions are at or below 75% of the emission limit for that pollutant, and there are no changes in the operation of Power Boiler #3 or its associated air pollution control equipment that could increase emissions, NDP may elect to conduct performance tests for that pollutant every third year. The subsequent performance tests must be conducted no more than 37 months after the previous performance test. If a performance stack test shows emissions exceed 75% of the emission limit for a pollutant, NDP shall resume conducting annual performance stack testing for that pollutant until all performance stack tests for that pollutant over a 2-year period are at or below 75% of the pollutant's emission limit. [40 C.F.R. §§ 63.7515(b) and (c)]

(iii) Performance tests which are conducted shall be performed in accordance with requirements in Table 5. [40 C.F.R. § 63.7520(b)]

(iv) NDP shall:

1. Conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury (more than one performance test may be required);
2. Demonstrate compliance and establish operating limits based on these performance tests; and
3. Comply with the operating limit for operating load conditions specified in Table 4 following each performance test and until the next performance test.

[40 C.F.R. § 63.7520(c)]

(v) NDP shall conduct a minimum of three separate test runs for each performance test required. [40 C.F.R. § 63.7520(d)]

(vi) NDP shall use the methodology in § 63.7520(e) to convert measured concentrations to lb/MMBtu emission rates for compliance purposes. If the measured concentration is below the detection level of the method used, NDP shall use the method detection level as the measured emissions level for the pollutant in calculating compliance. [40 C.F.R. §§ 63.7520(e) and (f)]

(6) Fuel Analysis

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. NDP has elected to use performance tests for HCl and fuel analysis for Hg. However, NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

If electing to demonstrate compliance with HCl and/or Hg emission limits through fuel analysis, NDP shall comply with the following for Power Boiler #3:

(i) NDP shall conduct a monthly fuel analysis for HCl and/or Hg (as applicable) except as provided for in the next paragraph. Samples for monthly fuel analyses shall be taken no less than 14 calendar days apart unless multiple samples are taken per month. [40 C.F.R. § 63.7515(e)]

(ii) If each of 12 consecutive monthly fuel analysis for a given pollutant demonstrates 75% or less of the compliance level for that pollutant, NDP may elect to decrease fuel analysis frequency for that pollutant to quarterly. If any quarterly sample exceeds 75% of the compliance level for a given pollutant, NDP shall return to monthly monitoring until 12 consecutive months of fuel analysis are again less than 75% of the compliance level. [40 C.F.R. § 63.7515(e)]

(iii) Fuel analyses which are conducted shall be performed in accordance with Table 6. The concentration of pollutants shall be determined in units of lb/MMBtu. [40 C.F.R. §§ 63.7521(a) & (e)]

(iv) For Power Boiler #3, fuel analysis is only required for fuel oil since it is the only type of fuel fired in the boiler subject to an emission limit in Tables 2 or 15. [40 C.F.R. § 63.7521(a)]

(v) Power Boiler #3 is not subject to the composite fuel sampling requirements contained in 40 C.F.R. §§ 63.7521(c) and (d) since both gaseous and liquid fuels are exempt pursuant to 40 C.F.R. § 63.7521(a).

(vi) NDP shall develop a site-specific fuel monitoring plan according to the procedures and requirements of 40 C.F.R. §§ 63.7521(b)(1) and (2). [40 C.F.R. § 63.7521(b)]

(7) Continuous Compliance and Monitoring Requirements

(i) NDP shall operate and maintain an oxygen analyzer system, as defined in § 63.7575. The oxygen analyzer system is considered a CMS. [40 C.F.R. § 63.7525(a)]

(ii) A PM continuous parameter monitoring system (PM CPMS) is required for boilers in the unit designed to burn heavy liquid fuel subcategory which have an annual heat input rate greater than 250 MMBtu/hr from heavy liquid. [40 C.F.R. § 63.7525(b)]

Although Power Boiler #3 is in the unit designed to burn heavy liquid fuel subcategory, the main fuel source for the boiler is natural gas, and the average annual heat input from heavy liquid is less than 250 MMBtu/hr. If Power Boiler #3 exceeds an average annual heat input of 250 MMBtu/hr from fuel oil (12-month rolling average basis), it will immediately become subject to the PM CPMS monitoring requirements of the rule.

(iii) NDP shall install, operate, and maintain a CMS in order to demonstrate compliance with the operating load limit and the 30-day rolling average limits on scrubber pressure drop, scrubber flow rate, oxygen content, and SO_2 emission rate in accordance with §§ 63.7525(d)(1) through (5). [40 C.F.R § 63.7525(d)]

(iv) The scrubber flow monitoring system shall meet the requirements of 40 C.F.R. § 63.7525(e).

(v) The scrubber pressure monitoring system shall meet the requirements of 40 C.F.R. § 63.7525(f).

(vi) NDP shall install, certify, operate, and maintain an SO_2 CEMS according to either 40 C.F.R. Part 60 or 40 C.F.R. Part 75. [40 C.F.R. § 63.7525(m)]

(vii) For each CMS, NDP shall develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality

control elements outlined in 40 C.F.R. §§ 63.8(d) and 63.7505(d)(1)(i) through (iii). NDP is not required to develop or submit a site-specific monitoring plan for the SO_2 CEMS if it is operated according to the performance specifications of 40 C.F.R. Part 60, Appendix B. [40 C.F.R. § 63.7505(d)(1)]

(viii) NDP shall monitor and collect CMS data according to 40 C.F.R. § 63.7535. [40 C.F.R. § 63.7535(a)]

1. NDP shall operate the monitoring systems and collect data at all required intervals at all times that Power Boiler #3 is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the facility's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. NDP shall complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [40 C.F.R. § 63.7535(b)]

2. NDP may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. NDP shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. NDP shall use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. [40 C.F.R. § 63.7535(c)]

3. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring

results, no data shall be used that was collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. NDP shall calculate monitoring results using all other monitoring data collected while the process is operating. NDP shall report all periods when the monitoring system is out of control in the semi-annual report. [40 C.F.R. § 63.7535(d)]

4. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. [40 C.F.R. § 63.7540(a)(1)]

(8) Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

(i) Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
(ii) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]
(iii) For the SO_2 CEMS, the records described in 40 C.F.R. §§ 63.7555(b)(1) through (5);
(iv) Records required by 40 C.F.R. Part 63, Subpart DDDDD, Table 8 including records of all monitoring data and calculated averages for applicable operating limits (including scrubber pressure drop and flow rate, monthly fuel analyses, oxygen content, boiler operating load, and SO_2 emissions) to show continuous compliance with each emission limit; [40 C.F.R. § 63.7555(c)]
(v) Monthly fuel use including the types and amounts of fuel fired; [40 C.F.R. § 63.7555(d)(1)]
(vi) Copies of all calculations and supporting documentation of maximum chlorine and mercury fuel input or emission rates (as applicable) that were done to demonstrate continuous compliance with the HCl and Hg emission limits. [40 C.F.R. §§ 63.7555(d)(3) and (4)]
(vii) If NDP elects to stack test less frequently than annually, records that document that the emissions in the previous stack test(s) were less than 75% of the applicable emission limit and documentation that there was no change in source operations including fuel composition and operation of

air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year; [40 C.F.R. § 63.7555(d)(5)]

(viii) Records of the occurrence and duration of each malfunction of Power Boiler #3 or of the associated air pollution control and monitoring equipment; [40 C.F.R. § 63.7555(d)(6)]

(ix) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.7555(d)(7)]

(x) Records of the calendar date, time, occurrence, and duration of each startup and shutdown; [40 C.F.R. § 63.7555(d)(9)]

(xi) Records of the type(s) and amount(s) of fuel used during each startup and shutdown; [40 C.F.R. § 63.7555(d)(10)]

(xii) For each startup period, records of the time that clean fuel combustion begins; the time NDP starts feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged; [40 C.F.R. § 63.7555(d)(11)]

(xiii) For each startup period, records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data collected during each startup period to confirm that the control devices are engaged; [40 C.F.R. § 63.7555(d)(12)] and

(xiv) When firing fuel oil, records of the scrubber's liquid flow rate and pressure drop during each hour of startup. [40 C.F.R. § 63.7555(d)(12)(iii)]

(9) Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

(i) NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.7545(d)]

(ii) Pursuant to 40 C.F.R. § 63.7550(h)(1), NDP is required to submit the results of each performance test to EPA within 60 days after the date of completing each performance test. However, 06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d), i.e., Standard Condition (8)(D), requires results of performance tests to be submitted to the Department within 30 days from the date of test completion. NDP has requested that these requirements be streamlined to avoid confusion. Therefore, only the more stringent (30-day) requirement is referenced in the Order of this license.

The performance stack test report must verify that the operating limits for Power Boiler #3 have not changed or provide documentation of the revised operating limits established. [40 C.F.R. §§ 63.7515(f)]

(iii) Within 60 days after the date of completing each CEMS performance evaluation, NDP shall submit the results of the CEMS performance evaluation to EPA and the Department. [40 C.F.R. § 63.7550(h)2)]

(iv) NDP shall prepare and submit to EPA and the Department a compliance report every six months which contains the information contained in §§ 63.7540(b) and 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]

(v) Each semi-annual compliance report shall cover the reporting period of January 1 through June 30 or July 1 through December 31 (as applicable). Each semi-annual compliance report shall be postmarked or submitted no later than July 31 or January 31 (respectively). [40 C.F.R. §§ 63.7550(b)(3) and (4)]

(vi) Semi-annual compliance reports, results of compliance tests, and results of CEMS performance evaluations shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

c. General Requirements

The following requirements are applicable to Power Boiler #3 regardless of which subcategory compliance is being demonstrated with.

(1) Continuous Compliance

At all times, NDP must operate and maintain Power Boiler #3, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

(2) Work Practice Standards

(i) Power Boiler #3 does not have a continuous oxygen trim system. Therefore, as a work practice standard, NDP shall perform annual tune-ups on Power Boiler #3 as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 13 months after the previous tune-up. NDP shall conduct the tune-up while burning the type of fuels that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [40 C.F.R. §§ 63.7515(d), 63.7540(a)(10), and Table 3, Row 3]

(ii) If Power Boiler #3 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]

(3) Recordkeeping

(i) Records shall be kept for a period of 5 years. [40 C.F.R. § 63.7560(b)] [Note: All records must be kept for a period of 6 years pursuant to Standard Condition (6).]

(ii) Records shall be kept on-site, or be accessible from on-site, for at least 2 years. Records may be kept off site for the remaining 3 years. [40 C.F.R. § 63.7560(c)]

8. Emission Limits and Streamlining

For Power Boiler #3, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.03 lb/MMBtu firing only natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.03 lb/MMBtu firing only natural gas
	0.05 lb/MMBtu firing any combination of fuels other than 1) only natural gas or 2) fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	* Streamlined to the following: When operating in the heavy liquid fuels subcategory until 10/6/2025: 6.2×10^{-2} lb/MMBtu When operating in the heavy liquid fuels subcategory on 10/6/2025 and after: 5.9×10^{-2} lb/MMBtu When operating in the light liquid fuels subcategory: 7.9×10^{-3} lb/MMBtu See Note 3
	6.2×10^{-2} lb/MMBtu operating in the heavy liquid fuels subcategory until 10/6/2025 See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 15(b)	
	5.9×10^{-2} lb/MMBtu operating in the heavy liquid fuels subcategory 10/6/2025 and after See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 15(b)	
	7.9×10^{-3} lb/MMBtu operating in the light liquid fuels subcategory See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 16(b)	
	0.20 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(A)(1)	
	0.08 lb/MMBtu firing fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	15.0 lb/hr firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	15.0 lb/hr firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs
	24.0 lb/hr firing fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	18.6 lb/hr * when firing fuel oil
	18.6 lb/hr when firing fuel oil (based on 0.062 lb/MMBtu)	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	
PM_{10}	0.03 lb/MMBtu firing only natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.03 lb/MMBtu firing only natural gas
	0.05 lb/MMBtu firing any combination of fuels other than 1) only natural gas or 2) fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.05 lb/MMBtu firing any combination of fuels other than 1) only natural gas or 2) fuel oil with any two or more of LVHCs, SOGs, HVLCs
	0.08 lb/MMBtu firing fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.08 lb/MMBtu firing fuel oil with any two or more of LVHCs, SOGs, HVLCs
	15.0 lb/hr firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	15.0 lb/hr firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs
	24.0 lb/hr firing fuel oil with any two or more of LVHCs, SOGs, HVLCs	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	24.0 lb/hr firing fuel oil with any two or more of LVHCs, SOGs, HVLCs
SO_2	1.92 lb/MMBtu 24-hr rolling avg	06-096 C.M.R. ch. 106, § 5(A)	0.26 lb/MMBtu * 24-hr block avg
	0.26 lb/MMBtu 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	
	78.0 lb/hr 3-hr block avg See Notes 1 & 2	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	78.0 lb/hr 3-hr block avg See Notes 1 & 2

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	0.40 lb/MMBtu 30-day rolling avg firing any fuel other than only natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.40 lb/MMBtu 30-day rolling avg firing any fuel other than only natural gas
	0.20 lb/MMBtu 30-day rolling avg firing only natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.20 lb/MMBtu 30-day rolling avg firing only natural gas
	120.0 lb/hr 30-day rolling avg	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	120.0 lb/hr 30-day rolling avg
CO	0.20 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.20 lb/MMBtu
	130 ppmdv @ 3% O_2 firing fuel oil See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Rows 15(a) and 16(a)	130 ppmdv @ 3% O_2 firing fuel oil See Note 3
	60.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	60.0 lb/hr
VOC	0.015 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.015 lb/MMBtu
	4.5 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	4.5 lb/hr
HCl	1.1×10^{-3} lb/MMBtu firing fuel oil See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 14(a)	1.1×10^{-3} lb/MMBtu firing fuel oil See Note 3
Hg	2.0×10^{-6} lb/MMBtu firing fuel oil until 10/6/2025 See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 14(b)	2.0×10^{-6} lb/MMBtu firing fuel oil until 10/6/2025 See Note 3
Hg	7.3×10^{-7} lb/MMBtu firing fuel oil on 10/6/2025 and after See Note 3	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 14(b)	7.3×10^{-7} lb/MMBtu firing fuel oil on 10/6/2025 and after See Note 3
Visible Emissions	As described earlier in this license.		

Note 1: When emissions of SO_2 from Boilers #6 and #7 (combined) exceed 352.8 lb/hr, emissions from Power Boiler #3 shall not exceed 60.0 lb/hr of SO_2 on a 3-hr block average basis. [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 2: When emissions of SO_2 from Recovery Boiler C exceed 206.3 lb/hr, emissions from Power Boiler #3 shall not exceed 60.0 lb/hr of SO_2 on a 3-hr block average basis. [06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

Note 3: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

9. Emission Limit Compliance Methods

Compliance with the emission limits associated with Power Boiler #3 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart DDDDD (See Note 1)
	lb/hr		
PM_{10}	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	lb/MMBtu	NO_x CEMS - 30-day rolling average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	NO_x CEMS, 30-day rolling average	
CO	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
	ppmdv		
	lb/hr		
VOC	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
	lb/hr		
HCl	lb/MMBtu	Either performance testing or fuel analysis in accordance with 40 C.F.R. Part 63, Subpart DDDDD	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
Hg	lb/MMBtu		
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

Note 1: Performance testing for PM lb/MMBtu is subject to a frequency of once every two qualifying years established by 06-096 C.M.R. ch. 115, BPT in A-214-77-4-A (12/26/2007). The Department has determined that the testing frequency established by 40 C.F.R. Part 63, Subpart DDDDD is more stringent than the BPT frequency. Therefore, the performance testing frequency for this pollutant has been streamlined to the more stringent standard, and only this more stringent standard shall be included in the air emission license.

10. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Power Boiler #3 and its associated air pollution control equipment.

a. Hours Power Boiler #3 was operating on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
b. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. § 63.7555(d)(1)]
c. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]
d. Records to demonstrate that the average annual heat input from fuel oil in Power Boiler #3 does not exceed 250 MMBtu/hr (12-month rolling average basis); [40 C.F.R. § 70.6(c)(1)]
e. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart DDDDD (described earlier); and
f. Records of any maintenance activities performed (planned or unplanned) on the venturi scrubber. [40 C.F.R. § 63.7500(a)(3)]

11. Parameter Monitors

When firing fuel oil, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for Power Boiler #3 and its associated air pollution control equipment:

Parameter	Averaging Period	Origin and Authority
Operating Load	30-day rolling average	40 C.F.R. § 63.7505(c) & § 63.7525(d)
Scrubber Flow Rate		40 C.F.R. § 63.7505(c) & § 63.7525(e)
Scrubber Pressure Drop		40 C.F.R. § 63.7505(c) & § 63.7525(f)

12. CEMS

The following are required continuous emission monitoring systems (CEMS) for Power Boiler #3.

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	30-day rolling average	06-096 C.M.R. ch. 117, § 1(B)(2)
	lb/hr	30-day rolling average	
O_2 CEMS	%	24-hr daily block average, 30-day rolling average, 90-day rolling average (as applicable)	40 C.F.R. § 63.7505(c) & § 63.7525(a) 06-096 C.M.R. ch. 117, § 1(B)(9)
SO_2 CEMS	lb/MMBtu	24-hour block average	40 C.F.R. § 63.7525(m) and 06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)
	lb/hr	3-hour block average	

I. Cogen Boilers #6 and #7

Cogeneration (Cogen) Boilers #6 and #7 are identical, circulating fluidized bed (CFB) boilers manufactured by Pyropower. Each of the Cogen Boilers is equipped with Coen Model 4 oil burners. These boilers commenced construction in 1986 and started operation in 1990. Each has a rated capacity of 610 MMBtu/hour (annual) and 630 MMBtu/hour (24-hour period). Emissions from the two boilers exit through a common stack (Stack #6/7) and share common COMS and CEMS for SO_2, NO_x, O_2, CO_2, and opacity. The stack has an inside diameter of 11.5 feet and a height of 411 feet AGL.

Cogen Boilers #6 and #7 are licensed to fire a variety of fuels, including coal, natural gas, HVLCs, LVHCs, SOGs, biomass (including wood waste, creosote-treated wood (CTW), wastewater treatment plant sludge, construction demolition debris (CDD), and waste papers), tire derived fuel (TDF), delayed petroleum coke (DPC), lime kiln rejects, oil (including specification waste oil, off-specification waste oil, and fuel oil with a sulfur content not to exceed 2.5% by weight), and old corrugated cardboard and double-lined kraft (collectively referred to as OCC) residuals. The firing rate capacity of Cogen Boilers #6 and #7 depends on what fuel or fuel mixture is employed.

1. Control Equipment

Cogen Boilers #6 and #7 each are equipped with CFB combustion, limestone injection, and an electrostatic precipitator (ESP) for control of air emissions. Flue gases from Cogen Boilers #6 and #7 pass separately though multi-cyclones and an ESP to reduce particulate matter emissions from each boiler. Each ESP has one chamber and 4 fields per chamber and is powered by 6 transformer rectifier (T.R.) sets. The ESPs have demonstrated compliance with emission limits while operating two of the four fields

per ESP. Stack testing has demonstrated compliance in this mode and is considered to meet BACT for operational purposes.

NDP shall operate for each boiler, at a minimum, the number of ESP fields in operation during the most recent performance test demonstrating compliance with licensed PM emission limits except as allowed under the work practice standards of Table 3 of 40 C.F.R. Part 63, Subpart DDDD. Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Performance Testing Guidance, NDP may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall NDP be relieved of its obligation to meet its licensed emission limits.

2. Flue Gas Desulfurization

NDP operates circulating limestone beds in Cogen Boilers #6 and #7 for SO_2 control, which are approved flue gas desulfurization systems. The SO_2 lb/MMBtu emission limits established for Cogen Boilers #6 and #7 are lower than the lb/MMBtu limit required by 06-096 C.M.R. ch. 106 §5; thus, NDP shall continue to be licensed to fire in these two boilers fuel oil with a sulfur content in excess of 0.5% by weight, providing that the approved flue gas desulfurization system is operated and SO_2 emissions do not exceed the applicable lb/MMBtu limit.

3. Fuel Classification

None of the fuel fired in Cogen Boilers #6 and #7 are considered solid waste.[1] In accordance with *Solid Wastes Used as Fuels or Ingredients in Combustion Units,* 40 C.F.R. Part 241, biomass, fuel oil, coal, and DPC are considered traditional fuels.

TDF is not a solid waste pursuant to 40 C.F.R. § 241.4(a)(1). NDP's wastewater treatment plant sludge is not a solid waste pursuant to 40 C.F.R. § 241.4(a)(4). CTW is not a solid waste pursuant to 40 C.F.R. § 241.4(a)(8).

CDD is not a solid waste pursuant to 40 C.F.R. § 241.4(a)(5) provided NDP obtains written certification from the CDD processing facility that the CDD has been processed by trained operators in accordance with best management practices as outlined in § 241.4(a)(5).

OCC residuals include both non-fiber and fibrous non-pulpable materials. Cogen Boilers #6 and #7 are designed to burn solid fuel and the fibrous OCC residuals meet the definition of paper recycling residuals in 40 C.F.R. § 241.2. Therefore, the fibrous

[1] The determinations that the fuels fired are not solid wastes is intended to apply to the applicability of federal air regulations only. Fuels may have different classifications under regulations administered by the Department's Bureau of Remediation and Waste Management.

OCC residuals are categorically not a solid waste when used as a fuel pursuant to 40 C.F.R. § 241.4(a)(6).

NDP affirms that the non-fibrous OCC residuals meet the legitimacy criteria pursuant to 40 C.F.R. §§ 241.3(b)(1) and 241.3(d)(1). This claim is supported by information provided in a letter to the Department dated October 21, 2020, showing that the non-fibrous OCC residuals will be managed as a valuable commodity, have a meaningful heating value, and contains contaminants at levels comparable in concentration (or lower) to the traditional fuel it replaces (biomass).

Therefore, both the fibrous and non-fibrous OCC residuals are not considered solid wastes when burned in the facility's boilers.

4. Visible Emissions

a. 06-096 C.M.R. ch. 101

Cogen Boilers #6 and #7 are exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 pursuant to Section 1(C)(7)(b) because the units are subject to a 10% opacity limit or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the applicable particulate matter (PM) or total select metals (TSM) emission limitation as described in Table 4 of 40 C.F.R. Part 63, Subpart DDDDD.

b. 40 C.F.R. Part 63, Subpart DDDDD

Cogen Boilers #6 and #7 are subject to the following visible emission standard pursuant to 40 C.F.R. Part 63, Subpart DDDDD:

> Visible emissions from Cogen Boilers #6 and #7 shall not exceed 10% opacity or the highest hourly average opacity reading measured during the most recent successful performance test demonstrating compliance with the PM emission limit. Compliance is based on a daily block average. This standard applies at all operating times except for periods of startup and shutdown, during which NDP shall comply with the applicable work practice standards.
> [40 C.F.R. §§ 63.7500(a)(2) and (f) and Table 4, Row 4(a)]

Note that compliance is based on a daily block average and not a six-minute block average. Due to the shared COMS for Cogen Boilers #6 and #7, the visible emissions limit above is inclusive of times when one boiler is in normal operation and the other is in startup or shutdown.

The terms "startup" and "shutdown" in this requirement refer to specific detailed definitions of those terms as provided in 40 C.F.R. § 63.7575. These definitions

apply only to requirements of Subpart DDDDD, and these terms may be defined differently when applied to other regulatory requirements as described below.

c. 40 C.F.R. Part 60, Subpart Db

Cogen Boilers #6 and #7 are subject to the following visible emission standard pursuant to 40 C.F.R. Part 60, Subpart Db:

> Visible emissions from Cogen Boilers #6 and #7 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction. [40 C.F.R. §§ 60.43b(f) and (g)]

Although the terms "startup" and "shutdown" are defined in 40 C.F.R. § 60.2, the definitions are vague and do not specify when the event begins or ends. Therefore, these terms, as they apply to the Subpart Db visible emission limit, are defined in greater detail in the BPT section below. "Malfunction" is defined as follows:

> *Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

d. 06-096 C.M.R. ch. 140, BPT

(1) Definitions
For the purposes of this license (except for the standards and requirements of 40 C.F.R. Part 63, Subpart DDDDD, which are subject to specific definitions for these terms), *Startup* and *Shutdown* shall be defined as follows. These definitions were established in Air Emission License A-214-70-G-R/A (2/13/2014) and are incorporated under 06-096 C.M.R. ch. 140, BPT.

> *Startup* includes the operational activities preceding and including the first fire of natural gas or fuel oil until the boiler has reached its rated temperature (955 °F) and pressure (1,310 psig), is firing only solid fuel, and is sustaining over 75% rated load.
>
> *Cold Startup* occurs after a boiler has been cooled from its rated operating pressure and temperature to a pressure of less than 50 psig. Typically, this occurs when a boiler has been taken offline for maintenance to perform a repair caused by a pressure part failure. A cold startup may require up to 36 hours for the boiler to be brought online in a methodical manner to allow the metals and refractory to expand in a uniform manner to prevent mechanical damage and/or thermal shock to the boiler. The boiler may be

started up without bed material if performing a refractory cure or with cold bed material as a result of being offline. The cold startup ends when the boiler has reached its rated temperature (955 °F) and pressure (1,310 psig), is firing only solid fuel, and is sustaining over 75% rated load.

Shutdown means the operational activities leading to the cessation of operation of a boiler. Shutdown includes the process of decreasing boiler firing rate, decreasing solid fuel firing, and removing bed material until a boiler ceases operation with a Master Fuel Trip (MFT).

(2) Alternate Limits

Consistent with the general provisions of both 40 C.F.R. Part 60 and Part 63, at all times, including periods of startup, shutdown, and malfunction, NDP must operate and maintain Cogen Boilers #6 and #7 and the associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires NDP to reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require NDP to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices.
[40 C.F.R. §§ 60.11(d) and 63.6(e)]

Additionally, 38 M.R.S. § 590.5 states:

In making license decisions and conditions, the Department shall consider the extent to which operation of the licensed facility requires an allowance for excess emissions during cold start-ups and shutdowns of the facility as long as that facility is operated to minimize emissions and is otherwise subject to applicable standards. When the applicant demonstrates to the Department that, consistent with best practical treatment requirements and other applicable standards, infrequent emissions are unavoidable during these periods, the Department shall establish appropriate license allowances and conditions.

Characteristics inherent to circulating fluidized bed (CFB) boilers can cause emissions during startup or shutdown operations to exceed the visible emissions standards applicable during steady state operation. CFBs require bed material to be circulated continuously in the boiler for proper combustion and heat transfer. During startup of these units, a significant amount of time is spent loading the bed material to facilitate a smooth startup. At the same time, oil is fired in the boilers to raise the combustion temperature until combustion of solid fuels can be sustained without oil firing. In addition, ESPs characteristically do

not function at maximum efficiency during the startup process due to flue gas characteristics.

During a planned shutdown, the bed material must remain in circulation for a period of time while it is being removed. Combustion of fuel is not occurring during this period and opacity events may be experienced.

National Fire Protection Association (NFPA) 85 Boiler and Combustion Systems Hazards Code (Section 7.6.2.5.4.3 of NFPA 85, edition 2011) requires that the ESP trip on interlock with a boiler Master Fuel Trip (MFT), which may result in unavoidable opacity exceedances. The code requirement is intended to prevent ignition of potentially explosive gases that may be present in the precipitator chamber following a boiler trip; therefore, when an affected unit experiences a MFT that is not the result of operator error or poor maintenance, it is a result of a malfunction as defined in 40 C.F.R. § 60.2. Thus, excess opacity during such events are not violations of the opacity standard in 40 C.F.R. Part 60, Subpart Db.

A previous air dispersion modeling analysis demonstrated that increased particulate emission rates from Cogen Boilers #6 and #7 did not violate ambient air quality standards for periods of time which most closely simulate startup and shutdown conditions. In addition, past ambient monitoring data collected from the area showed that short term opacity events from Cogen Boilers #6 and #7 did not have an effect on the short term monitored pollutant impact concentrations of the same time periods. Thus, in Air Emission License A-214-71-W-M (5/15/1995), NDP requested and was granted allowances for alternative visible emission limits and work practice standards for periods of startup or shutdown of Cogen Boilers #6 and #7 pursuant to 38 M.R.S. § 590.5. Additional parameter monitoring requirements shall be used to document the operation of a boiler during periods when the other boiler is in a period of startup or shutdown.

During periods of startup or shutdown, NDP shall comply with the alternate limits and compliance methods for Cogen Boilers #6 and #7 specified in the following paragraphs.

(i) When one of the two Cogen Boilers is in “normal” operation and the other has completed shutdown operations and is available for internal maintenance, visible emissions from the combined stack shall not exceed 60% opacity on a six-minute block average basis. NDP shall continue to operate the COMS and maintain records of opacity of emissions from the combined stack.

(ii) The identified period of alternate opacity compliance for Cogen Boiler #6 and/or #7 shall comply with each of the following:
   1. Cold Startups shall not exceed a maximum period of 36 hours per boiler;

2. All other startups or shutdowns shall not exceed a maximum period of 24 hours per boiler; and
3. The period of alternate opacity compliance shall begin upon the first six-minute value that is recorded to be in excess of 20% opacity on a six-minute block average basis.

(iii) When only one Cogen Boiler is in the process of startup or shutdown and the other is under "normal" operation, NDP shall continuously monitor and record once every half-hour the following surrogate parameters indicative of boiler performance for the Cogen Boiler under "normal" operation:

(a) Boiler air/fuel ratio;
(b) Boiler combustion O_2 trim control; and
(c) The operating ESP TR Set voltage and amperage

During a startup or a shutdown period, operation of the other boiler within the normal range of variation for the above parameters shall constitute compliance with the visible emission requirements of 40 C.F.R. Part 60, Subpart Db. Upon request from the Department, NDP shall submit copies of the records for these parameters.

5. *NO_x RACT*, 06-096 C.M.R. ch. 138

Cogen Boilers #6 and #7 are considered mid-size boilers. NDP is not located in a moderate nonattainment area for ozone, nor was it when 06-096 C.M.R. ch. 138 was promulgated in 1995. Therefore, pursuant to 06-096 C.M.R. ch. 138, § 1(A)(1), Cogen Boilers #6 and #7 are subject to the standards in §§ 3 and 6 of this rule.

In 1995, the facility applied for, and the Department approved (A-214-71-U-A, 12/20/1995), an alternative RACT determination. The Department found that the current control equipment (circulating fluidized bed technology), use of a NO_x CEMS to continuously monitor emissions, and compliance with the licensed emissions limits was an inherently low-NO_x system that met the definition of an equivalent strategy. Therefore, the standards in § 4 of 06-096 C.M.R. ch. 138 do not apply to Cogen Boilers #6 and #7 pursuant to § 1(A)(1)(b).

Section 6 of 06-096 C.M.R. ch. 138 addresses alternative emission limits for periods of startup and shutdown for affected units with an applicable standard pursuant §§ 3 or 4 of this rule and that demonstrate compliance through use of a CEMS. There is no applicable standard for Cogen Boilers #6 and #7 in §§ 3 or 4 of this rule; therefore, § 6 of this rule is not applicable to Cogen Boilers #6 and #7.

6. *NO_x Control Program*, 06-096 C.M.R. ch. 145

Cogen Boilers #6 and #7 are not subject to *NO_x Control Program*, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located both within the OTR and in a county that has not received a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act Amendments. In 06-096 C.M.R. ch. 145, *fossil fuel-fired* is defined as "the combustion of fossil fuel either alone or in combination with any other fuel, where the fossil fuel combusted compromises 51% or greater of the annual (calendar year basis) heat input on a Btu basis."

Although Cogen Boilers #6 and #7 fire fossil fuel, it makes up less than 51% of the heat input to each boiler on an annual basis. Additionally, NDP is located in a portion of the state that is no longer located in the OTR pursuant to approval of a Clean Air Act Section 176A petition effective March 14, 2022.

7. New Source Performance Standards

Cogen Boilers #6 and #7 are not subject to the NSPS titled *Standards of Performance for Electric Utility Steam Generating Units*, 40 C.F.R. Part 60, Subpart Da. These standards apply to electric utility steam generating units capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hr and constructed after September 18, 1978. An electric utility steam generating unit is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW net-electrical output to any utility power distribution system for sale. Cogen Boilers #6 and #7 do not meet the definition of electric utility steam generating units.

Cogen Boilers #6 and #7 are subject to the NSPS titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Db. These standards apply to steam generating units greater than 100 MMBtu/hr and constructed after June 19, 1984.

NDP shall comply with all requirements of 40 C.F.R. Part 60, Subpart Db applicable to Cogen Boilers #6 and #7 including, but not limited to, the following:

a. Standards

Pursuant to 40 C.F.R. Part 60, Subpart Db, Cogen Boilers #6 and #7 are subject to emissions standards for PM, SO_2, and NO_x. These standards are identified in the Emission Limits and Streamlining table in this section.

Standards for opacity are described in Section II(I)(4)(c) of this license.

b. Monitoring Requirements

(1) NDP shall install, calibrate, maintain, and operate an SO_2 CEMS on Cogen Boilers #6 and #7 (each) and record the output of the system. [40 C.F.R. § 60.47b(a)]

(2) NDP shall install, calibrate, maintain, and operate a NO_x CEMS on Cogen Boilers #6 and #7 (each) and record the output of the system. [40 C.F.R. § 60.48b(b)(1)]

(3) NDP shall install, calibrate, maintain, and operate an O_2 CEMS on Cogen Boilers #6 and #7 (each) and record the output of the system. [40 C.F.R. §§ 60.47b(a) and 60.48b(b)(1)]

(4) NDP shall install, calibrate, maintain, and operate a COMS on Cogen Boilers #6 and #7 and record the output of the system. [40 C.F.R. § 60.48b(a)]

(5) The span value for the COMS shall be as determined by 40 C.F.R. § 60.48b(e). [40 C.F.R. § 60.48b(e)(1)]

c. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 60, Subpart Db including, but not limited to, the following:

(1) The amounts of each fuel combusted during each day. [40 C.F.R. § 60.49b(d)(1)]
(2) Calculations documenting the annual capacity factor individually for coal, fuel oil, natural gas, and wood on a 12-month rolling average basis. [40 C.F.R. § 60.49b(d)(1)]
(3) Records of COMS data and calculated averages. [40 C.F.R. § 60.49b(f)]
(4) Records of NO_x CEMS data as specified in 40 C.F.R. § 60.49b(g).

d. Reports

NDP shall prepare and submit to the Department and EPA the following reports every six months. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 60.49b(w)]

(1) Excess emissions report. Excess emissions are defined as:

(i) All six-minute periods during which the average opacity exceeds the standard; and

(ii) Any calculated 30-day rolling average NO_x emission rate that exceeds the applicable emission limits.
[40 C.F.R. § 60.49b(h)]

(2) Reports containing the information in 40 C.F.R. §§ 60.49b(k) and (m), as applicable.

8. National Emissions Standards for Hazardous Air Pollutants

Cogen Boilers #6 and #7 are located at a major source of HAP and therefore are not subject to *NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers,* 40 C.F.R. Part 63, Subpart JJJJJJ.

Cogen Boilers #6 and #7 are subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,* 40 C.F.R. Part 63, Subpart DDDDD. Cogen Boilers #6 and #7 are categorized as existing boilers in the "fluidized bed units designed to burn biomass/bio-based solid" subcategory. Boilers in this subcategory are subject to emission limits in Tables 2 and 15 and work practice standards in Table 3 of 40 C.F.R. Part 63, Subpart DDDDD. NDP may elect to demonstrate compliance with any applicable subcategory and may elect to change the methods for demonstrating compliance within each subcategory as provided for in 40 C.F.R. Part 63, Subpart DDDDD. This flexibility is intended to be provided throughout this license.

Cogen Boilers #6 and #7 use ESPs to comply with the PM emission limit demonstrated through stack testing and is therefore subject to operating limits in Table 4 for opacity. NDP is also required to operate a COMS.

The fluidized limestone beds used by Cogen Boilers #6 and #7 are included in the definition of "dry scrubber" included in this regulation.

Cogen Boilers #6 and #7 are subject to emission limits for PM, HCl, Hg, and CO. Compliance with the PM and CO emission limits are demonstrated through periodic stack testing. Compliance with the HCl and Hg emission limits may be demonstrated either through periodic stack testing or fuel analysis.

The following monitors are considered CMS for Cogen Boilers #6 and #7 under 40 C.F.R. Part 63, Subpart DDDDD:

- SO_2 CEMS (when demonstrating compliance for HCl through performance testing)
- COMS
- Oxygen (O_2) Analyzer System
- Cogen Boilers #6 and #7 Operating Load (each)

Cogen Boilers #6 and #7 have continuous oxygen trim systems.

NDP does not utilize emissions averaging or efficiency credits to comply with Subpart DDDDD.

Cogen Boilers #6 and #7 use paragraph (2) of the definition of "startup" as follows: The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or heat) for heating, cooling, or process purposes, or producing electricity, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends four hours after when the boiler supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes, or generates electricity, whichever is earlier.

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart DDDDD applicable to Cogen Boilers #6 and #7 including, but not limited to, the following:

a. Emission Limits and Operating Limits

(1) Pursuant to 40 C.F.R. Part 63, Subpart DDDDD, Cogen Boilers #6 and #7 are subject to emissions limits for PM, CO, HCl, and Hg. These standards are identified in the Emission Limits and Streamlining table in this section.

(2) Cogen Boilers #6 and #7 are subject to the following operating limits at all operating times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

(i) Visible emissions from Cogen Boilers #6 and #7 shall not exceed 10% opacity or the highest hourly average opacity reading measured during the most recent successful performance test demonstrating compliance with the PM emission limit. Compliance is based on a daily block average. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 4(a)]

(ii) The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]

(iii) The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]

(iv) When demonstrating compliance with the HCl limit through performance testing, the 30-day rolling average SO_2 emission rate shall not exceed the highest hourly average SO_2 concentration measured during the most recent

successful HCl performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 9]

b. Work Practice Standards

(1) Cogen Boilers #6 and #7 have continuous oxygen trim systems as defined in § 63.7575 which maintain an optimum air to fuel ratio. Therefore, as a work practice standard NDP shall perform tune-ups every 5 years on Cogen Boilers #6 and #7 as specified in §§ 63.7540(a)(10)(i) through (vi). The burner inspection (conducted as part of the tune-up) may be delayed until the first outage, not to exceed 72 months from the previous inspection. NDP shall conduct the tune-ups while burning the type of fuels that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [40 C.F.R. §§ 63.7515(d), 63.7540(a)(10), and Table 3, Row 3]

(2) If Cogen Boiler #6 or #7 is not operating on the required date for its tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]

(3) In accordance with definition (2), startup begins when fuel is fired in the boiler and ends four hours after steam or heat is supplied for heating, cooling, process purposes or electricity generation, whichever is earlier. Cogen Boilers #6 and #7 are subject to the following work practice standards during startup:

(i) NDP shall operate all CMS during startup.
(ii) NDP shall use only clean fuels during startup. (See Definitions section.)
(iii) Once the boiler starts firing fuels that are not clean fuels, NDP shall engage all applicable control devices so as to comply with the emission limits within four hours of starting to supply useful thermal energy.
(iv) NDP shall engage and operate the PM control (ESP) within one hour of firing fuels that are not clean fuels.
(v) NDP shall develop and implement a written startup and shutdown plan as specified in 40 C.F.R. § 63.7505(e).
[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 5]

(4) Shutdown begins when the boiler no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler (whichever is earlier) and ends when the boiler is no longer supplying useful thermal energy and no fuel is being combusted in the boiler. NDP is subject to the following work practice standards during shutdown:

(i) NDP shall operate all CMS during shutdown.

(ii) When firing fuels that are not clean fuels during shutdown, NDP shall operate all applicable control devices.
[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 6]

c. Performance Tests

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. Currently, NDP uses fuel analysis for both HCl and Hg for Cogen Boilers #6 and #7. However, NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

The performance test requirements for PM and CO for Cogen Boilers #6 and #7 are the same as those listed above for Power Boiler #3.

d. Fuel Analysis

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. Currently, NDP uses fuel analysis for both HCl and Hg. However, NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

The fuel analysis requirements for Cogen Boilers #6 and #7 are the same as those listed above for Power Boiler #3 with the following additions:

If electing to demonstrate compliance with HCl and/or Hg emission limits through fuel analysis, NDP shall comply with the following for Cogen Boilers #6 and #7:

(1) For Cogen Boilers #6 and #7, fuel analysis is required for fuel oil and solid fuels. Fuel analysis is not required for natural gas and the other gases (including LVHC, HVLC, and SOC) fired in Cogen Boilers #6 and #7 since they are not subject to emission limits in Tables 2 or 15 for HCl or Hg.
[40 C.F.R. § 63.7515(e) and § 63.7521(a)]

(2) NDP shall obtain and prepare composite fuel samples in accordance with 40 C.F.R. §§ 63.7521(c) and (d). The composite fuel sampling requirements contained in these sections do not apply to fuel oil pursuant to 40 C.F.R. § 63.7521(a).

e. Continuous Compliance and Monitoring Requirements

(1) At all times, NDP must operate and maintain Cogen Boilers #6 and #7, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for

minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

(2) NDP shall operate and maintain an oxygen analyzer system, as defined in § 63.7575. The oxygen analyzer system is considered a CMS. [40 C.F.R. § 63.7525(a)]

(3) NDP shall operate and maintain a COMS on the combined stack for Cogen Boilers #6 and #7 according to the procedures in §§ 63.7525(c)(1) through (7). The COMS is considered a CMS. [40 C.F.R. § 63.7525(c)]

(4) NDP shall install, operate, and maintain a CMS in order to demonstrate compliance with the operating load limit and the 30-day rolling average limits on oxygen content and SO_2 emission rate (when electing to demonstrate compliance with HCl through performance testing) in accordance with §§ 63.7525(d)(1) through (5). [40 C.F.R § 63.7525(d)]

(5) NDP shall install, certify, operate, and maintain an SO_2 CEMS according to either 40 C.F.R. Part 60 or 40 C.F.R. Part 75. [40 C.F.R. § 63.7525(m)]

(6) For each CMS, NDP shall develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.8(d) and 63.7505(d)(1)(i) through (iii). NDP is not required to develop or submit a site-specific monitoring plan for the COMS or SO_2 CEMS if they are operated according to the performance specifications of 40 C.F.R. Part 60, Appendix B. [40 C.F.R. § 63.7505(d)(1)]

(7) NDP shall monitor and collect CMS data according to 40 C.F.R. § 63.7535. [40 C.F.R. § 63.7535(a)]

(i) NDP shall operate the monitoring systems and collect data at all required intervals at all times that Cogen Boilers #6 and/or #7 are operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the facility's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. NDP shall complete monitoring

system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [40 C.F.R. § 63.7535(b)]

(ii) NDP may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. NDP shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. NDP shall use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. [40 C.F.R. § 63.7535(c)]

(iii) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, no data shall be used that was collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. NDP shall calculate monitoring results using all other monitoring data collected while the process is operating. NDP shall report all periods when the monitoring system is out of control in the semi-annual report. [40 C.F.R. § 63.7535(d)]

(iv) Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests. [40 C.F.R. § 63.7540(a)(1)]

f. Recordkeeping

The recordkeeping requirements for Cogen Boilers #6 and #7 are the same as those listed above for Power Boiler #3 with the following additions and omissions:

(1) NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

(i) Records that document how the non-fibrous OCC residuals meet the legitimacy criteria in 40 C.F.R. § 241.3(d)(1); [40 C.F.R. § 63.7555(d)(2)]

(ii) Records that document that the TDF, CTW, CDD, and fibrous OCC residuals are non-wastes pursuant to 40 C.F.R. § 241.4(a); [40 C.F.R. § 63.7555(d)(2)] and

(iii) For each startup period, the number of fields in service on each ESP, as well as each field's secondary voltage and secondary current during each hour of startup. [40 C.F.R. § 63.7555(d)(12)(i)]

(2) The requirement to keep records of the scrubber liquid flow rate and pressure drop is not applicable to Cogen Boilers #6 and #7.

g. Notifications and Reports

The notification and reporting requirements for Cogen Boilers #6 and #7 are the same as those listed above for Power Boiler #3.

9. National Emission Standard for Mercury

Cogen Boilers #6 and #7 are subject to *National Emission Standard for Mercury*, 40 C.F.R. Part 61, Subpart E. This regulation is applicable to stationary sources which incinerate wastewater treatment plant sludge. The definition of "sludge" includes sludge produced from the processing of industrial wastewaters.

Emissions of mercury to the atmosphere from the incineration of wastewater treatment plant sludge is limited to 7.1 lb per 24-hour period. [40 C.F.R. § 61.52(b)]

Pursuant to 40 C.F.R. § 61.53(d)(1), each owner or operator of a source subject to this standard shall test emissions from the source unless a waiver of emission testing is obtained under 40 C.F.R. § 61.13. Section 40 C.F.R. § 61.13(i)(1) authorizes the Administrator[2] to waive the requirement for emissions testing upon written application if, in the Administrator's judgement, the source is meeting the standard.

[2] Since 40 C.F.R. Part 61, Subpart E has been delegated to the Department, the Administrator is the Department. Pursuant to 40 C.F.R. § 61.56; however, the ability to waive emissions testing is not included in the authorities specifically delegated to States.

Other applicable regulations described earlier in this license (40 C.F.R. Part 63, Subpart DDDDD) limit mercury emissions from these units to significantly lower levels. Since NDP has demonstrated through previous stack testing and ongoing compliance with 40 C.F.R. Part 63, Subpart DDDDD that mercury emissions from Cogen Boilers #6 and #7 are substantially below the emission limit for 40 C.F.R. Part 61, Subpart E, NDP's application for a waiver from the emission testing requirements of this regulation was granted. This waiver remains in effect.

Since mercury emissions from each boiler do not exceed 3.5 lb per 24-hour period, no additional monitoring of emissions or operations is required under 40 C.F.R. Part 61, Subpart E. [40 C.F.R. § 61.55(a)]

10. Emission Limits and Streamlining

For Cogen Boilers #6 and #7 (each), a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.03 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)	* Streamlined to the following: 0.03 lb/MMBtu firing any combination of fuel until 10/6/2025 7.4×10^{-3} lb/MMBtu on 10/6/2025 and after See Note 2
	0.06 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(4)(c)	
	0.051 lb/MMBtu firing only coal See Note 1	40 C.F.R. § 60.43b(a)(1)	
	0.10 lb/MMBtu firing coal with other fuels, fuel oil, fuel oil with other fuels, wood, or wood with other fuels except coal	40 C.F.R. Part 60, Subpart Db, §§ 60.43b(a)(2), (b), and (c)(1)	
	1.1×10^{-1} lb/MMBtu until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 9(b)	
	7.4×10^{-3} lb/MMBtu on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 9(b)	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	18.9 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)	18.9 lb/hr
PM_{10}	0.03 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)	0.03 lb/MMBtu
	18.9 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)	18.9 lb/hr
SO_2	1.92 lb/MMBtu 24-hr rolling avg	06-096 C.M.R. ch. 106, § 5(A)	*
	0.28 lb/MMBtu 24-hr block avg firing any fuel combination See Note 3	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)	
	0.32 lb/MMBtu 24-hr block avg for coal, DPC, or TDF contribution See Note 3	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)	
	minimum 90% reduction of sulfur from coal, TDF, DPC, and fuel oil 30-day rolling avg	06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)	
	0.20 lb/MMBtu or minimum 90% reduction 30-day rolling avg See Notes 7 & 8	40 C.F.R. Part 60, Subpart Db, §§ 60.42b(a) and (e)	
	176.4 lb/hr 3-hr block avg See Notes 4, 5, 6	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)	176.4 lb/hr 3-hr block avg See Notes 4, 5, 6

* 0.28 lb/MMBtu
24-hr block avg
firing any fuel combination
See Note 3

0.32 lb/MMBtu
24-hr block avg
for coal, DPC, or TDF contribution
See Note 3

minimum 90% reduction of sulfur
30-day rolling avg
See Notes 7 & 8

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	0.10 lb/MMBtu 24-hr block avg firing only natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)	*
	0.10 lb/MMBtu 30-day rolling avg firing only natural gas See Note 7	40 C.F.R. Part 60, Subpart Db, § 60.44b(a)(1)(i)	0.10 lb/MMBtu firing only natural gas
	0.30 lb/MMBtu 24-hr block avg firing only fuel oil	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)	0.30 lb/MMBtu firing only fuel oil
	0.30 lb/MMBtu 30-day rolling avg firing only fuel oil	40 C.F.R. Part 60, Subpart Db, § 60.44b(a)(2)(i)	Pro-rated emission limit (not to exceed 0.60 lb/MMBtu) based on the formula in § 60.44b(b) when firing a mixture of fuels which includes coal, fuel oil, or natural gas. All limits on a 24-hr block average basis.
	0.30 lb/MMBtu 30-day rolling avg firing natural gas with solid fuels other than coal	40 C.F.R. Part 60, Subpart Db, § 60.44b(d)	
	0.60 lb/MMBtu 24-hr block avg firing any combination of fuel	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)	
	0.60 lb/MMBtu 30-day rolling avg firing only coal	40 C.F.R. Part 60, Subpart Db, § 60.44b(a)(3)(i)	
	Pro-rated emission limit based on the formula in § 60.44b(b) when firing a mixture of fuels which includes coal, fuel oil, or natural gas. 30-day rolling avg	40 C.F.R. Part 60, Subpart Db, § 60.44b(c)	
	378.0 lb/hr 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)	283.5 lb/hr 24-hr block avg

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
CO	470 ppmdv @ 3% O_2 until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 9(a)	470 ppmdv @ 3% O_2 until 10/6/2025 See Note 2
	210 ppmdv @ 3% O_2 on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 9(a)	210 ppmdv @ 3% O_2 on 10/6/2025 and after See Note 2
	0.03 lb/MMBtu firing only fuel oil	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)	0.03 lb/MMBtu firing only fuel oil
	0.15 lb/MMBtu firing a fuel mix containing coal, DPC, or TDF	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-AC-A, 4/10/1998)	0.15 lb/MMBtu firing a fuel mix containing coal, DPC, or TDF
	0.50 lb/MMBtu firing a fuel mix containing biomass or natural gas	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-AC-A, 4/10/1998)	0.50 lb/MMBtu firing a fuel mix containing biomass or natural gas
	248.85 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)	248.85 lb/hr
VOC	0.008 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)	0.008 lb/MMBtu
	5.04 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)	5.04 lb/hr
HCl	2.2×10^{-2} lb/MMBtu until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 1(a)	2.2×10^{-2} lb/MMBtu until 10/6/2025 See Note 2
	2.0×10^{-2} lb/MMBtu on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(a)	2.0×10^{-2} lb/MMBtu on 10/6/2025 and after See Note 2
Hg	5.7×10^{-6} lb/MMBtu until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 1(b)	5.7 x 10-6 lb/MMBtu until 10/6/2025 See Note 2
	5.4×10^{-6} lb/MMBtu on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(b)	5.4 x 10-6 lb/MMBtu on 10/6/2025 and after See Note 2
Visible Emissions	As described earlier in this license.		

Note 1: Pursuant to 40 C.F.R. § 60.43b(g), this limit applies at all operating times except periods of startup, shutdown, or malfunction.

Note 2: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

Note 3: When Cogen Boiler #6 and/or #7 are/is firing only fuel oil or performing a gravimetric calibration, the monitored SO_2 lb/MMBtu emissions during that period, expected to be greater than during operation firing other fuels, shall not be included in determining the 24-hour block average SO_2 lb/MMBtu emission rate. NDP shall keep records of the dates and times of all gravimetric calibrations and the dates and time of any firing of only fuel oil in Cogen Boilers #6 and #7.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 4: When Cogen Boiler #6 and/or Cogen Boiler #7 is firing only fuel oil or performing a gravimetric calibration, SO_2 emissions from the common stack shall be limited to a total of 500.0 lb/hr on a three-hour block average basis. NDP shall keep records of the dates and times of all gravimetric calibrations and the date and time of any firing of only fuel oil in Cogen Boilers #6 and #7.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 5: When Recovery Boiler C is firing only fuel oil and emissions of SO_2 are above 206.3 lb/hour, SO_2 emissions from the common stack for Cogen Boilers #6 and #7 shall be limited to a total of 250.0 lb/hr on a three-hour block average basis. NDP shall keep records of the date and time of any firing of only fuel oil in Recovery Boiler C.

Note 6: In addition to the limitations listed above, NDP shall be determined to be in compliance when Cogen Boilers #6 and #7 exceed the 176.4 lb/hr (352.8 lb/hr combined) SO_2 limit provided all of the following conditions are met:

a. Either Cogen Boiler #6 or #7 is firing SOGs, LVHCs, HVLCs, or any combination thereof;
b. SO_2 emissions from Cogen Boilers #6 and #7 combined do not exceed 500.0 lb/hr on a 3-hour block average basis;
c. SO_2 emissions from Recovery Boiler C do not exceed 206.3 lb/hr on a 3-hour block average basis;
d. SO_2 emissions from Boiler #3 do not exceed 60 lb/hr on a 3-hour average basis;
e. The Mill shall report the dates, times, and average SO_2 emissions for each 3-hour block when Cogen Boilers #6 and #7 utilize these alternative limits.

The alternative SO_2 limits listed in this note shall not account for more than 4.0 tpy of actual SO_2 emissions.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 7: Pursuant to 40 C.F.R. § 60.42b(g) or § 60.44b(h), this limit applies at all operating times <u>including</u> periods of startup, shutdown, or malfunction.

Note 8: The original BACT determination required the use of a circulating limestone bed to remove at least 90% of potential SO_2 emissions from the coal, TDF, DPC, and oil components of the fuel fired in the two Cogen Boilers. Although the sulfur input from biomass and sludge fuels is not significant, the incineration of pulping gases in Cogen Boilers #6 and #7 introduces a significant loading of TRS compounds, which are oxidized in the boilers to form SO_2.

To avoid calculating inaccurate or misleading results, NDP calculates percent reduction of potential SO_2 emissions from all of the fuels input to the Cogen Boilers. The total sulfur input to the boilers is calculated using the sulfur input from each fuel (calculated from sulfur analytical data for each fuel) added to the sulfur input from each pulping gas stream (determined from design information). The SO_2 output is measured by a CEMS in the combined stack. From this input and output data, the total SO_2 removal efficiency is calculated and monitored on a 30-day rolling average.

11. Emission Limit Compliance Methods

Compliance with the emission limits associated with Cogen Boilers #6 and #7 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart DDDDD (See Note 1)
	lb/hr		
PM_{10}	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS, 24-hr block average, and 30-day rolling average (as applicable)	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	lb/MMBtu	NO_x CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	NO_x CEMS, 24-hr block average	
CO	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
	ppmdv		
	lb/hr		
VOC	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
	lb/hr		
HCl	lb/MMBtu	Either performance testing or fuel analysis in accordance with 40 C.F.R. Part 63, Subpart DDDDD	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
Hg	lb/MMBtu		
Visible Emissions	% opacity	COMS, six-minute block average basis and daily block average basis	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117

Note 1: Performance testing for PM lb/MMBtu is subject to a frequency of once every five years established by 06-096 C.M.R. ch. 115, BACT in A-214-77-8-M (8/24/2009). The Department has determined that the testing frequency established by 40 C.F.R. Part 63, Subpart DDDDD is more stringent than the BPT frequency. Therefore, the performance testing frequency for this pollutant has been streamlined to the more stringent standard, and only this more stringent standard shall be included in the Order of this air emission license.

12. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Cogen Boilers #6 and #7 and its associated air pollution control equipment.

a. Hours Cogen Boilers #6 and #7 (each) were active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
b. Types and amounts of each fuel fired in each boiler on a monthly basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. 63.7555(d)(1)]
c. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]
d. Dates and times of all gravimetric calibrations; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
e. Dates and times of any firing of only fuel oil in Cogen Boilers #6 and #7; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
f. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart Db (described earlier);
g. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart DDDDD (described earlier);
h. Records of any maintenance activities performed (planned or unplanned) on the multicyclones and ESPs. [40 C.F.R. § 63.7500(a)(3)]

13. Parameter Monitors

During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitor for Cogen Boilers #6 and #7:

Parameter	Averaging Period	Origin and Authority
Operating Load	30-day rolling average	40 C.F.R. § 63.7505(c) & § 63.7525(d)

In the event that only one of the two cogen boilers is in the process of startup or shutdown and the other is under "normal" operation, NDP shall monitor and record the following additional parameter values indicative of boiler performance:

Parameter	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
Boiler air/fuel ratio	Air/fuel ratio	Boiler control system	Continuously	every half hour
Boiler combustion O_2 trim control	Oxygen content	Boiler control system	Continuously	every half hour

For the purposes of the table above, *Continuously* shall mean ongoing while the equipment is operating, providing, at a minimum, one data point per specified data recording period.

14. CEMS and COMS

For Cogen Boilers #6 and #7, the table below lists the required CEMS and COMS.

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 117, § 1(B)(2) 06-096 C.M.R. ch. 138, § 4(6) 40 C.F.R. § 60.48b(b)(1)
	lb/hr		
SO_2 CEMS	lb/MMBtu	24-hr block average and 30-day rolling average (as applicable)	40 C.F.R. § 60.47b(a) 40 C.F.R. § 63.7525(m)
	lb/hr	3-hour block average	
COMS	% opacity	six-minute block average and daily block average	40 C.F.R. § 60.48b(a) 40 C.F.R. § 63.7525(c)
O_2 CEMS	%	3-hr, 24-hr, and 30-day rolling average (as applicable)	40 C.F.R. §§ 60.47b(a) & 60.48b(b)(1)
O_2 Analyzer	%	30-day rolling average	40 C.F.R. §§ 63.7505(c) & 63.7525(a)

J. Lime Kiln

Heat from fuel fired in the Lime Kiln causes recalcination of the lime (the chemical conversion of calcium carbonate to calcium oxide).

NDP installed the Lime Kiln in 1989. In 2008 (A-214-77-7-A), the unit was modified to support firing fuel oil or natural gas, either alone or together, in the Lime Kiln, which supported the existing kiln throughput capacity. The project included replacing the then existing oil burner with a burner system designed for a heat input capacity of 100 MMBtu/hour for oil and 110 MMBtu/hour for natural gas. Since natural gas generates a greater flue gas volume than oil, the firing rate for natural gas must be greater to support the same process heating and process throughput capacity.

In 2018 (A-214-77-15-A), the Lime Kiln was modified and BACT reevaluated as part of the Pulp Mill Reliability Project.

In addition to fuel oil and natural gas, the kiln can fire specification waste oil and LVHC gases generated by the pulping process. Lime Kiln emissions exhaust to a 263-foot AGL stack with a 60-inch diameter.

When there is lime in the Lime Kiln, chemical reactions occur which remove sulfur dioxide. Additionally, emissions of SO_2 from the Lime Kiln are controlled by a wet scrubber. These qualify as a sulfur dioxide removal devices and permit the fuel oil fired to have a sulfur content in excess of the 0.5% pursuant to 06-096 C.M.R. ch. 106, § (5)(A). Temperatures achieved in the kiln from firing fuel oil and/or natural gas cause recalcination of the lime (the chemical conversion of calcium carbonate to calcium oxide).

1. Control Equipment

   Emissions from the Lime Kiln are controlled by a wet scrubber. The lime mud is also an effective media to scrub SO_2 emissions generated from the incineration of total reduced sulfur (TRS) compounds.

   The Lime Kiln scrubber is a deluge-type scrubber which is not designed to create a differential pressure across the unit. Monitoring of scrubber pressure drop is required by federal regulations. Therefore, NDP submitted a request for an alternative monitoring determination to EPA to operate a continuous monitoring system to measure scrubbing liquid re-circulation flow rate and scrubbing liquid supply pressure instead of pressure drop across the scrubber. This request was approved in a letter dated 4/16/2004 (Control Number M060033[3]).

2. Fuel Desulfurization

   Pursuant to *Low Sulfur Fuel*, 06-096 C.M.R. ch. 106, no person may offer for sale #6 fuel oil with a sulfur content greater than 0.5% by weight unless it will be combusted in a source that installs an approved flue gas desulfurization system or other prescribed sulfur removal device such that after control total SO_2 emissions do not exceed 1.92 lb/MMBtu in any 24-hour period. When there is lime in the Lime Kiln, chemical reactions occur which remove sulfur dioxide. This qualifies as an approved flue gas desulfurization system and permits the residual fuel to have a sulfur content in excess of the 0.5% by weight pursuant to 06-096 C.M.R. ch. 106, § (5)(A).

   NDP shall continue to be licensed to fire residual fuel in the Lime Kiln with a sulfur content in excess of 0.5% by weight, providing that the approved flue gas desulfurization system is operated (i.e., lime is present) and SO_2 emissions do not exceed 1.92 lb/MMBtu.

3. Visible Emissions

   The Lime Kiln is subject to the following standard in *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101:

[3] 72 FR 41110, https://www.govinfo.gov/app/details/FR-2007-07-26/E7-13894

Visible emissions from the Lime Kiln shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time NDP shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

During periods of startup, shutdown, or malfunction, visible emissions from the Lime Kiln shall not exceed 40% opacity on a six-minute block average basis. This alternative visible emissions standard shall not be utilized for more than two hours (20 consecutive six-minute block averages) per event. Records must be kept of the date, time, and duration of each startup, shutdown, or malfunction event.
[06-096 C.M.R. ch. § 4(A)(8)(a)]

4. *Total Reduced Sulfur Control From Kraft Pulp Mills*, 06-096 C.M.R. ch. 124

NDP shall comply with all requirements of 06-096 C.M.R. ch. 124 applicable to the Lime Kiln including, but not limited to, the following:

a. Standards

Pursuant to 06-096 C.M.R. ch. 124, § 3(K), emissions of TRS from the Lime Kiln shall not exceed 20 ppmdv corrected to 10% O_2 on a 12-hour block average basis.

b. Monitoring

(1) NDP shall install, calibrate, maintain, and operate a TRS CEMS and O_2 analyzer on the Lime Kiln. [06-096 C.M.R. ch. 124, § 4(A)]

(2) The span of the TRS CEMS shall be set at 30 ppm.
[06-096 C.M.R. ch. 124, § 4(A)(1)]

(3) This rule requires the span of the O_2 analyzer to be set at 20%. [06-096 C.M.R. ch. 124, § 4(A)(2)] However, a wider span setting is required by 40 C.F.R. Part 60, Subpart BB. Therefore, only that more conservative requirement is included in the Order of this license.

(4) All TRS concentrations shall be corrected to 10% O_2.
[06-096 C.M.R. ch. 124, § 5(A)(3)]

c. Recordkeeping and Reporting

(1) NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate

12 contiguous one-hour average TRS concentrations. [06-096 C.M.R. ch. 124, § 5(A)(1)]

(2) NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations. [06-096 C.M.R. ch. 124, § 5(A)(2)]

(3) NDP shall submit quarterly reports to the Department in accordance with 06-096 C.M.R. ch. 124, § 5(C).

5. *VOC RACT*, 06-096 C.M.R. ch. 134

VOC RACT for the Lime Kiln was determined to be maintaining adequate combustion to demonstrate compliance with the applicable TRS emission limit in 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 134, VOC RACT (A-214-71-X-A, 12/20/1995)]

6. *NO_x RACT*, 06-096 C.M.R. ch. 138

NO_x RACT for the Lime Kiln was determined to be compliance with the emission limit in 06-096 C.M.R. ch. 138 demonstrated by performance tests.
[06-096 C.M.R. ch. 138, NO_x RACT (A-214-71-U-A, 12/20/1995)]

Pursuant to 06-096 C.M.R. ch. 138, § 3(D), emissions of NO_x from the Lime Kiln shall not exceed 120 ppmv on a wet basis corrected to 10% O_2 on a one-hour average. Although originally required to conduct performance tests for NO_x every two years, after the initial performance test following the addition of natural gas in 2008, the testing frequency became upon request by the Department. [06-096 C.M.R. ch. 138, NO_x RACT (A-214-77-7-A, 9/2/2008)]

Section 6 of 06-096 C.M.R. ch. 138 addresses alternative emission limits for periods of startup and shutdown for affected units with an applicable standard pursuant §§ 3 or 4 of this rule and that demonstrate compliance through use of a CEMS. The Lime Kiln demonstrates compliance through performance testing and not a CEMS; therefore, § 6 of this rule is not applicable to the Lime Kiln.

7. New Source Performance Standards

The Lime Kiln is subject to *Standards of Performance for Kraft Pulp Mills*, 40 C.F.R. Part 60, Subpart BB for lime kilns manufactured after September 24, 1976.

Lime kilns which commence construction, reconstruction, or modification after May 23, 2013, are subject to the requirements of *Standards of Performance for Kraft*

Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013, 40 C.F.R Part 60, Subpart BBa. The Lime Kiln was physically modified for the purposes of NSR as part of the Pulp Mill Reliability Project addressed in NSR License A-214-77-15-A (9/14/2018). For the purposes of NSPS, *General Provisions*, 40 C.F.R. § 60.14(a) states that a modification is any physical change or operational change to an existing facility which results in an increase in the emission rate (e.g., lb/hr) to the atmosphere of any pollutant to which a standard applies. The Pulp Mill Reliability Project did not result in an increase in short-term emission rates from the Lime Kiln. Therefore, the Lime Kiln was not considered "modified" for the purposes of NSPS and remained subject to 40 C.F.R. Part 60, Subpart BB.

NDP shall comply with all requirements of 40 C.F.R. Part 60, Subpart BB applicable to the Lime Kiln including, but not limited to, the following:

a. Standards

Pursuant to 40 C.F.R. Part 60, Subpart BB, the Lime Kiln is subject to emissions standards for PM and TRS. These standards are identified in the Emission Limits and Streamlining table in this section.

b. Monitoring Requirements

(1) NDP shall install, calibrate, maintain, and operate a TRS CEMS on the Lime Kiln exhaust and record the output of the system. [40 C.F.R. § 60.284(a)(2)]

(2) The span of the TRS CEMS shall be set at 30 ppm. [40 C.F.R. § 60.284(a)(2)(i)]

(3) NDP shall install, calibrate, maintain, and operate a O_2 analyzer on the Lime Kiln exhaust and record the output of the system. [40 C.F.R. § 60.284(a)(2)]

(4) The span of the O_2 analyzer shall be set at 25%. [40 C.F.R. § 60.284(a)(2)(ii)]

(5) The monitoring requirements for the Lime Kiln wet scrubber have been streamlined to the more stringent scrubber monitoring requirements in 40 C.F.R. Part 63, Subpart MM.

c. Recordkeeping and Reporting Requirements

(1) NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average TRS concentrations.
[40 C.F.R. § 60.284(c)(1)]

(2) NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations. [40 C.F.R. § 60.284(c)(2)]

(3) NDP shall submit semiannual excess emission reports in accordance with 40 C.F.R. § 60.7(c). For the Lime Kiln, periods of excess emissions are all 12-hour average TRS concentrations above 8 ppmv. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 60.284(d)(2)]

8. National Emissions Standards for Hazardous Air Pollutants

The Lime Kiln is subject to the requirements of *NESHAPs for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, 40 C.F.R. Part 63, Subpart MM.

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart MM applicable to the Lime Kiln including, but not limited to, the following:

a. Emission Limits and Operating Limits

(1) The concentration of PM in the Lime Kiln exhaust gases shall not exceed 0.15 g/dscm (0.064 gr/dscf) corrected to 10% O_2 (average of three 1-hour runs). [40 C.F.R. § 63.862(a)(1)(i)(C)]

(2) As described in the monitoring section below, pursuant to the approved alternate monitoring determination (Control Number M060033), NDP shall develop site-specific operating limits for scrubbing liquid flow rate and supply pressure.

b. Performance Tests

(1) NDP shall conduct a performance stack test for PM from the Lime Kiln every five years (next test due 9/10/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

(2) Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

(3) NDP shall establish operating limits for the scrubber CPMS during performance tests in accordance with 40 C.F.R. § 63.864(j). Multiple performance tests may be conducted to establish a range of parameter values. Operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.

c. Continuous Compliance and Monitoring Requirements

(1) At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require NDP to make any further efforts to reduce emissions if the standard has been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.860(d)]

(2) Pursuant to the approved alternate monitoring determination (Control Number M060033), NDP shall install, calibrate, maintain, and operate a CPMS for the Lime Kiln scrubbing liquid re-circulation flow rate and scrubbing liquid pressure subject to the following conditions:

(i) NDP shall follow the manufacturer or supplier-recommended maintenance and calibration procedures for the monitors and recorders used to measure the flow rate and supply pressure.
(ii) The monitoring equipment shall determine and record the flow rate and pressure values from the Lime Kiln wet scrubber at least once every successive 15-minute period.
(iii) NDP shall develop specific scrubbing liquid flow rate and supply pressure parametric operating ranges (operating limits) for the Lime Kiln scrubber, as indicators of compliance with the emission standard (0.064 gr/dscf of PM corrected to 10% O_2). The parametric operating ranges for the Lime Kiln scrubber will be developed during a performance test and shall be re-defined at any time that NDP makes modifications to the Lime Kiln or associated scrubber system that could alter the operating conditions of the Lime Kiln or scrubber system.

(3) NDP shall implement corrective action if an exceedance of an operating limit occurs when lime mud is being fed into the Lime Kiln.
[40 C.F.R. § 63.864(k)(1)]

d. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) Records of CPMS data, including any exceedance, with a brief explanation of the cause of the monitoring exceedance, the time the exceedance occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 C.F.R. §§ 63.866(b) and (c)(3)]
(2) Records of any violation under 40 C.F.R. § 63.864(k)(2); [40 C.F.R. § 63.866(b)]
(3) Daily Lime Kiln production (ton/day); [40 C.F.R. § 63.866(c)(2)]
(4) Records and documentation of supporting calculations for performance tests; [40 C.F.R. § 63.866(c)(4)]
(5) Records documenting the establishment of operating limits; [40 C.F.R. § 63.866(c)(5)]
(6) In the event of a failure to meet the applicable emission limit or CPMS operating limit, records of the number of failures and the date, start time, and duration of each failure. [40 C.F.R. § 63.866(d)]
(7) For any failure to meet an emission limit, an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions; [40 C.F.R. § 63.866(d)(2)(i)]
(8) For each failure to meet an operating limit, sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit; [40 C.F.R. § 63.866(d)(2)(ii)] and
(9) For any failure, actions taken to minimize emissions in accordance with § 63.860(d) and any corrective action taken to return the Lime Kiln to normal operation. [40 C.F.R. § 63.866(d)(3)]

e. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. §§ 63.867(a)(1) and 63.7(b)(1)]

(2) Pursuant to 40 C.F.R. § 63.867(d)(1), NDP is required to submit the results of each performance test to EPA within 60 days after the date of completing each performance test. However, 06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d) represented in Condition (8)(D) of this license requires results of performance tests to be submitted to the Department within 30 days from the date of test completion. NDP has requested that these requirements be streamlined to avoid

confusion. Therefore, only the more stringent (30-day) requirement is referenced in the Order of this license.

(3) NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions report every six months which contains the information contained in §§ 63.867(c)(1) - (5) as applicable. NDP may elect to combine excess emissions reports with those for 40 C.F.R. Part 63, Subpart S. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.867(c)]

(4) Semi-annual compliance reports and results of compliance tests shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail. [40 C.F.R. § 63.867(d)]

9. Emission Limits and Streamlining

For the Lime Kiln, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.064 gr/dscf @ 10% O_2	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	0.064 gr/dscf @ 10% O_2 *
	0.066 gr/dscf @ 10% O_2 firing natural gas	40 C.F.R. Part 60, Subpart BB, § 60.282(a)(3)(i)	
	0.13 gr/dscf @ 10% O_2 firing fuel oil	40 C.F.R. Part 60, Subpart BB, § 60.282(a)(3)(ii)	
	0.064 gr/dscf @ 10% O_2	40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)(i)(C)	
	24.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	24.0 lb/hr *
	1 lb/ADTP 2-hr sampling period	06-096 C.M.R. ch. 105, § 2	
PM_{10}	24.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	24.0 lb/hr
SO_2	1.92 lb/MMBtu 24-hr rolling avg	06-096 C.M.R. ch. 106, § 5(A)	23.0 lb/hr *
	23.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	120 ppmv @ 10% O_2 1-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	120 ppmv @ 10% O_2 * 1-hr block avg
	120 ppmv @ 10% O_2 1-hr block avg	06-096 C.M.R. ch. 138, § 3(D)	
	52.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	52.0 lb/hr
CO	39.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	39.0 lb/hr
VOC	2.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	2.0 lb/hr
TRS	20 ppmdv @ 10% O_2 12-hr block avg	06-096 C.M.R. ch. 124, § 3(K) and 06-096 C.M.R. ch. 134, VOC RACT (A-214-71-X-A, 12/20/1995)	8 ppmdv @ 10% O_2 * 12-hr block avg
	8 ppmdv @ 10% O_2 12-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	
Visible Emissions	As described earlier in this license		

10. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Lime Kiln shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	gr/dscf	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		
PM_{10}	lb/hr	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
SO_2	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 6C	As requested
NO_x	ppmv	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 7E	As requested
	lb/hr		

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
CO	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS, 12-hr block average in accordance with 06-096 C.M.R. ch. 124 See Note 1	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

Note 1: The first four 12-hour block averages in a quarter which exceed this limit are not considered a violation. [06-096 C.M.R. ch. 124, § 5(C)(3)(b)]

11. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Lime Kiln and its associated air pollution control equipment.

a. Hours the Lime Kiln was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
b. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137]
c. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]
d. If electing to utilize the alternative visible emission limit during periods of startup, shutdown, and malfunction, records of the date, time, and duration of each of these events. [06-096 C.M.R. ch. 101, § 4(A)(8)(a)(i)]
e. Dates, times, and duration of LVHC firing; [40 C.F.R. § 70.6(c)(1)]
f. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described earlier);
g. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described earlier);
h. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described earlier); and
i. Records of any maintenance activities performed (planned or unplanned) on the wet scrubber. [40 C.F.R. § 63.860(d)]

12. Parameter Monitors

During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Lime Kiln and its associated air pollution control equipment:

Parameter	Averaging Period	Origin and Authority
Scrubber Re-Circulation Flow Rate	3-hr rolling average	Alternative Monitoring Determination M060033 and 40 C.F.R. § 63.864(k)(vi)
Scrubber Liquid Pressure		

13. CEMS

For the Lime Kiln, the table below lists the required continuous emission monitoring systems (CEMS).

Continuous Monitors	Units	Averaging Period	Origin and Authority
TRS CEMS	ppmdv	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)
O_2 CEMS	%	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)

K. Recovery Boiler C

NDP installed Recovery Boiler C (RBC) in 1981. In 2018 (A-214-77-15-A), RBC was modified and BACT reevaluated as part of the Pulp Mill Reliability Project.

RBC is a Babcock and Wilcox low odor design boiler used by NDP to recover pulping chemicals and produce steam. The unit has the capacity to fire 4.4 million pounds (MMlb) of dry black liquor solids (BLS) per day or 759 MMBtu/hour of fuel oil. Emissions exit through a 290-foot AGL stack.

RBC's primary fuel is black liquor, the liquid from the digesters after pulping of wood chips. In RBC, inorganic chemicals in the black liquor are recovered in molten form, and organic constituents of the black liquor are combusted, supplying heat for steam generation.

NDP fires fuel oil as an auxiliary fuel. Typically, fuel oil is used only during startups, shutdowns, and to stabilize boiler operation. RBC is also licensed to fire natural gas, specification waste oil, and black liquor soap.

The fuel oil fired in RBC has a maximum sulfur content of 0.5% by weight when there is no smelt within the boiler and 2.5% by weight when there is smelt within the boiler. When

smelt is present in the boiler, chemical reactions occur which remove sulfur dioxide; therefore, this qualifies as a sulfur dioxide removal device and permits the fuel to have a sulfur content in excess of the 0.5% pursuant to 06-096 C.M.R. ch. 106, § (5)(A).

1. Control Equipment

   The particulate emissions from RBC are controlled by the operation of a S. F. Flakt Electrostatic Precipitator (ESP). The ESP is a rigid frame, dry bottom, European design. The ESP has two chambers with four fields per chamber and is powered by eight Transformer Rectifier (TR) sets. NDP has demonstrated compliance during periods of precipitator maintenance at reduced boiler load with only one of the two chambers in operation and at full load with less than eight fields in operation.

2. Fuel Desulfurization

   Pursuant to *Low Sulfur Fuel*, 06-096 C.M.R. ch. 106, no person may offer for sale #6 fuel oil with a sulfur content greater than 0.5% by weight unless it will be combusted in a source that installs an approved flue gas desulfurization system or other prescribed sulfur removal device such that after control total SO_2 emissions do not exceed 1.92 lb/MMBtu in any 24-hour period. When there is smelt within RBC, chemical reactions occur which remove sulfur dioxide. This qualifies as an approved flue gas desulfurization system and permits the fuel to have a sulfur content in excess of the 0.5% by weight pursuant to 06-096 C.M.R. ch. 106, § (5)(A).

   NDP shall continue to be licensed to fire residual fuel in RBC with a sulfur content in excess of 0.5% by weight, providing that the approved flue gas desulfurization system is operated (i.e., smelt is present) and SO_2 emissions do not exceed 1.92 lb/MMBtu.

3. Startup and Shutdown

   For the purposes of this license, *Startup* and *Shutdown* of RBC are defined as follows:

   Startup is defined as the activities leading to and including the firing of fuel in RBC for the purposes of achieving operating conditions which support the stable firing of black liquor. These activities include starting the ID/FD fans; manipulating dampers in the flue gas path for the boiler/precipitator; energizing and starting the precipitator; and firing fuel oil or natural gas, either alone or in combination with black liquor, until the conditions are achieved which support stable firing of black liquor.

   Shutdown is defined as the activities leading to the cessation of operation of RBC, such as reducing the boiler/load and firing rate; and/or burning the smelt bed while firing fuel oil or natural gas, alone or in combination with black liquor.

4. Visible Emissions

a. 06-096 C.M.R. ch. 101

RBC is subject to the following visible emissions limit pursuant to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101:

Visible emissions from RBC shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The average of the remaining five percent of all six-minute block averages on a quarterly basis shall not exceed 30% opacity. Periods of startup, shutdown, and malfunctions are included for the purpose of calculating block averages under this subsection. Periods when the unit is not operating are not included for the purpose of calculating block averages under this subsection.

RBC shall be considered to be operating whenever any fuel is being fired, regardless of whether black liquor is being fired or not.

b. 06-096 C.M.R. ch. 115, BACT

RBC is subject to the following visible emission limit established under 06-096 C.M.R. ch. 115, BACT [A-214-77-15-A (9/14/2018)]:

Visible emissions from RBC shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction. During periods of startup, shutdown, and malfunction NDP may elect to demonstrate compliance by complying with all of the following work practice standards:

(1) NDP shall maintain a log (written or electronic) of the date, time, and duration of all startups and shutdowns and malfunctions of RBC and its associated ESP which result in NDP electing to comply with these work practice standards.

(2) NDP shall develop and implement a written startup and shutdown plan.

(3) RBC and its associated ESP shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

c. 40 C.F.R. Part 60, Subpart BB

RBC is subject to the following visible emission limit established under 40 C.F.R. Part 60, Subpart BB:

Visible emissions from RBC shall not exceed 35% opacity on a six-minute block average basis. [40 C.F.R. §§ 40 C.F.R. §§ 60.282(a)(1)(ii) & 60.284(d)(1)(ii)] This standard applies at all times except for periods of startup, shutdown, and malfunction. [40 C.F.R. § 60.11(c)]

d. 06-096 C.M.R. ch. 140, BPT

Regardless of the averaging periods allowed by 06-096 C.M.R. ch. 101, RBC cannot exceed the visible emissions standards established by BACT and 40 C.F.R. Part 60, Subpart BB during periods of normal operation. Therefore, with this license, the Department is establishing the following visible emissions standards through BPT:

Visible emissions from RBC shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction.

Visible emissions from RBC shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The average of the remaining five percent of all six-minute block averages on a quarterly basis shall not exceed 30% opacity. Periods of startup, shutdown, and malfunctions are included for the purpose of calculating block averages under this subsection. Periods when the unit is not operating are not included for the purpose of calculating block averages under this subsection.

RBC shall be considered to be operating whenever any fuel is being fired, regardless of whether black liquor is being fired or not.

e. Streamlining

The Department has determined that the BPT visible emissions standards are more stringent than the other applicable limits listed above. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limits with the federally enforceable limits in 06-096 C.M.R. ch. 101 makes the BPT limit federally enforceable.

5. *Total Reduced Sulfur Control From Kraft Pulp Mills*, 06-096 C.M.R. ch. 124

NDP shall comply with all requirements of 06-096 C.M.R. ch. 124 applicable to RBC including, but not limited to, the following:

a. Standards

Pursuant to 06-096 C.M.R. ch. 124, § 3(H), emissions of TRS from RBC shall not exceed 5 ppmdv corrected to 8% O_2 on a 12-hour block average basis.

b. Monitoring

(1) NDP shall install, calibrate, maintain, and operate a TRS CEMS and O_2 analyzer on RBC. [06-096 C.M.R. ch. 124, § 4(A)]

(2) The span of the TRS CEMS shall be set at 30 ppm. [06-096 C.M.R. ch. 124, § 4(A)(1)]

(3) The span of the O_2 analyzer shall be set at 20%. [06-096 C.M.R. ch. 124, § 4(A)(2)]

(4) All TRS concentrations shall be corrected to 8% O_2. [06-096 C.M.R. ch. 124, § 5(A)(3)]

c. Recordkeeping and Reporting

(1) NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average TRS concentrations. [06-096 C.M.R. ch. 124, § 5(A)(1)]

(2) NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations. [06-096 C.M.R. ch. 124, § 5(A)(2)]

(3) NDP shall submit quarterly reports to the Department in accordance with 06-096 C.M.R. ch. 124, § 5(C).

6. *NO_x RACT*, 06-096 C.M.R. ch. 138

   NO_x RACT for RBC was determined to be compliance with the emission limit in 06-096 C.M.R. ch. 138 and use of a NO_x CEMS to continuously monitor emissions. [06-096 C.M.R. ch. 138, NO_x RACT (A-214-71-U-A, 12/20/1995)]

   Pursuant to 06-096 C.M.R. ch. 138, § 3(C), emissions of NO_x from RBC shall not exceed 120 ppmv on a wet basis corrected to 8% O_2 on a 24-hour daily block arithmetic average basis and compliance shall be demonstrated through use of a NO_x CEMS.

   Section 6 of 06-096 C.M.R. ch. 138 addresses alternative emission limits for periods of startup and shutdown for affected units with an applicable standard pursuant §§ 3 or 4 of this rule and that demonstrate compliance through use of a CEMS. Beginning May 1, 2026, during periods of startup or shutdown, RBC shall not exceed a mass emission rate of 117.3 lb/hr on a 24-hour daily block average basis, or shorter time period if the startup or shutdown event does not last for the entire 24-hour daily block period. Operating times other than periods of startup and shutdown may be excluded from the block average. This limit is equivalent to half of the applicable standard in § 3(C) of the rule (120 ppmwv) on a mass emissions basis. This alternative emissions limit may not be utilized for more than two consecutive calendar days per event and may not be utilized for more than 10% of the unit's total operating time in any 12-month calendar year period. Compliance shall be demonstrated through the use of a CEMS operated pursuant to the requirements of 06-096 C.M.R. ch. 117 and records of the date, time, and duration of all startup and shutdown events.

7. *NO_x Control Program*, 06-096 C.M.R. ch. 145

   RBC is not subject to *NO_x Control Program*, 06-096 C.M.R. ch. 145. This rule applies to fossil fuel-fired units with a maximum heat input greater than 250 MMBtu/hr located both within the OTR and in a county that has not received a waiver of NO_x control requirements pursuant to Section 182(f) of the 1990 Clean Air Act Amendments. In 06-096 C.M.R. ch. 145, *fossil fuel-fired* is defined as "the combustion of fossil fuel either alone or in combination with any other fuel, where the fossil fuel combusted compromises 51% or greater of the annual (calendar year basis) heat input on a Btu basis."

   Although RBC is licensed to fire fossil fuel, it also has a federally enforceable limit restricting the annual capacity factor for the firing of fossil fuels (fuel oil and natural gas combined) to less than 10%. Additionally, NDP is located in a portion of the state that is no longer located in the OTR pursuant to approval of a Clean Air Act Section 176A petition effective March 14, 2022.

8. New Source Performance Standards

Standards of Performance for Fossil-Fuel-Fired Steam Generators, 40 C.F.R. Part 60, Subpart D, apply to each fossil-fuel fired and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 250 MMBtu/hour. [40 C.F.R. § 60.40(a)(2)] In 1990, EPA provided an applicability determination that Subpart D does not apply to a kraft recovery boiler, provided that the annual capacity factor for fossil fuel is less than 10%. NDP has a federally enforceable license condition limiting RBC's annual heat input capacity for fossil fuel to less than 10%; thus, RBC is not subject to the requirements of 40 C.F.R. Part 60, Subpart D.

RBC is subject to *Standards of Performance for Kraft Pulp Mills*, 40 C.F.R. Part 60, Subpart BB for recovery furnaces manufactured after September 24, 1976.

Recovery furnaces which commence construction, reconstruction, or modification after May 23, 2013, are subject to the requirements of *Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013*, 40 C.F.R Part 60, Subpart BBa. RBC was physically modified for the purposes of NSR as part of the Pulp Mill Reliability Project addressed in Air Emission License A-214-77-15-A (9/14/2018). For the purposes of NSPS, *General Provisions*, 40 C.F.R. § 60.14(a) states that a modification is any physical change or operational change to an existing facility which results in an increase in the emission rate (e.g., lb/hr) to the atmosphere of any pollutant to which a standard applies. The Pulp Mill Reliability Project did not result in an increase in short-term emission rates from RBC. Therefore, RBC was not considered "modified" for the purposes of NSPS and remained subject to 40 C.F.R. Part 60, Subpart BB.

NDP shall comply with all requirements of 40 C.F.R. Part 60, Subpart BB applicable to RBC including, but not limited to, the following:

a. Standards

(1) Pursuant to 40 C.F.R. Part 60, Subpart BB, RBC is subject to emissions standards for PM and TRS. These standards are identified in the Emission Limits and Streamlining table in this section.

(2) Visible emissions from RBC shall not exceed 35% opacity on a six-minute block average basis. [40 C.F.R. §§ 60.282(a)(1)(ii) & 60.284(d)(1)(ii)] This standard applies at all times except for periods of startup, shutdown, and malfunction. [40 C.F.R. § 60.11(c)]

As discussed earlier, this visible emission limit has been streamlined to the more stringent visible emission limit established under 06-096 C.M.R. ch. 140, BPT.

b. Monitoring Requirements

(1) NDP shall install, calibrate, maintain, and operate a COMS on RBC and record the output of the system. [40 C.F.R. § 60.284(a)(1)]

(2) The span of the COMS shall be set at 70% opacity. [40 C.F.R. § 60.284(a)(1)]

(3) NDP shall install, calibrate, maintain, and operate a TRS CEMS on RBC and record the output of the system. [40 C.F.R. § 60.284(a)(2)]

(4) The span of the TRS CEMS shall be set at 30 ppm. [40 C.F.R. § 60.284(a)(2)(i)]

(5) NDP shall install, calibrate, maintain, and operate a O_2 analyzer on RBC and record the output of the system. [40 C.F.R. § 60.284(a)(2)]

(6) The span of the O_2 analyzer shall be set at 25%. [40 C.F.R. § 60.284(a)(2)(ii)]

c. Recordkeeping and Reporting Requirements

(1) NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average TRS concentrations. [40 C.F.R. § 60.284(c)(1)]

(2) NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations. [40 C.F.R. § 60.284(c)(2)]

(3) NDP shall submit semiannual excess emission reports in accordance with 40 C.F.R. § 60.7(c). For RBC, periods of excess emissions are all 12-hour average TRS concentrations above 5 ppmv and all six-minute average opacities that exceed 35%. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 60.284(d)(1)]

9. National Emissions Standards for Hazardous Air Pollutants

RBC is subject to the requirements of *NESHAPs for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, 40 C.F.R. Part 63, Subpart MM.

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart MM applicable to RBC including, but not limited to, the following:

a. Emission Limits and Operating Limits

(1) The concentration of PM in RBC exhaust gases shall not exceed 0.10 g/dscm (0.044 gr/dscf) corrected to 8% O_2 (average of three 1-hour runs). [40 C.F.R. § 63.862(a)(1)(i)(A)]

(2) RBC is not subject to monitoring requirements in 40 C.F.R. §§ 63.864(e)(10) through (14) and is therefore not required to establish operating limits pursuant to 40 C.F.R. § 63.864(j).

b. Performance Tests

(1) NDP shall conduct a performance stack test for PM from RBC every five years (next test due 7/22/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

(2) Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

c. Continuous Compliance and Monitoring Requirements

(1) At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require NDP to make any further efforts to reduce emissions if the standard has been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.860(d)]

(2) NDP shall install, calibrate, maintain, and operate a COMS on RBC in accordance with the requirements of 40 C.F.R. § 63.864(d).

(3) NDP shall maintain proper operation of RBC's ESP automatic voltage control. [40 C.F.R. § 63.864(e)(1)]

(4) NDP shall implement corrective action if the average of ten consecutive six-minute averages result in a measurement greater than 20% opacity when spent pulping liquor is being fed into RBC. [40 C.F.R. § 63.864(k)(1)]

d. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) Records of CPMS data, including any exceedance, with a brief explanation of the cause of the monitoring exceedance, the time the exceedance occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 C.F.R. §§ 63.866(b) and (c)(3)]
(2) Records of any violation under 40 C.F.R. § 63.864(k)(2); [40 C.F.R. § 63.866(b)]
(3) Daily RBC black liquor solids firing rates (ton/day); [40 C.F.R. § 63.866(c)(1)]
(4) Records and documentation of supporting calculations for performance tests; [40 C.F.R. § 63.866(c)(4)]
(5) In the event of a failure to meet the applicable emission limit or CPMS operating limit, records of the number of failures and the date, start time, and duration of each failure. [40 C.F.R. § 63.866(d)]
(6) For any failure to meet an emission limit, an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions; [40 C.F.R. § 63.866(d)(2)(i)]
(7) For any failure, actions taken to minimize emissions in accordance with § 63.860(d) and any corrective action taken to return RBC to normal operation. [40 C.F.R. § 63.866(d)(3)]

e. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. §§ 63.867(a)(1) and 63.7(b)(1)]

(2) Pursuant to 40 C.F.R. § 63.867(d)(1), NDP is required to submit the results of each performance test to EPA within 60 days after the date of completing each performance test. However, 06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d), i.e., Standard Condition (8)(D), requires results of performance tests to be submitted to the Department within 30 days from the date of test completion. NDP has requested that these requirements be streamlined to avoid confusion. Therefore,

only the more stringent (30-day) requirement is referenced in the Order of this license.

(3) NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions report every six months which contains the information contained in §§ 63.867(c)(1) - (5) as applicable. NDP may elect to combine excess emissions reports with those for 40 C.F.R. Part 63, Subpart S. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.867(c)]

(4) Semi-annual compliance reports and results of compliance tests shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail. [40 C.F.R. § 63.867(d)]

10. Emission Limits and Streamlining

For RBC, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.044 gr/dscf @ 8% O_2	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	0.044 gr/dscf @ 8% O_2 *
	0.044 gr/dscf @ 8% O_2	40 C.F.R. Part 60, Subpart BB, § 60.282(a)(1)(i)	
	0.044 gr/dscf @ 8% O_2	40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)(i)(A)	
	86.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	86.7 lb/hr *
	4 lb/ADTP 2-hr sampling period	06-096 C.M.R. ch. 105, § 2	
PM_{10}	65.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	65.0 lb/hr
SO_2	100 ppmdv @ 8% O_2 30-day rolling avg See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	100 ppmdv @ 8% O_2 30-day rolling avg See Note 1
	1.92 lb/MMBtu 24-hr rolling avg	06-096 C.M.R. ch. 106, § 5(A)	206.3 lb/hr * 3-hr block avg See Note 2
	206.3 lb/hr 3-hr block avg See Note 2	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	110 ppmdv @ 8% O_2 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	110 ppmdv @ 8% O_2 * 24-hr block avg
	120 ppmwv @ 8% O_2 24-hr block avg	06-096 C.M.R. ch. 138, § 3(C)(1)	
	215.0 lb/hr 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	215.0 lb/hr 24-hr block avg
	117.3 lb/hr 24-hr block avg (SU/SD AEL) See Note 3	06-096 C.M.R. ch. 138, § 6	117.3 lb/hr 24-hr block avg (SU/SD AEL) See Note 3
CO	222.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	222.0 lb/hr
VOC	3.7 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	3.7 lb/hr
TRS	5 ppmdv @ 8% O_2 12-hr block avg	06-096 C.M.R. ch. 124, § 3(H)	5 ppmdv @ 8% O_2 * 12-hr block avg
	5 ppmdv @ 8% O_2 12-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)	
Visible Emissions	As described earlier in this license		

Note 1: When RBC is firing only fuel oil, the monitored SO_2 ppmdv emissions during that period shall not be included in determining the 30-day rolling average SO_2 ppmdv emission rate.

Note 2: As an alternative to the 206.3 lb/hr SO_2 emission limit, NDP shall be determined to be in compliance when Recovery Boiler C exceeds the 206.3 lb/hr limit if all of the following requirements are met:

i. SO_2 emissions from Recovery Boiler C shall not exceed 650.0 lb/hr on a 3-hour block average basis.

ii. SO_2 emissions from Cogen Boilers #6 and #7 combined shall not exceed 250.0 lb/hr on a 3-hour block average basis.

iii. SO_2 emissions from Power Boiler #3 shall not exceed 60.0 lb/hr on a 3-hour block average basis.

iv. NDP shall not utilize these limits to demonstrate compliance for more than 300 hours (i.e., 100 3-hour blocks) in any calendar year and shall report quarterly the dates, times, and number of 3-hour blocks when these limits were utilized for the quarter.

Note 3: Limit applies during periods of startup or shutdown beginning May 1, 2026. This limit is on a 24-hour daily block average basis, or shorter time period if the startup or

shutdown event does not last for the entire 24-hour daily block period. Operating times other than periods of startup and shutdown may be excluded from the block average.

11. Emission Limit Compliance Methods

Compliance with the emission limits associated with RBC shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	gr/dscf	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		
PM_{10}	lb/hr	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
SO_2	ppmdv	SO_2 CEMS, 30-day rolling average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	ppmdv	NO_x CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr		
CO	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS, 12-hr block average in accordance with 06-096 C.M.R. ch. 124 See Note 1	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
Visible Emissions	% opacity	COMS, six-minute block average basis and daily block average basis	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117

Note 1: The first two 12-hour block averages in a quarter which exceed this limit are not considered a violation. [06-096 C.M.R. ch. 124, § 5(C)(3)(b)]

12. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for RBC and its associated air pollution control equipment.

a. Hours RBC was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
b. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137]
c. Sulfur content (% by weight) of all fuel oil fired; [06-096 C.M.R. ch. 137]
d. Date and time of any firing of only fuel oil; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
e. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described earlier);
f. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described earlier); and
g. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described earlier).

13. CEMS

For RBC, the table below lists the required CEMS and COMS.

Continuous Monitors	Units	Averaging Period	Origin and Authority
SO_2 CEMS	ppmdv	30-day rolling average	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
	lb/hr	3-hr block average	
NO_x CEMS	ppmdv	24-hr block average	06-096 C.M.R. ch. 138, § 3(C)(2)
	lb/hr		
COMS	% opacity	six-minute block average	40 C.F.R. § 60.284(a)(1) & 40 C.F.R. § 63.864(d)
TRS CEMS	ppmdv	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)
O_2 CEMS	%	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)

L. Smelt Tank C

Smelt Tank C was installed in 1981. Emissions from Smelt Tank C exit via two venturi scrubbers and through two identical stacks, each 200-feet AGL. During the combustion of black liquor in RBC, the heating value of the lignin is released and the pulping chemicals are recovered as smelt, which is removed from the bottom of the recovery boiler and transferred to Smelt Tank C where the hot smelt mixes with water to form green liquor. Steam is generated and vented from the smelt tank.

1. Control Equipment

   Air pollutants emitted from Smelt Tank C include PM, PM_{10}, SO_2, and TRS. Particulate matter emissions from smelt tanks are comprised of finely divided smelt particles that become entrained in the exhaust gases. Smelt Tank C is equipped with two venturi scrubbers for emissions control.

2. Visible Emissions

   Smelt Tank C is subject to the following standard in *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101:

   Visible emissions from Smelt Tank C shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. § 4(B)(4)]

3. *Total Reduced Sulfur Control From Kraft Pulp Mills*, 06-096 C.M.R. ch. 124

   NDP shall comply with all requirements of 06-096 C.M.R. ch. 124 applicable to Smelt Tank C including, but not limited to, the following:

   a. Standards

      Pursuant to 06-096 C.M.R. ch. 124, § 3(J), emissions of TRS from Smelt Tank C shall not exceed 0.033 lb/ton BLS as H_2S.

   b. Performance Tests

      NDP shall conduct a performance stack test for TRS from Smelt Tank C every two calendar years (next test by the end of 2025). [06-096 C.M.R. ch. 124, § 4(C)]

4. *VOC RACT*, 06-096 C.M.R. ch. 134

   VOC RACT for Smelt Tank C was determined to be use of the venturi scrubbers when the tank is in operation and compliance with the applicable TRS emission limit in 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 134, VOC RACT (A-214-71-X-A, 12/20/1995)]

5. New Source Performance Standards

Smelt Tank C is subject to *Standards of Performance for Kraft Pulp Mills*, 40 C.F.R. Part 60, Subpart BB for smelt dissolving tanks manufactured after September 24, 1976. NDP shall comply with all requirements of 40 C.F.R. Part 60, Subpart BB applicable to Smelt Tank C including, but not limited to, the following:

a. Standards

(1) Emissions of PM from Smelt Tank C shall not exceed 0.2 lb/ton BLS (dry weight). [40 C.F.R. § 60.282(a)(2)]

(2) Emissions of TRS from Smelt Tank C shall not exceed 0.033 lb/ton BLS as H_2S. [40 C.F.R. § 60.283(a)(4)]

b. Monitoring Requirements

(1) NDP shall install, calibrate, maintain, and operate a CMS for the measurement of pressure drop across each venturi scrubber on Smelt Tank C. The monitoring device shall be certified by the manufacturer to be accurate to within a gage pressure of +/- 500 pascals (+/- 2 inches of water gage pressure). [40 C.F.R. § 60.284(b)(2)(i)]

(2) NDP shall install, calibrate, maintain, and operate a CMS for the measurement of scrubbing liquid supply pressure for each venturi scrubber on Smelt Tank C. The monitoring device shall be certified by the manufacturer to be accurate to within +/- 15% of the design scrubbing liquid supply pressure. [40 C.F.R. § 60.284(b)(2)(ii)]

(3) The measurements of scrubber pressure drop and scrubbing liquid supply pressure from each venturi scrubber shall be recorded at least once per shift. [40 C.F.R. § 60.284(c)(4)]

6. National Emissions Standards for Hazardous Air Pollutants

Smelt Tank C is subject to the requirements of *NESHAPs for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, 40 C.F.R. Part 63, Subpart MM.

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart MM applicable to Smelt Tank C including, but not limited to, the following:

a. Emission Limits and Operating Limits

(1) The concentration of PM in Smelt Tank C exhaust gases shall not exceed 0.20 lb/ton BLS fired. [40 C.F.R. § 63.862(a)(1)(i)(B)]

(2) The 3-hour rolling average scrubbing liquid flow rate shall be maintained at or above the lowest one-hour pressure drop measured during the most recent successful PM performance test.
[40 C.F.R. §§ 63.864(j)(5)(i)(A) & 63.864(k)(1)(ii)]

(3) The 3-hour rolling average pressure drop across the wet scrubbers shall be maintained at or above the lowest one-hour pressure drop measured during the most recent successful PM performance test. This operating limit applies at all times except for periods of startup and shutdown.
[40 C.F.R. §§ 63.864(j)(5)(i)(B) & 63.864(k)(1)(ii)]

b. Performance Tests

(1) NDP shall conduct a performance stack test for PM from Smelt Tank C every five years (next test due 7/24/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

(2) Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

(3) NDP shall establish operating limits for the scrubber CPMS during performance tests in accordance with 40 C.F.R. § 63.864(j). Multiple performance tests may be conducted to establish a range of parameter values. Operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.

c. Continuous Compliance and Monitoring Requirements

(1) At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require NDP to make any further efforts to reduce emissions if the standard has been achieved. Determination of whether a source is operating in compliance with

operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.860(d)]

(2) NDP shall install, calibrate, maintain, and operate a CPMS on the Smelt Tank C scrubbers to determine and record the pressure drop across each scrubber. Measurements shall be recorded at least once every successive 15-minute period. [40 C.F.R. § 63.864(e)(10)]

(3) The monitoring devices used for the continuous measurement of pressure drop across the scrubbers must be certified by the manufacturer to be accurate to within a gage pressure of +/- 500 pascals (+/- 2 inches of water gage pressure). [40 C.F.R. § 63.864(e)(10)(i)]

(4) NDP shall install, calibrate, maintain, and operate a CPMS on the Smelt Tank C scrubbers to determine and record the scrubbing liquid flow rate for each scrubber. Measurements shall be recorded at least once every successive 15-minute period. [40 C.F.R. § 63.864(e)(10)]

(5) The monitoring devices used for the continuous measurement of scrubbing liquid flow rate must be certified by the manufacturer to be accurate to within +/- 5% of the design scrubbing liquid flow rate. [40 C.F.R. § 63.864(e)(10)(ii)]

(6) Except for periods of startup and shutdown, NDP shall implement corrective action if any 3-hour average scrubber pressure drop is below the minimum operating limit established during the most recent successful PM performance test. [40 C.F.R. § 63.864(k)(1)]

(7) NDP shall implement corrective action if any 3-hour average scrubbing liquid flow rate is below the minimum operating limit established during the most recent successful PM performance test. [40 C.F.R. § 63.864(k)(1)]

d. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) Records of CPMS data, including any exceedance, with a brief explanation of the cause of the monitoring exceedance, the time the exceedance occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 C.F.R. §§ 63.866(b) and (c)(3)]
(2) Records of any violation under 40 C.F.R. § 63.864(k)(2);
[40 C.F.R. § 63.866(b)]

(3) Records and documentation of supporting calculations for performance tests; [40 C.F.R. § 63.866(c)(4)]
(4) In the event of a failure to meet the applicable emission limit or CPMS operating limit, records of the number of failures and the date, start time, and duration of each failure. [40 C.F.R. § 63.866(d)]
(5) For any failure to meet an emission limit, an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions; [40 C.F.R. § 63.866(d)(2)(i)]
(6) For any failure, actions taken to minimize emissions in accordance with § 63.860(d) and any corrective action taken to return Smelt Tank C to normal operation. [40 C.F.R. § 63.866(d)(3)]

e. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

(1) NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. §§ 63.867(a)(1) and 63.7(b)(1)]

(2) Pursuant to 40 C.F.R. § 63.867(d)(1), NDP is required to submit the results of each performance test to EPA within 60 days after the date of completing each performance test. However, 06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d) represented in Standard Condition (8)(D) requires results of performance tests to be submitted to the Department within 30 days from the date of test completion. NDP has requested that these requirements be streamlined to avoid confusion. Therefore, only the more stringent (30-day) requirement is referenced in the Order of this license.

(3) NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions report every six months which contains the information contained in §§ 63.867(c)(1) - (5) as applicable. NDP may elect to combine excess emissions reports with those for 40 C.F.R. Part 63, Subpart S. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.867(c)]

(4) Semi-annual compliance reports and results of compliance tests shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail. [40 C.F.R. § 63.867(d)]

7. Emission Limits and Streamlining

For Smelt Tank C, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.192 lb/ton BLS	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	0.192 lb/ton BLS *
	0.2 lb/ton BLS	40 C.F.R. Part 60, Subpart BB, § 60.282(a)(2)	
	0.20 lb/ton BLS	40 C.F.R. Part 63, Subpart MM, § 63.862(a)(1)(i)(B)	
	16.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	16.0 lb/hr *
	1 lb/ADTP 2-hr sampling period	06-096 C.M.R. ch. 105, § 2	
PM_{10}	0.190 lb/ton BLS	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	0.190 lb/ton BLS
	15.8 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	15.8 lb/hr
SO_2	0.067 lb/ton BLS	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	0.067 lb/ton BLS
	5.5 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	5.5 lb/hr
TRS	0.033 lb/ton BLS as H_2S	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)	0.033 lb/ton BLS as H_2S*
	0.033 lb/ton BLS as H_2S	06-096 C.M.R. ch. 124, § 3(J)	
	0.033 lb/ton BLS as H_2S	40 C.F.R. Part 60, Subpart BB, § 60.283(a)(4)	
Visible Emissions	As described earlier in this license		

8. Emission Limit Compliance Methods

Compliance with the emission limits associated with Smelt Tank C shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		
PM_{10}	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 6C	As requested
	lb/hr		
TRS	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 16B	Once every 2 calendar years in accordance with 06-096 C.M.R. ch. 124
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

9. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Smelt Tank C and its associated air pollution control equipment.

a. Hours Smelt Tank C was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
b. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described earlier);
c. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described earlier); and
d. Records of any maintenance activities performed (planned or unplanned) on the venturi scrubbers. [40 C.F.R. § 63.860(d)]

10. Parameter Monitors

During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for Smelt Tank C and its associated control equipment:

Parameter	Averaging Period	Origin and Authority
Scrubber Pressure Drop	3-hr rolling average	40 C.F.R. § 60.284(b)(2)(i) & 40 C.F.R. §§ 63.864(e)(10) & (k)(1)
Scrubber Liquid Flow Rate		40 C.F.R. § 63.864(e)(10) & (k)(1)
Scrubber Liquid Pressure	N/A	40 C.F.R. § 60.284(b)(2)(ii)

11. CEMS

There are no CEMS required for Smelt Tank C.

M. Lime Slaker and Causticizers

Lime produced in the Lime Kiln discharges into the Lime Slaker, along with fresh lime makeup as needed. In the Lime Slaker, the lime is mixed with water and converted to hydrated lime ($Ca(OH)_2$). Green liquor and hydrated lime are then converted in the Causticizer Tanks to white liquor, which is used in the digesters. NDP operates one lime slaker manufactured by Ahlstrom Corp. The Lime Slaker was installed in 1989 and began operation in 1990. NDP operates four causticizing tanks which were installed in 1989 and began operation in 1990.

1. Control Equipment

Particulate emissions from the Lime Slaker are controlled by a static scrubber and vented to a 120-foot AGL stack. Wet scrubbing is considered the most appropriate control alternative for this type of source because the scrubbing media can be reused in the process. Emissions from Causticizing Tanks #1, #2, and #3 exhaust through the Lime Slaker static scrubber. Causticizing Tank #4 is vented to atmosphere. Causticizers are identified as insignificant activities under 06-096 C.M.R. ch. 140, Appendix B, § B(A)(88) and are not addressed further in this license.

2. Visible Emissions

The Lime Slaker is subject to the following visible emission standard pursuant to 06-096 C.M.R. ch. 101 and BACT:

> Visible emissions from the Lime Slaker shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4) and 06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

3. New Source Performance Standards

   Lime slakers are not affected facilities addressed by *Standards of Performance for Kraft Pulp Mills*, 40 C.F.R. Part 60, Subpart BB.

4. National Emissions Standards for Hazardous Air Pollutants

   Lime slakers are not affected sources addressed by *NESHAPs for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills*, 40 C.F.R. Part 63, Subpart MM.

5. Periodic Monitoring

   NDP shall record data and maintain records for the following periodic monitoring values for the Lime Slaker and its associated air pollution control equipment.

   a. Hours the Lime Slaker was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
   b. Records of any maintenance activities performed (planned or unplanned) on the Lime Slaker scrubber. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

6. Parameter Monitors

   During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Lime Slaker and its associated air pollution control equipment:

Parameter	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
Scrubber media flow rate	gpm	Flow meter	Continuously	once every 15-minutes

7. CEMS

   There are no CEMS required for the Lime Slaker.

N. Kraft Pulping Process

1. Components

a. Chip Bin Steaming

NDP operates one chip bin, the Kamyr Chip Bin, from which wood chips are fed to the digester system. Wood chips are conveyed from the chip bin to a pressurized steaming vessel that, in turn, feeds the digester.

Emissions from the chip bin when using flash steam from the steaming vessel are subject to 40 C.F.R. Part 63, Subpart S. When using flash steam Kamyr Chip Bin emissions are collected as part of the HVLC system described later in this license.

b. Digester System

NDP's Kamyr Continuous Digester System consists of the Kamyr Digester and a 250-ton Blow Tank. The Batch Digester System consists of 10 Batch Digesters and 2 associated Batch Blow Tanks. In the digester systems, wood is "cooked" under pressure in white liquor, a chemical solution which dissolves lignin, the substance which holds wood fibers together. The Kamyr Digester was installed in 1961. Batch Digesters #5 through #10 were installed in 1949, and Batch Digesters #1 through #4 were installed in 1990.

Regulated pollutants emitted from the Digester Systems are VOC and TRS. Emissions from the Digester Systems are captured as part of the Low Volume, High Concentration (LVHC) gas collection system, in accordance with 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S, and incinerated in the Lime Kiln, Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7. The LVHC system is addressed later in this license.

c. Brownstock Washer System

NDP operates two Brownstock Washer lines: The Softwood Brownstock Washer Line was installed in 1961, and the original Hardwood Brownstock Washer Line was installed in 1951. The Hardwood Brownstock Washer Line was modified by installation of the CB washer in 1990 and the DD washer in 2002. The DD washer replaced the three original vacuum drum washers.

Regulated pollutants emitted from the Brownstock Washer Systems are VOC and TRS. Emissions from the Brownstock Washer Systems are captured by the HVLC gas collection system and incinerated in Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7.

d. Deckers

The Hardwood Decker was installed in 1961 and originally operated as the Softwood Decker until 1990. The Hardwood Decker uses fresh water or process water containing less than 400 ppmw of HAP (measured as methanol), and therefore is not required to be collected per 40 C.F.R. Part 63, Subpart S. Emissions of TRS are less than the threshold that requires collection per 06-096 C.M.R. ch. 124.

As part of NDP's HAP collection and treatment pursuant to 40 C.F.R. § 63.446(e)(1). the Softwood Decker utilizes process water containing greater than 400 ppmw of HAP (measured as methanol), and is therefore required to be collected in accordance with the requirements of 40 C.F.R. Part 63, Subpart S. When using process water containing greater than 400 ppmw of HAP, emissions of TRS are greater than the threshold that requires collection pursuant to 06-096 C.M.R. ch. 124. Emissions from the Softwood Decker are captured and collected as part of the HVLC gas collection system and incinerated in Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7.

e. Multiple Effect Evaporator System

The Multiple Effect Evaporators were designed and manufactured by Goslin-Birmington and installed in 1981. These evaporators were designed with six effects and are non-direct contact systems. The Mill also operates two pre-evaporators and two concentrators which are considered part of the Evaporator System. A regulated pollutant emitted from the Multiple Effect Evaporators is TRS, which is captured by the LVHC gas collection system, in accordance with 06-096 C.M.R. ch. 124, and incinerated in the Lime Kiln, Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7.

2. Controls

a. LVHC

In accordance with applicable requirements of 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S, NDP collects and controls low volume, high concentration gas streams containing non-condensable gases. This collection and control system is the LVHC system and collects gaseous emissions from the following equipment:

(1) Hardwood and Softwood Digester Systems (including all ten batch digesters and the Kamyr continuous digester);
(2) Evaporator System; and
(3) Condensate Collection System.

The relief and blow gases from the digesters and the TRS-containing gases from the evaporators are collected as part of the LVHC collection system and incinerated in Cogen Boilers #6 and/or #7, Power Boiler #3, or the Lime Kiln. Condensates from the LVHC system are collected and treated by the Steam Stripper, described later in this license.

b. HVLC

In accordance with applicable requirements of 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S, NDP collects and controls high volume, low concentration gas streams containing non-condensable gases. This HVLC system controls gases by incineration in Cogen Boilers #6 and/or #7 or Power Boiler #3. The HVLC system collects gaseous emissions from the following equipment:

(1) Kamyr Chip Bin

The collection and oxidation of the Kamyr Chip Bin vent gases reduces emissions to the atmosphere of TRS, VOC, and methanol (a HAP). The non-condensable gases collected from the Kamyr Chip Bin are considered part of NDP's HVLC system and are defined as a miscellaneous source in 06-096 C.M.R. ch. 124. Kamyr Chip Bin gases are collected into the HVLC system when flash steam is being used in the Kamyr Chip Bin; however, if fresh steam is used in the Kamyr Chip Bin, the gases are not required to be collected as part of the HVLC system and are instead vented to the atmosphere, pursuant to requirements of 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S.

The Kamyr Chip Bin is sealed to reduce the generated gas volume and to minimize infiltration, thus reducing the danger of gas explosions by minimizing oxygen content of the vent gases. The gases from the Chip Bin pass through a series of coolers, separators, and condensers before incineration, further reducing the volume of sulfur compounds to be oxidized in the mill boilers and dampening out variability. A flame arrester is installed in the gas collection line after the Kamyr Chip Bin condenser.

Gases from the Kamyr Chip Bin are transported by a steam eductor to the main collection piping, which conveys the gases to one of the specified combustion units for destruction. TRS compounds in the gases are oxidized to SO_2, which is then controlled by the combustion unit's SO_2 controls. Condensates in the piping system are conveyed to the Steam Stripper.

(2) Hardwood Brownstock Washers

The vent gas piping collects the applicable sources of the Hardwood Brownstock Washer System as part of NDP's HVLC system. The Hardwood Brownstock Washer System is subject to and shall continue to comply with the requirements of 06-096 C.M.R. ch. 124, 40 C.F.R. Part 60, Subpart BB, and 40 C.F.R. Part 63, Subpart S.

Condensates from the evaporator system are recycled to the DD Washer as part of NDP's HAP collection and treatment pursuant to 40 C.F.R. § 63.446(e)(1).

Emissions from the Hardwood Brownstock Washer vents combine with the Kamyr Chip Bin vent gases and Softwood Brownstock Washer System gases and are sent to one of the specified combustion units for destruction.

(3) Softwood Brownstock Washers

The Softwood Brownstock Washer hoods are sealed to minimize the volume of vented gases. Vent system piping collects the applicable vents associated with the Softwood Brownstock Washer System and includes them for control as part of NDP's HVLC system. The Softwood Brownstock Washer System is subject to the applicable requirements of 06-096 C.M.R. ch. 124 and 40 CFR Part 63, Subpart S.

(4) Storage Tank Vent

Emissions from several storage tank vents are collected and included in the HVLC system to minimize TRS emissions from the facility. The tank vents controlled include the following: miscellaneous Pulp Mill tanks, 17% black liquor storage tanks, 52% black liquor storage tank, and 64% black liquor storage tank.

The storage tank vent control system is not required by either 06-096 C.M.R. ch. 124 or 40 C.F.R. Part 63, Subpart S. However, given the location and characteristics of these tanks and the HVLC system, NDP has chosen to control the storage tank vents in accordance with their continuing odor emission reduction program. These tanks are below the threshold for miscellaneous sources and therefore are not considered part of the HVLC system for purposes of 06-096 C.M.R. ch. 124.

The saltcake mix tank and the precipitator mix tank vents are not subject to 40 C.F.R. Part 63, Subpart S. These tanks are considered miscellaneous sources under 06-096 C.M.R. ch. 124 and are collected in the HVLC system.

(5) Knotter Vents

The knotter systems on the hardwood and softwood brownstock lines consist of the following equipment: primary knotters, stock chest, and a shared backup knotter screen. These systems have low emissions (<0.1 lb HAP/ton ODP) and are therefore not required to have controls installed pursuant to 40 C.F.R. Part 63, Subpart S, § 63.433(a)(1)(ii)(A). These systems are also below the threshold for miscellaneous sources and are therefore not part of the HVLC system under 06-096 C.M.R. ch. 124. However, NDP has chosen to control components of the hardwood and softwood knotter systems in accordance with their continuing odor emission reduction program.

(6) Screen Vents

The screening system consists of the primary and secondary screens and the scalping screen. These vents have low emissions (<0.2 lb HAP/ton ODP) and are therefore not required to have controls installed pursuant to 40 C.F.R. Part 63, Subpart S, § 63.433(a)(1)(ii)(B). These systems are also below the threshold for miscellaneous sources and are therefore not considered part of the HVLC system under 06-096 C.M.R. ch. 124. However, NDP has chosen to control components of the hardwood and softwood screening systems in accordance with their continuing odor emission reduction program.

(7) Deckers

Hardwood Decker

The Hardwood Decker uses fresh water or process water containing less than 400 ppmw of HAP (measured as methanol). NDP is therefore not required to collect these gases pursuant to 40 C.F.R. Part 63, Subpart S, §§ 63.443(a)(1)(iv)(A) and (B). The Hardwood Decker is also below the threshold of a miscellaneous source for 06-096 C.M.R. ch. 124. If, in the future, shower water containing more than 400 ppmw of HAP is used on the Hardwood Decker, NDP will be required to collect the vent gases and include them in the system to control HAP emissions. NDP has demonstrated that the use of stripped condensate as shower water will not result in an increase in annual emissions.

Under current operating scenarios, emissions from the Hardwood Deckers are not required to be collected as part of the HVLC system. However, if either of the two following scenarios is implemented, the affected Decker(s) would become subject to HVLC collection requirements:

(i) shower water containing more than 400 ppmw by weight of methanol is used on the Decker [40 C.F.R. Part 63, Subpart S]; or

(ii) shower water is used on the Decker which causes emissions of TRS greater than 0.75 lb/hour on a continuous basis under normal operations [06-096 C.M.R. ch. 124].

Softwood Decker

The Softwood Decker is tied into the vent collection system to allow the option of using process water containing greater than 400 ppmw of HAP. Condensates from the evaporator system are recycled to the Softwood Decker as part of NDP's HAP collection and treatment as specified in 40 C.F.R. § 63.446(e)(1). The collected gases are oxidized in one of the specified HVLC combustion units. The Softwood Decker System is subject to the requirements of 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S.

c. Condensate Collection and Steam Stripper System

In 1998, in advance of the requirements of 40 C.F.R. Part 63, Subpart S and in an effort to reduce emissions of malodorous compounds at the mill, NDP installed a Steam Stripper System to treat certain foul condensate streams generated by the mill's pulp manufacturing process. The Steam Stripper System consists of a Stripper Feed Tank, the Steam Stripper column, re-boiler, pre-heaters, condensers, and piping that directs Steam Stripper off-gases (SOGs) to Cogen Boilers #6 and/or #7 or Power Boiler #3 for the destruction of TRS and VOC.

The Condensate Collection System collects condensates generated in the LVHC, HVLC, and SOG systems; Digester Systems; and Evaporator Systems and transports them to the Stripper Feed Tank. The Steam Stripper receives foul condensate from the Stripper Feed Tank. Through volatilization by direct-contact heat transfer, VOC and TRS compounds are removed from the foul condensate in the form of SOGs. The SOGs are transported to Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7 for incineration. In the incinerating boiler, TRS gases in the SOGs are oxidized to SO_2, which is then controlled by the boiler's SO_2 emissions control device. The Steam Stripper collection system is considered part of NDP's LVHC system.

3. *Total Reduced Sulfur Control From Kraft Pulp Mills*, 06-096 C.M.R. ch. 124

NDP shall comply with all requirements of 06-096 C.M.R. ch. 124 applicable to the Kraft pulping process including, but not limited to, the following:

a. Standards

(1) The LVHC system shall have a primary control strategy and a backup control strategy. Both shall meet the requirements of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 124, § 3(B)]

(2) NDP shall not vent emissions of TRS from the LVHC system or its associated equipment which:

(i) Exceeds 40 minutes in duration; or
(ii) Contributes to an aggregate TRS venting of more than 1.0% of quarterly operating time.
[06-096 C.M.R. ch. 124, § 3(C)]

(3) The HVLC system shall maintain a 96% collection and control uptime based on quarterly brownstock washer system operating time on a total mass weighted basis. [06-096 C.M.R. ch. 124, § 3(E)]

b. Recordkeeping and Reporting

(1) NDP shall maintain a written preventative maintenance program for the LVHC and HVLC systems. [06-096 C.M.R. ch. 124, § 3(G)]

(2) NDP must report verbally or in writing (e.g., email) to the Department on the next State working day:

(i) Any venting of TRS to the atmosphere from the LVHC system or Steam Stripper of longer than 15 minutes; and
(ii) Any venting of TRS to the atmosphere from the HVLC collection system of longer than four hours.
[06-096 C.M.R. ch. 124, § 5(B)]

(3) NDP shall submit quarterly reports to the Department in accordance with 06-096 C.M.R. ch. 124, § 5(C).

4. *VOC RACT*, 06-096 C.M.R. ch. 134

Emissions of VOC from the Digester System, Multiple Effect Evaporator System, and Brownstock Washer System were previously evaluated pursuant to 06-096 C.M.R. ch. 134 in A-214-71-X-A (12/20/1995).

VOC RACT for the Digester System and the Multiple Effect Evaporator System was determined to be collection and incineration in the Lime Kiln, Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7, in compliance the TRS control requirements of 06-096 C.M.R. ch. 124. [06-096 C.M.R. ch. 134, VOC RACT (A-214-71-X-A, 12/20/1995)]

During development of 06-096 C.M.R. ch. 134, the Paper Industry Information Office (aka Maine Pulp and Paper Association) performed a VOC RACT analysis on various VOC sources from a representative paper mill in Maine. From that analysis, it was

determined that the control of VOC emissions from the pulp stock washers would have an adverse economic impact; thus, VOC emissions from the Brownstock Washer Systems were determined to be meeting VOC RACT as of the 06-096 C.M.R. ch. 134 compliance deadline of May 31, 1995. Since that deadline, NDP has installed an HVLC system that provides additional VOC controls by collecting and incinerating these gases in Power Boiler #3, Cogen Boiler #6, or Cogen Boiler #7, in accordance with 06-096 C.M.R. ch. 124 and 40 C.F.R. Part 63, Subpart S.

5. New Source Performance Standards

The Digester System, Brownstock Washer System, Multiple Effect Evaporator System, and Condensate Steam Stripper are subject to *Standards of Performance for Kraft Pulp Mills*, 40 C.F.R. Part 60, Subpart BB for equipment manufactured after September 24, 1976.

NDP shall comply with all requirements of 40 C.F.R. Part 60, Subpart BB applicable to the pulping equipment including, but not limited to, the following:

a. Standards

Since emissions of TRS from the Digester System, Brownstock Washer System, Multiple Effect Evaporator System, and Condensate Steam Stripper each exceed 5 ppmdv, NDP shall incinerate these gases in one of the following: Cogen Boilers #6 or #7, Power Boiler #3, or the Lime Kiln [40 C.F.R. § 60.283(a)(1)]

b. Monitoring Requirements

Cogen Boilers #6 and #7 are designed to operate at temperatures above 1,200 °F. Based on guidance from EPA, since Cogen Boilers #6 and #7 combust gases from non-NSPS equipment in addition to NSPS equipment, and they are designed to operate at more than 1,200 °F, there is no requirement to operate a CMS to measure combustion temperature in this equipment. This is why 40 C.F.R. § 60.284(b)(1) references incinerators only and not other combustion devices.

Monitoring requirements for the Lime Kiln were addressed previously.

c. Recordkeeping and Reporting Requirements

NDP shall submit semiannual excess emission reports in accordance with 40 C.F.R. § 60.7(c). For the Digester System, Brownstock Washer System, Multiple Effect Evaporator System, and Condensate Steam Stripper, periods of excess emissions are:

(1) All 12-hour average TRS concentrations above 5 ppmv unless the gasses are combusted in the Lime Kiln; or
(2) All periods in excess of 5 minutes and their duration during which the combustion temperature at the point of incineration is less than 1,200 °F.

All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 60.284(d)(3)]

6. National Emissions Standards for Hazardous Air Pollutants

The Kraft Pulping and Condensate Systems are subject to *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, 40 C.F.R. Part 63, Subpart S. These systems are considered existing equipment because they were constructed prior to December 17, 1993.

For the purposes of 40 C.F.R. Part 63, Subpart S, emissions from the Pulping System includes emissions from the equipment specified in § 63.443(a)(1).

For the purposes of 40 C.F.R. Part 63, Subpart S, the Condensate System includes condensates from the equipment specified in § 63.446(b).

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart S applicable to the Pulping System and Condensate System including, but not limited to, the following:

a. Control Requirements

Background
NDP has elected to demonstrate compliance with the pulping condensate collection option listed in 40 C.F.R. § 63.446(c)(3). This option requires collection of pulping process condensates that contain a total HAP mass of 11.1 lbs per ton of oven-dry pulp (lb/ton ODP) or more for mills that perform bleaching and 7.2 lb/ton ODP or more for mills that do not perform bleaching. Pursuant to § 63.446(i), mills that produce both bleached and unbleached pulp products may meet a prorated mass standard. The Department requires a 30-day rolling average for compliance with condensate collection requirements, the 30-day average includes only days when condensate sources are operating.

To demonstrate compliance with pulping condensate treatment requirements NDP treats pulping condensates pursuant to 40 C.F.R. § 63.446(e)(1) [recycling the condensates into the Pulping System] and § 63.446(e) (5) [treating the condensate in the Condensate Steam Stripper]. Emissions from condensates recycled into the Pulping System are controlled with other Pulping System emissions by destruction in Cogen Boiler #6 or #7, Power Boiler #3, or the Lime Kiln. Emissions from the Condensate Steam Stripper are similarly routed for destruction in these devices.

Therefore, NDP is subject to the following requirements:

(1) Pulping System equipment shall be enclosed and vented to a closed-vent system and routed to Cogen Boiler #6 or #7, Power Boiler #3, or the Lime Kiln (as applicable) for destruction. [40 C.F.R. §§ 63.443(c) and (d)(1)]

(2) The Pulping System enclosures and closed-vent system shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.443(c)]

(3) NDP shall collect pulping process condensates that contain a total HAP mass of 11.1 lb/ton ODP or more for bleached pulp and 7.2 lb/ton ODP or more for unbleached pulp, calculated as a prorated standard based on the ratio of annual tons of bleached and unbleached ODP. Compliance shall be demonstrated by a rolling average of the last 30 operating days.
[40 C.F.R. §§ 63.446(c)(3) and (i)]

(4) The pulping condensates shall be conveyed in a closed collection system that is designed and operated to meet the requirements of 40 C.F.R. §§ 63.446(d)(1) and (2). [40 C.F.R. § 63.446(d)]

(5) The pulping condensates shall either be recycled back into the Pulping System or treated by the Condensate Steam Stripper.
[40 C.F.R. §§ 63.446(e)(1) and (5)]

(6) The Condensate Steam Stripper shall remove 10.2 lb of total HAP per ton ODP for mills that perform bleaching (6.6 lb of total HAP per ton ODP for mills that do not perform bleaching) or achieve a total HAP concentration of 330 ppm for mills that perform bleaching (210 ppm for mills that do not perform bleaching) or less by weight at the outlet of the device. Pursuant to § 63.446(i), mills that produce both bleached and unbleached pulp products may meet a prorated mass standard. [40 C.F.R. § 63.446(e)(5)]

(7) SOGs shall be vented to a closed-vent system and routed to Cogen Boiler #6 or #7 or Power Boiler #3 for destruction. [40 C.F.R. § 63.446(g)]

(8) The enclosures and closed-vent system conveying SOGs for destruction shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.446(g)]

b. Continuous Compliance and Monitoring Requirements

(1) At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.453(q)]

(2) NDP shall install, calibrate, certify, operate, and maintain a CMS for the following parameters for the Condensate Steam Stripper:

Parameter	Frequency	
	Monitor	Record
Process wastewater feed rate	Monitor continuously, Record every 15 minutes	
Steam feed rate		
Process wastewater column feed temperature		

[40 C.F.R. §§ 63.453(a) and (g)]

(3) NDP shall establish operating limits for the Condensate Steam Stripper CMS in accordance with 40 C.F.R. § 63.453(n).

(4) NDP shall operate the Condensate Steam Stripper in a manner consistent with the minimum or maximum (as appropriate) operating parameter. [40 C.F.R. § 63.453(o)]

(5) Inspections of Enclosures, Closed-Vent Systems, and Condensate Closed Collection System

(i) Except as provided for in (iii), each enclosure and closed-vent system used by the Pulping System to convey SOG shall meet the inspection and operating requirements of § 63.453(k).
(ii) Except as provided for in (iii), the condensate closed collection system shall meet the inspection and operating requirements of § 63.453(l).
(iii) NDP has demonstrated that unsafe conditions may be created in the inspection and monitoring of some enclosures and closed collection and vent system components as required by 40 C.F.R. § 63.453(k) and (l).

Therefore, for equipment required to be inspected pursuant to 40 C.F.R. § 63.453(k) and (l), NDP shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an imminent or potential danger, or if the equipment could not be inspected without elevating the inspecting personnel more than six feet above a supported surface.
[40 C.F.R. § 63.453(q)]

c. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart S including, but not limited to, the following:

(1) A site-specific inspection plan for each enclosure opening, closed-vent system, and closed collection system; [40 C.F.R. § 63.454(b)]
(2) For each inspection of an enclosure opening, closed-vent system, and closed collection system, the information in 40 C.F.R. § 63.454(b);
(3) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or air pollution control and monitoring equipment; [40 C.F.R. § 63.454(g)(1)]
(4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.454(g)(2)]

d. Notifications and Reports

NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions and monitoring system performance report and summary report every six months which contains the information contained in §§ 63.10(e)(3) and 63.454(g) as applicable. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.455(a)]

Periods of excess emissions for the Pulping System shall not be considered a violation provided the time of excess emissions divided by the total process operating time in the semi-annual reporting period does not exceed the levels in 40 C.F.R. § 63.443(e).

Periods of excess emissions for the Condensate Steam Stripper shall not be considered a violation provided the time of excess emissions divided by the total process operating time in the semi-annual reporting period does not exceed 10%. [40 C.F.R. § 63.446(g)]

7. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Kraft Pulping Process and its associated air pollution control equipment.

a. Records necessary to calculate annual emissions in accordance with 06-096 C.M.R. ch. 137;
b. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described earlier);
c. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described earlier); and
d. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart S (described earlier)

8. Parameter Monitors

The CMS for the Condensate Steam Stripper required by 40 C.F.R. Part 63, Subpart S are identified as parameter monitors.

O. Bleach Plant

NDP's Bleach Plant consists of the Softwood Bleach Plant (A-Line), Hardwood Bleach Plant (B-Line), the Bleach Plant Scrubber System, the R-8 ClO_2 Generation Plant, and R-8 ClO_2 Scrubber System.

To produce high quality, stable pulp products, the industry utilizes bleaching methods to remove lignin from the pulp. Effective bleaching is achieved through a continuous sequence of process stages utilizing certain chemicals and conditions in each stage. NDP's bleaching line is composed of a three-stage bleaching process: D-E_{op}-D, including delignification[4] and extraction[5] phases. Each bleaching stage consists of a reaction tower, washer, and seal tank.

ClO_2 used in the elemental chlorine-free bleaching process is manufactured onsite using an R-8 process in the R-8 ClO_2 Generation Plant. In the R-8 process, methanol, sodium chlorate, and sulfuric acid react to form ClO_2. This reaction also results in the generation of saltcake ($Na_3H(SO_4)_2$), formic acid (CHOOH), water, and carbon dioxide. The saltcake slurry is pumped from the ClO_2 generator to a filter, where the generated liquor and weak wash are separated from the other components and recirculated back to the process. The

[4] Delignification is the detachment of lignin from the desired pulp product, represented in the bleaching sequence notation as D. Delignification is accomplished using chlorine dioxide (ClO_2).
[5] Extraction is the removal of the lignin portion of the mix, represented in the bleaching sequence notation as E. The subscript(s) indicate what type of chemical(s) is/are used to enhance the extraction process, such as peroxide or oxygen.

saltcake is removed from the filter and sent to a dissolving tank. From the dissolving tank, the saltcake solution is pumped to other mill processes.

1. New Source Review

In 2020, NDP permitted the Unbleached Kraft Project (A-214-77-18-A, 11/18/2020) which pivoted resources toward the unbleached fiber market. As part of this project, NDP temporarily stopped bleaching softwood pulp. In 2024, NDP licensed a modification to the Unbleached Kraft Project (A-214-77-20-A, 5/9/2024) to maintain the flexibility to produce either bleached or unbleached products. The requirements of these NSR licenses are included in this license.

These NSR licenses include recordkeeping and reporting requirements to demonstrate that the Unbleached Kraft Project did not exceed significant increase levels. These "Future Project Emissions Reporting" requirements are included in the Order section of the license.

2. Control Equipment

a. Bleach Plant

Chlorine (Cl_2) and ClO_2 emissions are collected from each Bleach Plant and controlled by two packed tower scrubbers in series for each bleach line. The A-Line and B-Line Wet Scrubber System to control Cl_2, ClO_2, and VOC emissions from the Bleach Plant was installed in June of 1992.

In the B-Line Wet Scrubber System, the gases enter the first packed bed scrubber where caustic, white liquor, and/or weak wash is used as the scrubbing medium. After passing through the first scrubbing tower, the gases continue to the second packed tower scrubber, which uses white liquor, caustic, and/or weak wash as the scrubbing medium. The scrubber system is capable of controlling emissions to below licensed levels with only one of the two packed tower scrubbers in operation. The separate A-Line Wet Scrubber System is identical to the B-Line. The wet scrubber systems for each bleach line are capable of controlling the combined emissions from both bleach lines. The A-Line and B-Line Wet Scrubber System vents to a 140-foot AGL stack.

b. R-8 ClO_2 Generation Plant

After being created in the R-8 ClO_2 Generation Plant, ClO_2 gas passes through an indirect contact cooler, which removes some water vapor from the gas and thus increases the concentration of ClO_2 in the gas stream. The ClO_2 gas stream then goes to the ClO_2 absorption tower (designated S-3), where chilled water absorbs the ClO_2. The off-gases from the S-3 absorber, along with other tank and equipment

vents within the R-8 process, are drawn into the vent scrubber (S-10). Additional chilled water is used in the vent scrubber (S-10) to absorb residual ClO_2. The weak ClO_2 solution is then drawn into the absorption tower (S-3). Off-gases from the vent scrubber (S-10) are drawn into the white liquor scrubber (designated S-16), which uses white liquor and/or caustic and/or weak wash to remove any remaining Cl_2 or ClO_2 from the gases before they are exhausted from the ClO_2 Scrubber System to a 45-foot AGL stack.

3. *VOC RACT*, 06-096 C.M.R. ch. 134

Emissions of VOC from the Bleach Plant were previously evaluated pursuant to 06-096 C.M.R. ch. 134 in A-214-71-X-A (12/20/1995). VOC RACT for the Bleach Plant was determined to be the discontinued use of sodium hypochlorite as a primary bleaching stage and continued use of the B-Line Wet Scrubber System.

4. National Emissions Standards for Hazardous Air Pollutants

The Bleach Plant (Bleaching System) is subject to *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, 40 C.F.R. Part 63, Subpart S. This system is considered to be existing equipment because it was constructed prior to December 17, 1993.

Since NDP uses an elemental chlorine-free process, for the purposes of 40 C.F.R. Part 63, Subpart S, the Bleaching System includes equipment that uses any chlorinated compounds. [40 C.F.R. § 63.445(a)(2)] Therefore, the extraction stage of the bleach plant (where no chlorinated compounds are introduced) is not subject to the requirements of Subpart S.

NDP shall comply with all requirements of 40 C.F.R. Part 63, Subpart S applicable to the Bleaching System including, but not limited to, the following:

a. Control Requirements

(1) Bleaching System equipment shall be enclosed and vented to a closed-vent system and routed to the A-Line or B-Line Wet Scrubber Systems or ClO_2 Scrubber System (as applicable).[40 C.F.R. §§ 63.445(b)]

(2) The Bleaching System enclosures and closed-vent system shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.445(b)]

(3) The A-Line and B-Line Wet Scrubber Systems shall:

(i) Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99% or more; or

(ii) Achieve an outlet concentration of 10 ppmv or less of total chlorinated HAP; or
(iii) Achieve a treatment device outlet mass emission rate of 0.002 lb/ton ODP. [40 C.F.R. § 63.445(c)]

(4) NDP shall use no hypochlorite or chlorine for bleaching. [40 C.F.R. § 63.445(d)(2)]

b. Performance Tests

(1) NDP shall conduct a performance stack test for the A-Line and B-Line Wet Scrubber Systems within 60 months from the date of the previous test (next test due 9/18/2025). [40 C.F.R. § 63.457(a)]

(2) Performance tests shall be conducted in accordance with 40 C.F.R. § 63.457.

c. Continuous Compliance and Monitoring Requirements

Background
Pursuant to 40 C.F.R. § 63.453(m), NDP proposed alternative closed collection and vent system monitoring provisions for the Bleach Plant.

NDP proposed monitoring scrubber vent gas fan amperage in lieu of monitoring vent gas inlet flow rate. This request was approved in a letter from EPA dated March 29, 2001.

NDP proposed monitoring scrubber liquid recycle flow oxidation/reduction potential (ORP) in lieu of monitoring ORP at the bleach plant scrubber effluent. This request was approved in a letter from EPA dated July 11, 2001.

Therefore, NDP is subject to the following requirements:

(1) At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.453(q)]

(2) NDP shall install, calibrate, certify, operate, and maintain a CMS for the following parameters for the B-Line Wet Scrubber System:

Parameter	Frequency
Scrubber Recycle Flow ORP	Monitor continuously, Record continuously
Scrubber Vent Gas Fan On/Off	
Scrubber Liquid Influent Flow Rate	

[40 C.F.R. §§ 63.453(a), (c), and (m)]

(3) NDP shall establish operating limits for the A-Line and B-Line Wet Scrubber System CMS during performance tests in accordance with 40 C.F.R. § 63.453(n).

(4) NDP shall operate the A-Line and B-Line Wet Scrubber System in a manner consistent with the minimum or maximum (as appropriate) operating parameter. [40 C.F.R. § 63.453(o)]

(5) Inspections of Enclosures and Closed-Vent Systems

(i) Except as provided for in (ii), each enclosure and closed-vent system used by the Bleaching System shall meet the inspection and operating requirements of 40 C.F.R. § 63.453(k).

(ii) NDP has demonstrated that unsafe conditions may be created in the inspection and monitoring of some enclosures and closed collection and vent system components as required by 40 C.F.R. § 63.453(k). Therefore, for equipment required to be inspected pursuant to 40 C.F.R. § 63.453(k), NDP shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an imminent or potential danger, or if the equipment could not be inspected without elevating the inspecting personnel more than six feet above a supported surface. [40 C.F.R. § 63.453(q)]

d. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart S including, but not limited to, the following:

(1) A site-specific inspection plan for each enclosure opening, closed-vent system, and closed collection system; [40 C.F.R. § 63.454(b)]

(2) For each inspection of an enclosure opening, closed-vent system, and closed collection system, the information in 40 C.F.R. § 63.454(b);

(3) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or air pollution control and monitoring equipment; [40 C.F.R. § 63.454(g)(1)]
(4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.454(g)(2)]

e. Notifications and Reports

NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions and monitoring system performance report and summary report every six months which contains the information contained in §§ 63.10(e)(3) and 63.454(g) as applicable. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.455(a)]

5. Emission Limits and Streamlining

For the Bleach Plant, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC	0.103 lb/ADT	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)	0.103 lb/ADT
Cl_2 See Note 1	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-H-A, 8/31/1990)	3.0 lb/hr
ClO_2 See Note 1	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-H-A, 8/31/1990)	3.0 lb/hr

Note 1: Emission limit applies to the combined emissions from A-Line, B-Line, Bleach Plant Scrubber System, R-8 ClO2 Generation Plant, and R-8 ClO2 Scrubber System.

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Bleach Plant shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
VOC	lb/ADT	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Cl_2 and ClO_2	Control requirements of 40 C.F.R. Part 63, Subpart S	Performance testing in accordance with NCASI TB #520	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart S
	lb/hr		

7. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Bleach Plant and its associated air pollution control equipment.

a. Hours the Bleach Plant was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
b. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart S (described earlier);
c. Records of any maintenance activities performed (planned or unplanned) on the B-Line Wet Scrubber System or ClO_2 Scrubber System; and [40 C.F.R. § 63.453(q)]
d. Records of the following monitoring for the Bleach Plant and R-8 ClO_2 Plant Scrubber System:

Parameter	Frequency	Origin and Authority
B-Line Wet Scrubber System Pressure Drop	Monitor continuously, Record once per shift	06-096 C.M.R. ch. 140, BPT (A-214-70-F-A, 12/26/2007)
R-8 ClO2 Plant Scrubber System Recycle Flow ORP		
R-8 ClO_2 Plant Scrubber System fan "on/off"		
R-8 ClO_2 Plant Scrubber System Liquid Influent Flow Rate		
R-8 ClO_2 Plant Scrubber System Pressure Drop		

8. Parameter Monitors

   The CMS for the B-Line Wet Scrubber System required by 40 C.F.R. Part 63, Subpart S are identified as parameter monitors.

9. CEMS

   There are no CEMS required for the Bleach Plant.

P. Groundwood Operations

NDP permanently shut down the Groundwood Pulp Mill in December 2020.

Q. Recycle Pulping Process

NDP uses a hydropulper and screen system to generate up to 300 ADTPD of recycled pulp. The hydropulper mixes recycled paper and hot water with a central agitator to create a pulp slurry. Steam is not utilized in this process, and the process does not include de-inking.

The recycle pulping and cleaning process separates non-fiber and fibrous non-pulpable material as rejects. These old corrugated cardboard and double-lined kraft (collectively referred to as OCC) residuals may be sent to the NDP landfill, an off-site licensed disposal facility, and/or an off-site licensed incineration facility. NDP may also combust the OCC residuals in Cogen Boilers #6 and #7 to recover the heating value of the material.

Although *National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*, 40 C.F.R. Part 63, Subpart S, is applicable to processes using secondary fiber, the affected source for such equipment is limited to the bleaching system. NDP does not bleach recycle pulp. Therefore, there are no applicable requirements in 40 C.F.R. Part 63, Subpart S for the Recycle Pulping Process.

Hydropulpers, repulpers, and pulp handling processes are considered insignificant activities pursuant to 06-096 C.M.R. ch. 140, Appendix B, § A.84. Therefore, these processes and equipment are mentioned for completeness purposes only.

R. Paper Machines and Pulp Dryer

NDP uses bleached and unbleached kraft pulp as well as recycle pulp to produce coated and uncoated papers on Paper Machines R-10, R-12, and R-15. Pulp may also be dried on the R-9 Pulp Dryer for use within the mill and/or sold as baled market pulp. All coatings are aqueous-based and contain minimal or zero levels of VOC.

The R-9 Pulp Dryer contains steam dryers and no coaters. It can run either bleached or unbleached pulp.

The R-10 Paper Machine uses steam-heated dryer cans, natural gas/propane-fired floatation dryers, and an on-machine coater to produce coated paper products. NDP operates four air flotation dryers, installed in 1998 on Paper Machine R-10 to dry coating. Two of the dryers are rated at 6.4 MMBtu/hr and two at 8.05 MMBtu/hr. All are licensed to burn either propane or natural gas. The dryers are designated as the R-10 Dryers #1, #2, #3, and #4. As part of the Unbleached Kraft Project, NDP proposed physical changes to this machine including installation of a new shoe press and upgrading the headbox and top former.

The R-12 Paper Machine uses steam-heated dryer cans to dry the paper web. It is equipped with an on-line coater to produce coated paper products. However, it was modified as part of the Unbleached Kraft Project to produce uncoated and unbleached grades using unbleached kraft pulp from the pulp mill as well as recycle pulp.

The R-15 Paper Machine uses steam-heated dryer cans to dry the paper web. It is equipped with an on-machine coater to produce coated paper products. However, it was modified as part of the Unbleached Kraft Project to produce uncoated, unbleached linerboard grades using unbleached kraft pulp from the pulp mill as well as recycle pulp. In addition, NDP permitted the installation of a shoe press to increase drying efficiency.

1. New Source Review

   In 2020, NDP permitted the Unbleached Kraft Project (A-214-77-18-A, 11/18/2020) which pivoted resources toward the unbleached fiber market. As part of this project, NDP permitted physical and operational changes to the paper machines and pulp dryer and reevaluated BACT for this equipment. The permitting accounted for all machines running any combination of bleached, unbleached, or recycle grades. In 2024, NDP licensed a modification to the Unbleached Kraft Project (A-214-77-20-A, 5/9/2024) to maintain the flexibility to produce either bleached or unbleached products. The requirements of these NSR licenses are included in this license.

   These NSR licenses include recordkeeping and reporting requirements to demonstrate that the Unbleached Kraft Project did not exceed significant increase levels. These “Future Project Emissions Reporting” requirements are included in the Order section of the license.

2. Visible Emissions

a. Paper Machine Building Vents

The paper machines are subject to the following visible emission limit established under BACT:

> Visible emissions from the paper machine building vents shall not exceed 10% opacity on a six-minute block average basis. [A-214-77-20-A (5/9/2024)]

The paper machines are subject to the following visible emission standard pursuant to 06-096 C.M.R. ch. 101:

> Visible emissions from the paper machine building vents shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

The Department has determined that the BACT visible emissions standard is more stringent than the applicable limits in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the Order of this air emission license.

b. R-10 Dryers #1 - #4

The R-10 Dryers #1 - #4 are subject to the following visible emission limit established under BACT:

> Visible emissions from each of the R-10 Dryers #1, #2, #3, and #4 shall not exceed 10% opacity on a six-minute block average basis.
> [A-214-71-AB-A (3/2/1998)]

The R-10 Dryers #1 - #4 are subject to the following visible emission standard pursuant to 06-096 C.M.R. ch. 101:

> Visible emissions from each of the R-10 Dryers #1, #2, #3, and #4 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction, during which time NDP may comply with the work practice standards in 06-096 C.M.R. ch. 101, §§ 4(A) or (C).
> [06-096 C.M.R. ch. 101, § 3(A)(6)]

The Department has determined that the BACT visible emissions standard is more stringent than the applicable limits in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the Order of this air emission license.

3. *Control of Volatile Organic Compounds from Paper, Film and Foil Coating Operations*, 06-096 C.M.R. ch. 123

   The paper machine coaters are not subject to *Control of Volatile Organic Compounds from Paper, Film and Foil Coating Regulation*, 06-096 C.M.R. ch. 123, because the regulation does not apply to size presses and on-machine coaters on paper machines that apply sizing or water-based clays, such as the on-machine coaters on Paper Machines R-10, R-12, and R-15. The paper machines are also exempt because all coatings used on the coaters have an applied VOC content less than 2.9 pounds per gallon of coating. [06-096 C.M.R. ch. 123, §§ 1(C)(1) & (2)]

4. *VOC RACT*, 06-096 C.M.R. ch. 134

   VOC RACT, 06-096 C.M.R. ch. 134, exempts certain VOC-emitting equipment from the requirements contained therein. These listed exemptions include "paper machine area emissions which include paper machines and the finishing and converting areas." Therefore, the R-10, R-12, and R-15 Paper Machines are exempt from the requirements of this rule. [06-096 C.M.R. ch. 134, § 1(C)(7)]

5. National Emissions Standards for Hazardous Air Pollutants

   NDP is not subject to *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating*, 40 C.F.R. Part 63, Subpart JJJJ. This regulation is applicable to facilities that perform paper and other web coating operations.

   NDP is licensed to perform coating operations on the R-10, R-12, and R-15 Paper Machines. However, the coating is part of the sheet formation and on-machine operations. Pursuant to a letter dated November 19, 2003, from the U.S. EPA to Timothy Hunt of the American Forest and Paper Association (AF&PA), both size presses and on-machine coaters that function as part of the in-line papermaking system used to form the paper substrate are not subject to 40 C.F.R. Part 63, Subpart JJJJ requirements.

6. Emission Limits and Streamlining

a. For the paper machines and pulp dryer, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM R-10, R-12, & R-15 (each machine)	0.04 lb/ADT	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)	0.04 lb/ADT
PM_{10} R-10, R-12, & R-15 (each machine)	0.09 lb/ADT	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)	0.09 lb/ADT
$PM_{2.5}$ R-10, R-12, & R-15 (each machine)	0.09 lb/ADT	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)	0.09 lb/ADT
VOC R-9, R-10, R-12, & R-15 (all machines combined)	197.0 tpy	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)	197.0 tpy
Visible Emissions	As described earlier in this license		

b. For the R-10 Dryers #1 - #4 (combined), a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.12 lb/MMBtu each dryer	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.12 lb/MMBtu each dryer
	3.47 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	3.47 lb/hr all dryers total
PM_{10}	3.47 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	3.47 lb/hr all dryers total
SO_2	0.016 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	0.016 lb/hr all dryers total

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	4.47 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	4.47 lb/hr all dryers total
CO	0.61 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	0.61 lb/hr all dryers total
VOC	0.16 lb/hr all dryers total	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)	0.16 lb/hr all dryers total
Visible Emissions	As described earlier in this license		

7. Emission Limit Compliance Methods

   a. Compliance with the particulate matter emission limits shall be demonstrated by combusting only natural gas or propane in the R-10 Dryers and compliance with the visible emissions limit. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

   b. Compliance with the visible emission limit shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

   c. Compliance with the annual VOC emission limit shall be demonstrated by calculations of emissions performed monthly. For machines running bleached fiber, emissions shall be calculated based on actual chemical use assuming that 100% of the VOC is volatilized and emitted. When only recycle fiber is used, NDP shall calculate emissions from the machine based on an emission factor of 0.295 lb/ADT. When unbleached kraft pulp is used, NDP shall calculate emissions from the machine based on an emission factor of 0.51 lb/ADT. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

   d. Compliance with all other emission limits associated with the R-10 Dryers #1 - #4 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

8. Periodic Monitoring

   NDP shall record data and maintain records for the following periodic monitoring values for the paper machines and pulp dryer.

   a. Hours each paper machine or pulp dryer was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]

b. Records necessary to calculate annual emissions in accordance with 06-096 C.M.R. ch. 137; and
c. Types and amounts of each fuel fired in R-10 Dryers #1 - #4 on a monthly basis. [06-096 C.M.R. ch. 137]

9. Parameter Monitors

There are no parameter monitors required for the paper machines or pulp dryer.

10. CEMS

There are no CEMS required for the paper machines or pulp dryer.

S. Bulk Handling Systems

NDP operates the following bulk handling and storage systems:

- Number 15 Paper Machine Starch Silo #1
- Number 15 Paper Machine Starch Silo #2
- North Mill Starch Silo #1
- North Mill Starch Silo #2
- Lime Kiln Lime Silo
- Cogen Limestone Silo
- Farrington Mountain Ash Conditioning Facility Silo
- Cogen Fly Ash Silo
- Salt Cake Silo

In order to minimize fugitive emissions, NDP shall develop and follow an established Best Management Practice (BMP) Plan for all mill bulk handling and unloading systems. The BMP shall be available to the Department upon request. For the bulk handling systems, NDP shall comply with the following [06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)] **Enforceable by State-only**:

1. Maintain the alarm systems in proper operating condition;
2. Maintain all baghouses to achieve visible emissions no greater than 10% opacity on a six-minute block average basis;
3. Clean-up all spills within 24 hours of the occurrence of each spill;
4. Inspect all unloading systems for leaks and malfunctions as described by the BMP Plan; and
5. Discontinue unloading until leaks and/or malfunctions are eliminated.

T. Landfill Flare

NDP previously operated an active flare incineration system at the company-owned Farrington Mountain solid waste landfill in Mexico, Maine. The flare was permanently shut down in 2015. NDP currently operates 4 solar spark passive flares installed directly on top of 4 leachate collection manholes. These units are considered insignificant activities.

Operation of the landfill in accordance with the landfill Operations and Maintenance Manual under the oversight of the Department's BRWM satisfies BPT requirements for this component of NDP's operations. The passive landfill flares are mentioned above for informational purposes only.

U. Building Heaters

NDP operates and maintains numerous natural gas fired heaters to provide building heat as necessary. As the heaters were added, they were licensed and subject to BACT requirements, as included in this license.

Equipment	Max. Capacity (MMBtu/hr)	Max. Firing Rate (scf/hr)	Location
NG Unit 1	6.54	6,350	North End Building, Finishing
NG Unit 2	9.62	9,340	Throughout the facility
NG Unit 3	5.51	5,353	
NG Unit 4	5.51	5,353	
NG Unit A	2.05	1,992	
NG Unit B	14.11	13,700	North End Building, Roll Wrap
NG Unit C	6.41	6,225	Throughout the facility
NG Unit D	6.32	6,136	
NG Unit E	5.13	4,980	
NG Unit F	4.62	4,482	
NG Unit G	6.41	6,225	
NG Unit H	14.12	13,695	Throughout the facility
NG Unit I	7.69	7,466	North End Building, Dry End
NG Unit J	12.83	12,456	North End Building, Wet End
NG Unit K	7.69	7,470	Throughout the facility
NG Unit L	6.32	6,136	
NG Unit RB	10.0	9,709	B Recovery Boiler Building

Due to the small size of each unit and the fuel for which it was designed, BACT was determined to be good combustion control, the use of natural gas as fuel, and the emission limitations based on the following emission factors:

Pollutant	Emission Factor	Origin
PM	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-70-D-A, 4/12/2004) (A-214-77-3-A, 11/7/2007)
PM_{10}	0.005 lb/MMBtu	
NO_x	0.10 lb/MMBtu	Vendor Guaranteed Data
CO	0.10 lb/MMBtu	
VOC	5.5 lb/MMscf	AP-42 Table 1.4-2 dated 7/98

Units 2, 3, 4, A, C, D, E, F, G, H, K, L, and RB were originally subject to an operational limit of 5,040 hr/year to ensure the addition of these units did not result in a cumulative emissions increase of NO_x greater than the significant emissions increase levels. In Air Emission License A-214-70-H-A (11/12/2015), this operational limit was changed to an equivalent heat input limit of 812,808 MMBtu/year for all building heaters combined. Compliance is demonstrated by records of fuel consumed on a calendar year basis.

1. Visible Emissions

   The building heaters are subject to the following visible emission limit established under BACT:

   > Visible emissions from each building heater shall not exceed 10% opacity on a six-minute block average basis except for no more than one six-minute block average in a 3-hour period. [A-214-70-D-A (4/12/2004) & A-214-77-3-A (11/7/2007)]

   The building heaters are subject to the following visible emission standard pursuant to 06-096 C.M.R. ch. 101:

   > Visible emissions from each building heater shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

   The Department has determined that the applicable limit in 06-096 C.M.R. ch. 101 is more stringent than the limit established by BACT. The visible emission limit has been streamlined to the more stringent limit, and only this more stringent limit shall be included in the Order of this air emission license.

2. New Source Performance Standards

   The building heaters do not meet the definition of *steam generating unit* and are therefore not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

3. National Emissions Standards for Hazardous Air Pollutants

The building heaters do not meet the definition of either *boiler* or *process heater* in 40 C.F.R. § 63.7575. Therefore, these units are not subject to *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 C.F.R. Part 63, Subpart DDDDD.

4. Emission Limits and Streamlining

For the building heaters, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested (* denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM All building heaters	0.12 lb/MMBtu (applicable to all units with capacity ≥ 3 MMBtu/hr)	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.005 lb/MMBtu *
	0.005 lb/MMBtu	06-096 C.M.R. ch. 115, BACT (A-214-70-D-A, 4/12/2004) (A-214-77-3-A, 11/7/2007)	

	Applicable Emission Standards (lb/hr)					
Equipment	PM	PM_{10}	NO_x	CO	VOC	Origin and Authority
Unit 1	0.03	0.03	0.65	0.65	0.03	06-096 C.M.R. ch. 115, BACT (A-214-70-D-A, 4/12/2004)
Unit 2	0.05	0.05	0.96	0.96	0.05	
Unit 3	0.03	0.03	0.55	0.55	0.03	
Unit 4	0.03	0.03	0.55	0.55	0.03	
Unit A	0.01	0.01	0.21	0.21	0.01	
Unit B	0.07	0.07	1.41	1.41	0.08	
Unit C	0.03	0.03	0.64	0.64	0.03	
Unit D	0.03	0.03	0.63	0.63	0.03	
Unit E	0.03	0.03	0.51	0.51	0.03	
Unit F	0.02	0.02	0.46	0.46	0.02	
Unit G	0.03	0.03	0.64	0.64	0.03	
Unit H	0.07	0.07	1.41	1.41	0.08	
Unit I	0.04	0.04	0.77	0.77	0.04	
Unit J	0.06	0.06	1.28	1.28	0.07	
Unit K	0.04	0.04	0.77	0.77	0.04	
Unit L	0.03	0.03	0.63	0.63	0.03	
Unit RB	0.05	0.05	0.99	0.99	0.05	06-096 C.M.R. ch. 115, BACT (A-214-77-3-A, 11/7/2007)

5. Emission Limit Compliance Methods

   Compliance with the emission limits associated with the building heaters shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

6. Periodic Monitoring

   NDP shall record data and maintain records for the following periodic monitoring values for the building heaters.

   a. Hours each unit was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); and [06-096 C.M.R ch. 137]
   b. Total amount of fuel fired in the building heaters and the associated total heat input on an annual basis. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-214-70-H-A, 11/12/2015)]

7. Parameter Monitors

   There are no parameter monitors required for the building heaters.

8. CEMS

   There are no CEMS required for the building heaters.

V. Stationary Engines

NDP operates the following five emergency generators and one emergency fire pump:

Generator/Engine	Maximum Input Capacity, MMBtu/hr	Fuel	Year of Install.	Applicable Requirements in…		
				NSPS Subpart IIII	NSPS Subpart JJJJ	NESHAP Subpart ZZZZ
Cogen Emergency Generator	1.5	Distillate fuel	2002	No	No	Yes
R15 Emergency Generator	1.2		2001	No	No	Yes
Mill Emergency Generator	5.4		1999	No	No	Yes
Diesel Fire Water Pump	1.6		1984	No	No	Yes
Lift Pump Emergency Generator	5.1		2008	Yes	No	Yes
ClO_2 Plant Emergency Generator	1.4		2024	Yes	No	Yes
Upper Gate Emergency Generator	0.3	Natural Gas, Propane	2012	No	Yes	Yes

BPT for distillate-fired emergency generators and fire pump engines includes the use of distillate fuel with a sulfur content not to exceed 15 ppm (0.0015% by weight).

NDP also operates the following non-emergency engine:

Generator/Engine	Maximum Input Capacity, MMBtu/hr	Fuel	Year of Install.	Applicable Requirements in…	
				NSPS Subpart JJJJ	NESHAP Subpart ZZZZ
Lime Kiln Auxiliary Drive	0.6	Natural Gas, Propane	1990	No	Yes

1. Operating Hours Restriction

   The Cogen Emergency Diesel Generator, R15 Emergency Generator, Mill Emergency Generator, Diesel Fire Water Pump, and Lift Pump Emergency Generator were previously restricted to an operating limit of 500 hr/year (each engine). The Department has determined that the operating limits for emergency engines contained in the NSPS and NESHAP regulations described below is more appropriate and typically more stringent. Therefore, the previous operating limit is considered obsolete and no longer included in this license.

2. Visible Emissions

   a. 06-096 C.M.R. ch. 101

      NDP's seven stationary engines are each subject to the following standards of 06-096 C.M.R. ch. 101.

      Visible emissions from each engine constructed on or after April 1, 2006, shall not exceed an opacity of 20% on a six-minute block average basis.

      Visible emissions from each engine constructed before April 1, 2006, shall not exceed an opacity of 20% on a six-minute block average basis, except during periods of startup. During periods of startup, the engine must meet the normal operating visible emissions standard or the or the following work practice standards and alternative visible emissions standard. Use of the following work practice standards and alternative visible emissions standard in lieu of the normal operating visible emissions standard is limited to no more than once per day.

      (1) The duration of the startup shall not exceed 30 minutes per event;
      (2) Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and

(3) The owner or operator shall keep records as of the date, time, and duration of each startup event.

b. 06-096 C.M.R. ch. 140, BPT

With this license, the Department is establishing the following visible emissions standard through BPT:

Visible emissions from each engine shall not exceed an opacity of 20% on a six-minute block average basis.

c. Streamlining

The Department has determined that the BPT visible emissions standard is more stringent than the applicable limits in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license. Streamlining the BPT limits with the federally enforceable limits in 06-096 C.M.R. ch. 101 makes the BPT limit federally enforceable.

3. New Source Performance Standards, 40 C.F.R. Part 60, Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is not applicable to the Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and the Diesel Fire Water Pump since these units were manufactured prior to April 1, 2006.

The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator engines are subject to 40 C.F.R. Part 60, Subpart IIII since they were ordered after July 11, 2005, and manufactured after April 1, 2006. By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the internal combustion engine also meets the requirements found in *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ.

a. Emergency Engine Designation and Operating Criteria

Under Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. § 60.4211(f) and §60.4219]

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement
The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement
The distillate fuel fired in the Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on the Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirement
The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall each be operated and maintained according to the manufacturer's emission-related written instructions. NDP may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(5) Annual Time Limit for Maintenance and Testing
The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement
No initial notification is required for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping
NDP shall keep records that include maintenance conducted on the Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-

emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

4. New Source Performance Standards, 40 C.F.R. Part 60, Subpart JJJJ

Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is not applicable to the Lime Kiln Auxiliary Drive since it was manufactured prior to July 1, 2008.

The Upper Gate Emergency Generator is a model year 2012 engine subject to 40 C.F.R. Part 60, Subpart JJJJ since it was ordered after June 12, 2006, and manufactured after January 1, 2009. [40 C.F.R. § 60.4230] By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, this unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart JJJJ, a stationary reciprocating internal combustion engine (ICE) is considered an emergency stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart JJJJ, resulting in the engine being subject to requirements applicable to non-emergency engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4243(d) and 60.4248]

b. 40 C.F.R. Part 60, Subpart JJJJ Requirements

(1) Manufacturer Certification Requirement
The Upper Gate Emergency Generator shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. § 60.4233]

(2) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on the Upper Gate Emergency Generator. [40 C.F.R. § 60.4237]

(3) Operation and Maintenance Requirement
The Upper Gate Emergency Generator shall be operated and maintained according to the manufacturer's written instructions or procedures developed by NDP that are approved by the engine manufacturer. NDP may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

(4) Annual Time Limit for Maintenance and Testing
As an emergency engine, the Upper Gate Emergency Generator shall be limited to 100 hours/year for maintenance and testing. The Upper Gate Emergency Generator may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]

(5) Recordkeeping
NDP shall keep records that include maintenance conducted on the Upper Gate Emergency Generator and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4245(b)]

5. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the Lift Pump Emergency Generator, ClO_2 Plant Emergency Generator, and Upper Gate Emergency Generator. These units are considered existing, emergency stationary reciprocating internal combustion engines at a major HAP source. However, the Lift Pump Emergency Generator, ClO_2 Plant Emergency Generator, and Upper Gate Emergency Generator are also subject to New Source Performance Standards. By meeting the requirements of 40 C.F.R. Part 60, Subparts IIII and JJJJ (as applicable) the Lift Pump Emergency Generator, ClO_2 Plant Emergency Generator, and Upper Gate Emergency Generator also meet the requirements found in 40 C.F.R. Part 63, Subpart ZZZZ.

The Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and Diesel Fire Water Pump are subject to 40 C.F.R. Part 63, Subpart ZZZZ. These units are considered existing, emergency stationary reciprocating internal combustion engines (RICE) at a major HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency*

Stationary RICE in the NESHAP for Stationary RICE) specifically does not exempt these units from the federal requirements.

The Lime Kiln Auxiliary Drive is also subject to 40 C.F.R. Part 63, Subpart ZZZZ. This unit is considered an existing, non-emergency, stationary RICE at a major HAP source which is not subject to New Source Performance Standards. This unit is rated for less than 100 hp.

a. Emergency Engine Designation and Operating Criteria

Under Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for

maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and Diesel Fire Water Pump shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements
[40 C.F.R. § 63.6602 and Table 2(c)]

	Operating Limitations
Compression ignition (distillate fuel) units: Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, Diesel Fire Water Pump	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

	Operating Limitations
Spark ignition (natural gas, propane) units: Lime Kiln Auxiliary Drive Upper Gate Emergency Generator	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or NDP shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program
NDP has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, NDP must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R.§ 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements
During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

(5) Annual Time Limit for Maintenance and Testing
The Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and Diesel Fire Water Pump shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

NDP shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

6. Emission Limits and Streamlining

For the Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, Diesel Fire Water Pump, Lift Pump Emergency Generator, and Lime Kiln Auxiliary Drive a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested ("*" denotes a request for streamlining), and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

Cogen Emergency Generator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.47 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.47 lb/hr
PM_{10}	0.47 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.47 lb/hr
NO_x	6.62 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	6.62 lb/hr
CO	1.43 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	1.43 lb/hr
VOC	0.53 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	0.53 lb/hr
Visible Emissions	As described earlier in this license		

R15 Emergency Generator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.37 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.37 lb/hr
PM_{10}	0.37 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.37 lb/hr
NO_x	5.29 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	5.29 lb/hr
CO	1.14 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	1.14 lb/hr
VOC	0.42 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	0.42 lb/hr
Visible Emissions	As described earlier in this license		

Mill Emergency Generator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.12 lb/MMBtu
	0.65 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.65 lb/hr
PM_{10}	0.65 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.65 lb/hr
NO_x	17.28 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	17.28 lb/hr
CO	4.59 lb/hr	06-096 C.M.R. ch. 140, BPT **Enforceable by State-only**	4.59 lb/hr
VOC	0.49 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.49 lb/hr
Visible Emissions	As described earlier in this license		

Diesel Fire Water Pump			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.50 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.50 lb/hr
PM_{10}	0.50 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.50 lb/hr
NO_x	7.06 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	7.06 lb/hr
CO	1.52 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	1.52 lb/hr
VOC	0.56 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.56 lb/hr
Visible Emissions	As described earlier in this license		

ClO_2 Plant Emergency Generator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.43 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	0.43 lb/hr
PM_{10}	0.43 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	0.43 lb/hr
$PM_{2.5}$	0.43 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	0.43 lb/hr
NO_x	6.17 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	6.17 lb/hr
CO	1.33 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	1.33 lb/hr
VOC	0.50 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	0.50 lb/hr
Visible Emissions	As described earlier in this license		

Lift Pump Emergency Generator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.12 lb/MMBtu	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	0.12 lb/MMBtu
	0.20 g/kW-hr	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	0.20 g/kW-hr
	0.26 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.26 lb/hr
PM_{10}	0.26 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	0.26 lb/hr
NO_x + VOC	6.4 g/kW-hr	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	6.4 g/kW-hr
	8.20 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	8.20 lb/hr
CO	3.5 g/kW-hr	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	3.5 g/kW-hr
	4.48 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	4.48 lb/hr
Visible Emissions	As described earlier in this license		

Lime Kiln Auxiliary Drive			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.02 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.02 lb/hr
PM_{10}	0.02 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.02 lb/hr
NO_x	1.16 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	1.16 lb/hr
CO	0.21 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.21 lb/hr
VOC	0.07 lb/hr	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014) **Enforceable by State-only**	0.07 lb/hr
Visible Emissions	As described earlier in this license		

7. Emission Limit Compliance Methods

   Compliance with the emission limits associated with stationary engines shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

8. Periodic Monitoring

   NDP shall record data and maintain records for the following periodic monitoring values for the stationary engines.

   a. Hours of operating time on a calendar year basis; [06-096 C.M.R. ch. 137]
   b. Log of the duration and reasons for all operating times as they occur; [40 C.F.R. § 63.6655(f)]
   c. Records of all maintenance conducted; and [40 C.F.R. § 63.6655(e)]
   d. Sulfur content of the fuel fired for those engines which fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]

9. Parameter Monitors

   There are no Parameter Monitors required for the stationary engines.

10. CEMS

    There are no CEMS required for the stationary engines.

W. Portable Engines

NDP may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of "portable engine" as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

X. Methanol and Oil Storage Tanks

NDP utilizes the following tanks to store methanol and fuel oil:

Tank ID	Tank Size
Methanol Storage Tank	20,000 gallons
Steam Plant Day Tank #1 (fuel oil)	20,000 gallons
Steam Plant Day Tank #2 (fuel oil)	20,000 gallons
Oil Bulk Storage Tank	640,000 gallons

The tanks storing fuel oil are heated by steam provided by the facility's boilers. The Methanol Storage Tank is unheated.

NDP has several smaller storage tanks for distillate fuel and liquified propane gas that are considered insignificant activities.

1. *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111

   None of the storage tanks at NDP are subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. This rule applies to storage vessels greater than 39,000 gallons containing petroleum liquids whose true vapor pressure is greater than 10.5 kPa. The true vapor pressure of #6 fuel oil is less than this threshold.

2. New Source Performance Standards (NSPS)

   None of the storage tanks at NDP are subject to *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978*, 40 C.F.R. Part 60, Subpart K. This regulation applies to storage vessels for petroleum liquids with capacities greater than 40,000 gallons. The definition of "petroleum liquids" in the regulation specifically excludes #6 fuel oil.

   None of the storage tanks at NDP are subject to *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, 40 C.F.R. Part 60, Subpart Kb. This regulation does not apply to storage vessels between 75 – 151 m^3 (19,813 – 39,890 gallons) which store liquids with a vapor pressure less than 15.0 kPa. Both fuel oil and methanol have vapor pressures below this threshold. This regulation also does not apply to storage vessels greater than 151 m^3 which store liquids with a vapor pressure less than 3.5 kPa. The fuel oil has a vapor pressure below this threshold. [40 C.F.R. § 60.110b(b)]

3. Emissions Calculation Methodology

Emissions from the Methanol Storage Tank, Steam Plant Day Tanks #1 and #2, and the Oil Bulk Storage Tank shall be included in the facility's annual emissions inventory report filed in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Emissions from each storage tank shall be calculated in accordance with the most current version of *EPA's Compilation of Air Emissions Factors* (AP-42) or other method as approved by the Department.

4. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the storage tanks:

a. Records necessary to calculate annual emissions of VOC and HAP from the storage tanks; and [06-096 C.M.R. ch. 137]
b. Calculations of the VOC/HAP emitted from the storage tanks on a calendar year total basis. [06-096 C.M.R. ch. 137]

Y. Wastewater Treatment Facility

NDP operates a Wastewater Treatment Plant to treat all process wastewater generated from mill drains and processes. Industrial wastewater is specifically not exempted from *VOC RACT*, 06-096 C.M.R. ch. 134 pursuant to § 1(A)(4).

NDP is required by the federal Clean Water Act to comply with their Maine Pollution Discharge Elimination System (MPDES) permit. By maintaining a valid MPDES permit, NDP's wastewater treatment facility meets the requirements of VOC RACT.
[06-096 C.M.R. ch. 134, § 3(A)(4)(b)]

Z. Parts Washers

NDP operates several parts washers. Depending on the solvent used, each parts washer may be subject to the requirements of *Solvent Degreasers,* 06-096 C.M.R. ch. 130. Periodic monitoring for the applicable parts washers shall consist of recordkeeping including records of solvent added and removed for each unit.

AA. Emission Statements

NDP is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. NDP shall maintain records sufficient to complete and submit the annual emissions statement as required by this rule.

Every third year, or as requested by the Department, NDP shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. NDP shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

BB. Facility Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Operating at the worst-case lb/hr emission limit for 8,760 hr/year for Power Boiler #3, Cogen Boilers #6 and #7, the Lime Kiln, Recovery Boiler C, Smelt Tank C, and R-10 Dryers #1 - #4;
- A heat input limit of 812,808 MMBtu/year for all building heaters combined;
- Worst-case emissions from the paper machines and pulp dryer as outlined in A-214-77-18-A (11/18/2020);
- Operating each emergency stationary engine for 100 hr/year; and
- Operation of the Lime Kiln Auxiliary Drive for 8,760 hr/year.

Please note, this information provides the basis for fee calculation only and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

Unit	PM	PM_{10}	SO_2	NO_x	CO	VOC
Cogen Boiler #6	82.8	82.8	772.6	1,655.60	1,090.00	22.1
Cogen Boiler #7	82.8	82.8	772.6	1,655.60	1,090.00	22.1
Power Boiler #3	65.7	65.7	341.6	525.60	262.80	19.7
Lime Kiln	105.1	105.1	100.7	227.8	170.8	8.8
Recovery Boiler C	379.7	284.7	903.6	941.7	972.4	16.2
Smelt Tank C	70.1	69.2	24.1	–	–	–
Bleach Plant	–	–	–	–	–	27.8
Paper Machines & Pulp Dryer (combined)	15.0	33.7	–	–	–	197.0
R10 Dryers	15.2	15.2	0.1	19.6	2.7	0.7
Building Air Heaters	2	2	0.2	40.6	40.6	2.2
Cogen Emergency Generator	0.1	0.1	0.1	1.6	0.4	0.1
R15 Emergency Generator	0.1	0.1	0.1	1.4	0.3	0.1
Mill Emergency Diesel Generator	0.2	0.2	0.1	4.4	1.2	0.1
Diesel Fire Water Pump	0.1	0.1	0.1	1.8	0.4	0.1
Lift Pump Emergency Generator	0.1	0.1	0.1	2.1	1.1	2.1
Lime Kiln Auxiliary Drive	0.1	0.1	0.1	0.3	0.1	0.1
ClO_2 Emergency Generator	–	–	–	0.3	0.1	–
Total TPY	**819.1**	**741.9**	**2,916.1**	**5,078.4**	**3,632.9**	**319.2**

III. AMBIENT AIR QUALITY ANALYSIS

NDP previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. [See NO_x modeling results in license A-214-71-AN-A (April 9, 2002) and modeling results for other pollutants in license A-214-71-S-A/R (September 3, 1996).] An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-214-70-K-R/A pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to NDP pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

(1) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]

(2) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 140]

(3) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.

[06-096 C.M.R. ch. 140]

(4) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 140]

(5) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in their application.

Permit Shield Table

Source	Citation	Description	Basis for Determination
Cogen Boilers #6 and #7	06-096 C.M.R. ch. 101	Visible Emissions Regulation	Exempt pursuant to §§ 1(C)(7)
Facility	06-096 C.M.R. ch. 107	Sulfur Dioxide Emission Standards for Sulfite Pulp Mills	Facility is not a sulfite pulp mill.
Oil Bulk Storage Tank	06-096 C.M.R. ch. 111	Petroleum Liquid Storage Vapor Control	The vapor pressure of #6 fuel oil is less than 10.5 kPa.
Paper Machines & On-Machine Coaters	06-096 C.M.R. ch. 123	Control of VOC from Paper, Film and Foil Coating Operations	Both on-machine coaters and machines that use coating containing < 2.9 lb VOC/gal are exempt.
Paper Machines	06-096 C.M.R. ch. 134	VOC RACT	Emissions from paper machines are exempt.
Facility	06-096 C.M.R. ch. 145	NO_x Control Program	Facility is not located within the OTR

Source	Citation	Description	Basis for Determination
Power Boiler #3	06-096 C.M.R. ch. 156	CO_2 Budget Trading Program	Does not meet the definition of a CO_2 Budget Unit.
Cogen Boilers #6 & #7	06-096 C.M.R. ch. 156	CO_2 Budget Trading Program	Qualify for the limited exemption under § 1(A)(4).
Power Boiler #3	40 C.F.R. Part 60, Subpart D	NSPS for Fossil Fuel Fired Steam Generating Units	Commenced construction prior to August 17, 1971
RBC	40 C.F.R. Part 60, Subpart D	NSPS for Fossil Fuel Fired Steam Generating Units	Annual capacity factor for fossil fuel is < 10%
Power Boiler #3, Cogen Boilers #6 & #7, RBC	40 C.F.R. Part 60, Subpart Da	NSPS for Electric Utility Steam Generating Units	These boilers do not meet the definition of an electric utility.
Power Boiler #3 & RBC	40 C.F.R. Part 60, Subpart Db	NSPS for Industrial-Commercial-Institutional Steam Generating Units	Commenced construction prior to June 19, 1984 applicability date.
Power Boiler #3, Cogen Boilers #6 & #7	40 C.F.R. Part 60, Subpart Dc	NSPS for Steam Generating Units less than 100 MMBtu/hr	Units are greater than 100 MMBtu/hr.
Methanol Storage Tank and fuel oil storage tanks	40 C.F.R. Part 60, Subpart Kb	NSPS for Volatile Organic Liquid Storage Vessels	Max. true vapor pressure less than applicable threshold for the storage tank capacity.
Coal Handling	40 C.F.R. Part 60, Subpart Y	NSPS for Coal Preparation Plants	Facility is not a coal preparation plant.
Lime Slaker	40 C.F.R. Part 60, Subpart BB	NSPS for Kraft Pulp Mills	Not an applicable source under the regulation.
Facility	40 C.F.R. Part 60, Subpart RR	Pressure Sensitive Tape and Label Surface Coating	No applicable sources at this facility.
Cogen, R15, Mill, & Fire Pump Generators	40 C.F.R. Part 60, Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engine	Manufactured prior to April 1, 2006 applicability date
Lime Kiln Auxiliary Drive	40 C.F.R. Part 60, Subpart JJJJ	NSPS for Spark Ignition Internal Combustion Engine	Manufactured prior to April 1, 2006 applicability date.
Paper Machines & On-Line Coaters	40 C.F.R. Part 63, Subpart JJJJ	NESHAPs for Paper and Other Web Coating	Function as part of in-line papermaking system used to form paper substrate.
RBC	40 C.F.R. Part 63, Subpart DDDDD	NESHAPs for Industrial, Commercial, Institutional Boilers and Process Heaters	Unit already subject to 40 CFR Part 63, Subpart MM.
Power Boiler #3, Cogen Boiler #6 & #7	40 C.F.R. Parts 72 thru 78	EPA Acid Rain Program	Units are not electric utility units.

[06-096 C.M.R. ch. 140]

(6) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of three or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 C.M.R. ch. 140;

B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 C.M.R. ch. 140]

(7) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 C.M.R. ch. 140]

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 140. [06-096 C.M.R. ch. 140]

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction,

reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 140] **Enforceable by State-only**

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 140]
Enforceable by State-only

(6) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. In addition, the licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 C.M.R. ch. 140]

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 C.M.R. ch. 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Submit to the Department for approval a test protocol at least 30 calendar days prior to the scheduled date of the emissions test, unless the Department agrees to a shorter submission timeframe;

B. Perform stack testing under circumstances representative of the facility's normal process and operating conditions:

1. Within 60 calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

2. To demonstrate compliance with the applicable emission standards; or

3. Pursuant to any other requirement of this license to perform stack testing.

C. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

D. Submit a written report to the Department within 30 days from date of test completion, unless an extension is granted by the Department.

[06-096 C.M.R. ch. 140] **Enforceable by State-only**

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 140] **Enforceable by State-only**

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

B. The licensee shall submit a report to the Department on a quarterly basis describing all violations of any emission standard.

Pursuant to 38 M.R.S. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design, or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 140]

(11) Upon the written request of the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status.
[06-096 C.M.R. ch. 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring by January 31 and July 31 of each year, or on an equivalent schedule specified in the license. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
[06-096 C.M.R. ch. 140]

(13) The licensee shall submit a compliance certification to the Department and EPA annually by January 31 of each year, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
B. The compliance status;
C. Whether compliance was continuous or intermittent;
D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
E. Such other facts as the Department may require to determine the compliance status of the source.

The facility's designated responsible official must sign this report. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors.
[06-096 C.M.R. ch. 140]

SPECIFIC CONDITIONS

(14) Power Boiler #3

A. Allowable Fuels

1. Power Boiler #3 is licensed to fire fuel oil, specification and off-specification waste oil, natural gas, LVHC gases, HVLC gases, and SOGs.
[06-096 C.M.R. ch. 140, BPT]

2. The sulfur content of the fuel oil fired in Power Boiler #3 shall not exceed 2.5% by weight. Compliance shall be demonstrated by purchase records from the supplier. [06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)]

B. Control Equipment

1. NDP shall operate low NO_x burners and flue gas recirculation to control NO_x emissions from Power Boiler #3. [06-096 C.M.R. ch.115, BACT (A-214-71-O-A, 2/12/1993)]

2. NDP shall operate a venturi scrubber to control SO_2 emissions from Power Boiler #3 when firing fuel oil. [06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)]

C. Emission Limits
Emission limits are on a 1-hour block average basis unless otherwise stated.

1. When firing fuel oil, emissions from Power Boiler #3 shall not exceed the following limits:

Pollutant	Fuel	ppmdv	Origin and Authority
CO	any	130 @ 3% O_2 See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Rows 15(a) and 16(a)

Note 1: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

2. Emissions from Power Boiler #3 shall not exceed the following limits:

Pollutant	Fuel	lb/MMBtu	Origin and Authority
PM	only natural gas	0.03	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	when operating in the heavy liquid fuels subcategory until 10/6/2025	6.2×10^{-2} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 15(b)
	when operating in the heavy liquid fuels subcategory on 10/6/2025 and after	5.9×10^{-2} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 15(b)
	when operating in the light liquid fuels subcategory	7.9×10^{-3} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 16(b)
PM_{10}	firing only natural gas	0.03	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	firing any combination of fuels other than 1) only natural gas or 2) fuel oil with any two or more of LVHCs, SOGs, HVLCs	0.05	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	firing fuel oil with any two or more of LVHCs, SOGs, HVLC	0.08	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
SO_2	any	0.26	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
NO_x	firing any fuel other than only natural gas	0.40 30-day rolling avg	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	firing only natural gas	0.20 30-day rolling avg	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
CO	any	0.20	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
VOC	any	0.015	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
HCl	firing fuel oil	1.1×10^{-3} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 14(a)
Hg	firing fuel oil until 10/6/2025	2.0×10^{-6} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 14(b)
Hg	firing fuel oil on 10/6/2025 and after	7.3×10^{-7} See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 14(b)

Note 1: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

3. Emissions from Power Boiler #3 shall not exceed the following limits:

Pollutant	Fuel	lb/hr	Origin and Authority
PM	firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs	15.0	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	firing fuel oil	18.6	06-096 C.M.R. ch. 140, BPT
PM_{10}	firing any combination of fuels other than fuel oil with any two or more of LVHCs, SOGs, HVLCs	15.0	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
	firing fuel oil with any two or more of LVHCs, SOGs, HVLC	24.0	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
SO_2	any	78.0 3-hr block avg See Notes 1 & 2	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
NO_x	any	120.0 30-day rolling avg	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
CO	any	60.0	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)
VOC	any	4.5	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)

Note 1: When emissions of SO_2 from Boilers #6 and #7 (combined) exceed 352.8 lb/hr, emissions from Power Boiler #3 shall not exceed 60.0 lb/hr of SO_2 on a 3-hr block average basis. [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 2: When emissions of SO_2 from Recovery Boiler C exceed 206.3 lb/hr, emissions from Power Boiler #3 shall not exceed 60.0 lb/hr of SO_2 on a 3-hr block average basis. [06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

D. Visible Emissions

1. When firing only natural gas, visible emissions from Power Boiler #3 shall not exceed an opacity of 10% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

2. When firing only distillate fuel, visible emissions from Power Boiler #3 shall not exceed an opacity of 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]

3. When firing any fuel or combination of fuels other than only natural gas or only distillate fuel, visible emissions from Power Boiler #3 shall not exceed an opacity of 20% on a six-minute block average basis, except that for periods of startup, shutdown, and malfunction Power Boiler #3 shall not exceed 30% opacity for more

than one hour (10 consecutive six-minute block averages) per event. [06-096 C.M.R. ch. 140, BPT]

4. Upon request by the Department, NDP shall demonstrate compliance with the visible emission limits for Stack #2 through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9. [40 C.F.R. § 70.6(c)(1)]

E. Compliance Methods

Compliance with the emission limits associated with Power Boiler #3 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department. [06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart DDDDD (See Note 1)
	lb/hr		
PM_{10}	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	lb/MMBtu	NO_x CEMS, 30-day rolling average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	NO_x CEMS, 30-day rolling average	
CO	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
	ppmdv		
	lb/hr		
VOC	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
	lb/hr		
HCl	lb/MMBtu	Either performance testing or fuel analysis in accordance with 40 C.F.R. Part 63, Subpart DDDDD	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
Hg	lb/MMBtu		
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

Note 1: Performance testing for PM lb/MMBtu is subject to a frequency of once every two qualifying years established by 06-096 C.M.R. ch. 115, BPT in A-214-77-4-A (12/26/2007). The Department has determined that the testing frequency established by 40 C.F.R. Part 63, Subpart DDDDD is more stringent than the BPT frequency. Therefore, the performance testing frequency for this pollutant has been streamlined to the more stringent standard, and only this more stringent standard shall be included in the air emission license.

F. 40 C.F.R. Part 63, Subpart DDDDD Operating Limits

When firing fuel oil, Power Boiler #3 is subject to the following operating limits at all operating times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards (described later in this Order in Specific Condition (16)A):

1. The 30-day rolling average pressure drop on the wet scrubber shall be maintained at or above the lowest one-hour pressure drop measured during the most recent successful PM performance test of representative conditions.
   [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 1(a)]
2. The 30-day rolling average liquid flow rate on the wet scrubber shall be maintained at or above the lowest one-hour liquid flow rate measured during the most recent successful PM performance test of representative conditions.
   [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 1(a)]
3. The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]
4. The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]
5. The 30-day rolling average SO_2 emission rate shall not exceed the highest hourly average SO_2 concentration measured during the most recent successful HCl performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 9]

G. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Power Boiler #3 and its associated air pollution control equipment.

1. Hours Power Boiler #3 was operating on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
2. Records of the date, time, and duration of each startup, shutdown, or malfunction event. [06-096 C.M.R. ch. 140, BPT]
3. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. 63.7555(d)(1)]
4. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]

5. Records to demonstrate that the average annual heat input from fuel oil in Power Boiler #3 does not exceed 250 MMBtu/hr (12-month rolling average basis); [40 C.F.R. § 70.6(c)(1)]
6. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart DDDDD (described later in this Order); and
7. Records of any maintenance activities performed (planned or unplanned) on the venturi scrubber. [40 C.F.R. § 63.7500(a)(3)]

H. Parameter Monitors

1. When firing fuel oil, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for Power Boiler #3 and its associated air pollution control equipment:

Parameter	Averaging Period	Origin and Authority
Operating Load	30-day rolling average	40 C.F.R. § 63.7505(c) & § 63.7525(d)
Scrubber Flow Rate		40 C.F.R. § 63.7505(c) & § 63.7525(e)
Scrubber Pressure Drop		40 C.F.R. § 63.7505(c) & § 63.7525(f)

2. The scrubber flow monitoring system shall meet the requirements of 40 C.F.R. § 63.7525(e).

3. The scrubber pressure monitoring system shall meet the requirements of 40 C.F.R. § 63.7525(f).

I. CEMS

NDP shall operate and maintain the following continuous emission monitoring systems (CEMS) for Power Boiler #3 whenever the unit is operating:

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	30-day rolling average	06-096 C.M.R. ch. 117, § 1(B)(2)
	lb/hr	30-day rolling average	
O_2 CEMS	%	24-hr daily block average, 30-day rolling average, 90-day rolling average (as applicable)	40 C.F.R. § 63.7505(c) & § 63.7525(a) 06-096 C.M.R. ch. 117, § 1(B)(9)
SO_2 CEMS	lb/MMBtu	24-hour block average	40 C.F.R. § 63.7525(m) and 06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)
	lb/hr	3-hour block average	

(15) **Cogen Boilers #6 and #7**

A. Allowable Fuels

1. Cogen Boilers #6 and #7 are licensed to fire a combination of fuels including coal, natural gas, HVLCs, LVHCs, SOGs, biomass (including wood waste, creosote-treated wood (CTW), wastewater treatment plant sludge, construction demolition debris (CDD), and waste papers), tire derived fuel (TDF), delayed petroleum coke (DPC), lime kiln rejects, oil (including specification waste oil, off-specification waste oil, and fuel oil), and old corrugated cardboard and double-lined kraft (collectively referred to as OCC) residuals. [06-096 C.M.R. ch. 140, BPT]

2. The sulfur content of the fuel oil fired in Cogen Boilers #6 and #7 shall not exceed 2.5% by weight. Compliance shall be demonstrated by purchase records from the supplier. [06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)]

B. Control Equipment

1. NDP shall control particulate matter emissions from Cogen Boilers #6 and #7 by use of multicyclones and an ESP on each boiler. [06-096 C.M.R. ch. 115, BACT (A-214-71-O-A (2/12/1993)]

2. Except for periods of startup and shutdown, NDP shall operate for each boiler, at a minimum, the number of ESP fields in operation during the most recent performance test demonstrating compliance with licensed PM emission limits. Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Performance Testing Guidance, NDP may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall NDP be relieved of its obligation to meet its licensed emission limits. [06-096 C.M.R. ch. 115, BACT (A-214-71-Q-M, 12/22/1993)]

3. The circulating limestone bed used in SO_2 control must remove at least 90% of the potential SO_2 emissions. The averaging time for the 90% efficiency shall be a 30-day calculated rolling average. Compliance shall be documented through fuel use records, fuel sulfur content records, design information, and SO_2 CEMS data, as appropriate. [40 C.F.R. Part 60, §§ 60.42b(a) and (e) and 06-096 C.M.R. ch. 115, BACT (A-214-71-O-A, 2/12/1993)]

   Pursuant to 40 C.F.R. § 60.42b(g) or § 60.44b(h), this limit applies at all operating times <u>including</u> periods of startup, shutdown, or malfunction.

C. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from Cogen Boilers #6 and #7 shall each not exceed the following limits:

Pollutant	Fuel	ppmdv	Origin and Authority
CO	any	470 @ 3% O_2 until 10/6/2025 See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 9(a)
		210 @ 3% O_2 on 10/6/2025 and after See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 9(a)

Note 1: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

2. Emissions from Cogen Boilers #6 and #7 shall each not exceed the following limits:

Pollutant	Fuel	lb/MMBtu	Origin and Authority
PM	any	0.03 until 10/6/2025 See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993) 40 C.F.R. Part 63, Subpart DDDDD
		7.4×10^{-3} on 10/6/2025 and after See Note 1	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 9(b)
PM_{10}	any	0.03	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-O-A, 2/12/1993)
SO_2	any	0.28 24-hr block avg See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)
	for coal, DPC, or TDF contribution	0.32 24-hr block avg See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)

Pollutant	Fuel	lb/MMBtu	Origin and Authority
NO_x	firing only natural gas	0.10 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)
	firing only oil	0.30 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998) and 40 C.F.R. Part 60, Subpart Db, § 60.44b(d)
	firing mixtures of fuels which include coal, oil, or natural gas	Pro-rated emission limit (not to exceed 0.60 lb/MMBtu) based on the formula in § 60.44b(b) 24–hr block avg	40 C.F.R. Part 60, Subpart Db, § 60.44b(c)
CO	firing only oil	0.03	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)
	firing a fuel mix containing coal, DPC, or TDF	0.15	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)
	firing a fuel mix containing biomass or natural gas	0.50	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)
VOC	any	0.008	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)
HCl	any	2.2×10^{-2} until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 1(a)
		2.0×10^{-2} on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(a)
Hg	any	5.7×10^{-6} until 10/6/2025 See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 15, Row 1(b)
		5.4×10^{-6} on 10/6/2025 and after See Note 2	40 C.F.R. Part 63, Subpart DDDDD, Table 2, Row 1(b)

Note 1: When Cogen Boiler #6 and/or #7 are/is firing only fuel oil or performing a gravimetric calibration, the monitored SO_2 lb/MMBtu emissions during that period, expected to be greater than during operation firing other fuels, shall not be included in determining the 24-hour block average SO_2 lb/MMBtu emission rate. NDP shall keep records of the dates and times of all gravimetric calibrations and the dates and time of any firing of only fuel oil in Cogen Boilers #6 and #7.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 2: Pursuant to 40 C.F.R. § 63.7500(f), this limit applies at all operating times except periods of startup and shutdown.

3. Emissions from Cogen Boilers #6 and #7 shall each not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	18.9	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)
PM_{10}	18.9	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)
SO_2	176.4 3-hr block avg See Notes 1, 2, 3	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)
NO_x	378.0 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009) (A-214-71-AC-A, 4/10/1998)
CO	248.85	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)
VOC	5.04	06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 2/24/2009) (A-214-71-O-A, 2/12/1993)

Note 1: When Cogen Boiler #6 and/or Cogen Boiler #7 is firing only fuel oil or performing a gravimetric calibration, SO_2 emissions from the common stack shall be limited to a total of 500.0 lb/hr on a three-hour block average basis. NDP shall keep records of the dates and times of all gravimetric calibrations and the date and time of any firing of only fuel oil in Cogen Boilers #6 and #7.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

Note 2: When Recovery Boiler C is firing only fuel oil and emissions of SO_2 are above 206.3 lb/hour, SO_2 emissions from the common stack for Cogen Boilers #6 and #7 shall be limited to a total of 250.0 lb/hr on a three-hour block average basis. NDP shall keep records of the date and time of any firing of only fuel oil in Recovery Boiler C.

Note 3: In addition to the limitations listed above, NDP shall be determined to be in compliance when Cogen Boilers #6 and #7 exceed the 176.4 lb/hr (352.8 lb/hr combined) SO_2 limit provided all of the following conditions are met:

a. Either Cogen Boiler #6 or #7 is firing SOGs, LVHCs, HVLCs, or any combination thereof;

b. SO_2 emissions from Cogen Boilers #6 and #7 combined do not exceed 500.0 lb/hr on a 3-hour block average basis;

c. SO_2 emissions from Recovery Boiler C do not exceed 206.3 lb/hr on a 3-hour block average basis;

d. SO_2 emissions from Boiler #3 do not exceed 60 lb/hr on a 3-hour average basis;

e. The Mill shall report the dates, times, and average SO_2 emissions for each 3-hour block when Cogen Boilers #6 and #7 utilize these alternative limits.

The alternative SO_2 limits listed in this note shall not account for more than 4.0 tpy of actual SO_2 emissions.
[06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

D. Visible Emissions

1. Visible emissions from Cogen Boilers #6 and #7 shall not exceed 10% opacity or the highest hourly average opacity reading measured during the most recent successful performance test demonstrating compliance with the PM emission limit. Compliance is based on a daily block average. This standard applies at all operating times except for periods of startup and shutdown, during which NDP shall comply with the applicable work practice standards. [40 C.F.R. §§ 63.7500(a)(2) and (f) and Table 4, Row 4(a)]

   Note that compliance is based on a daily block average and not a six-minute block average. Due to the shared COMS for Cogen Boilers #6 and #7, the visible emissions limit above is inclusive of times when one boiler is in normal operation and the other is in startup or shutdown.

   The terms *startup* and *shutdown* in this requirement refer to specific detailed definitions of those terms as provided in 40 C.F.R. § 63.7575. These definitions apply only to requirements of Subpart DDDDD, and these terms may be defined differently when applied to other regulatory requirements as described below.

2. Visible emissions from Cogen Boilers #6 and #7 shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period of not more than 27% opacity. This standard applies at all times except for periods of startup, shutdown, and malfunction.
   [40 C.F.R. §§ 60.43b(f) and (g)]

3. During periods of startup or shutdown, NDP shall comply with the alternate limits and compliance methods for Cogen Boilers #6 and #7 specified in the following paragraphs. [06-096 C.M.R. ch. 115, BACT (A-214-71-W-M (5/15/1995)]

   Note that these requirements are separate from those contained in 40 C.F.R. Part 63, Subpart DDDDD.

   a. When one of the two Cogen Boilers is in "normal" operation and the other has completed shutdown operations and is available for internal maintenance, visible emissions from the combined stack shall not exceed 60% opacity on a six-minute block average basis. NDP shall continue to operate the COMS and maintain records of opacity of emissions from the combined stack.

b. The identified period of alternate opacity compliance for Cogen Boiler #6 and/or #7 shall comply with each of the following:
   (i) Cold Startups shall not exceed a maximum period of 36 hours per boiler;
   (ii) All other startups or shutdowns shall not exceed a maximum period of 24 hours per boiler; and
   (iii) The period of alternate opacity compliance shall begin upon the first six-minute value that is recorded to be in excess of 20% opacity on a six-minute block average basis.

c. When only one Cogen Boiler is in the process of startup or shutdown and the other is under "normal" operation, NDP shall continuously monitor and record once every half-hour the following surrogate parameters indicative of boiler performance for the Cogen Boiler under "normal" operation:

   (i) Boiler air/fuel ratio;
   (ii) Boiler combustion O_2 trim control; and
   (iii) The operating ESP TR Set voltage and amperage

   During a startup or a shutdown period, operation of the other boiler within the normal range of variation for the above parameters shall constitute compliance with the visible emission requirements of 40 C.F.R. Part 60, Subpart Db. Upon request from the Department, NDP shall submit copies of the records for these parameters.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. As described in § II(I)(4(d)(2) of this license, a MFT that is not the result of operator error or poor maintenance is a malfunction as defined in 40 C.F.R. § 60.2.

For the purposes of this license (except for the standards and requirements of 40 C.F.R. Part 63, Subpart DDDDD, which are subject to specific definitions for these terms), *Startup* and *Shutdown* shall be defined as follows. These definitions were established in Air Emission License A-214-70-G-R/A (2/13/2014) and are incorporated under 06-096 C.M.R. ch. 140, BPT.

Startup includes the operational activities preceding and including the first fire of natural gas or fuel oil until the boiler has reached its rated temperature (955 °F) and pressure (1,310 psig), is firing only solid fuel, and is sustaining over 75% rated load.

Cold Startup occurs after a boiler has been cooled from its rated operating pressure and temperature to a pressure of less than 50 psig. Typically, this occurs when a boiler has been taken offline for maintenance to perform a repair caused by a pressure part failure. A cold startup may require up to 36 hours for the boiler to be

brought online in a methodical manner to allow the metals and refractory to expand in a uniform manner to prevent mechanical damage and/or thermal shock to the boiler. The boiler may be started up without bed material if performing a refractory cure or with cold bed material as a result of being offline. The cold startup ends when the boiler has reached its rated temperature (955 °F) and pressure (1,310 psig), is firing only solid fuel, and is sustaining over 75% rated load.

Shutdown means the operational activities leading to the cessation of operation of a boiler. Shutdown includes the process of decreasing boiler firing rate, decreasing solid fuel firing, and removing bed material until a boiler ceases operation with a Master Fuel Trip (MFT).

E. Compliance Methods

Compliance with the emission limits associated with Cogen Boilers #6 and #7 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.
[06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
	lb/hr		
PM_{10}	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS, 24-hr block average, and 30-day rolling average (as applicable)	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	lb/MMBtu	NO_x CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	NO_x CEMS, 24-hr block average	
CO	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
	ppmdv		
	lb/hr		
VOC	lb/MMBtu	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
	lb/hr		
HCl	lb/MMBtu	Either performance testing or fuel analysis in accordance with 40 C.F.R. Part 63, Subpart DDDDD	In accordance with 40 C.F.R. Part 63, Subpart DDDDD
Hg	lb/MMBtu		

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
Visible Emissions	% opacity	COMS, six-minute block average basis and daily block average basis	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117

F. 40 C.F.R. Part 63, Subpart DDDDD Operating Limits

Cogen Boilers #6 and #7 are subject to the following operating limits at all operating times except for periods of startup and shutdown, during which time NDP shall comply with the applicable work practice standards:

1. Visible emissions from Cogen Boilers #6 and #7 shall not exceed 10% opacity or the highest hourly average opacity reading measured during the most recent successful performance test demonstrating compliance with the PM emission limit. Compliance is based on a daily block average. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 4(a)]
2. The 30-day rolling average operating load shall not exceed 110% of the highest hourly average operating load recorded during the most recent successful performance stack test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 7]
3. The 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent successful CO performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 8]
4. When demonstrating compliance with HCl emissions limits through performance testing, the 30-day rolling average SO_2 emission rate shall not exceed the highest hourly average SO_2 concentration measured during the most recent successful HCl performance test. [40 C.F.R. § 63.7500(a)(2) and Table 4, Row 9]

G. 40 C.F.R. Part 60, Subpart Db

Following are applicable requirements of 40 C.F.R. Part 60, Subpart Db for Cogen Boilers #6 and #7 not addressed elsewhere in this Order:

1. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 60, Subpart Db including, but not limited to, the following:

a. The amounts of each fuel combusted during each day. [40 C.F.R. § 60.49b(d)(1)]
b. Calculations documenting the annual capacity factor individually for coal, fuel oil, natural gas, and wood on a 12-month rolling average basis. [40 C.F.R. § 60.49b(d)(1)]
c. Records of COMS data and calculated averages. [40 C.F.R. § 60.49b(f)]

d. Records of NO_x CEMS data as specified in 40 C.F.R. § 60.49b(g).

2. Reports

NDP shall prepare and submit to the Department and EPA the following reports every six months. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 60.49b(w)]

a. Excess emissions report. Excess emissions are defined as:

(1) All six-minute periods during which the average opacity exceeds the standard; and
(2) Any calculated 30-day rolling average NO_x emission rate that exceeds the applicable emission limits.
[40 C.F.R. § 60.49b(h)]

b. Reports containing the information in 40 C.F.R. §§ 60.49b(k) and (m), as applicable.

H. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Cogen Boilers #6 and #7 and their associated air pollution control equipment.

1. Hours Cogen Boilers #6 and #7 (each) were active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Types and amounts of each fuel fired in each boiler on a monthly basis; [06-096 C.M.R. ch. 137 and 40 C.F.R. 63.7555(d)(1)]
3. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]
4. Dates and times of all gravimetric calibrations; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
5. Dates and times of any firing of only fuel oil in Cogen Boilers #6 and #7; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
6. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart Db (described earlier in this Order);
7. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart DDDDD (described later in this Order);
8. Records of any maintenance activities performed (planned or unplanned) on the multicyclones and ESPs. [40 C.F.R. § 63.7500(a)(3)]

I. Parameter Monitors

1. During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitor for Cogen Boilers #6 and #7:

Parameter	Averaging Period	Origin and Authority
Operating Load	30-day rolling average	40 C.F.R. § 63.7505(c) & § 63.7525(d)

2. In the event that only one of the two cogen boilers is in the process of startup or shutdown and the other is under "normal" operation, NDP shall monitor and record the following additional parameter values indicative of boiler performance.

Parameter	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
Boiler air/fuel ratio	Air/fuel ratio	Boiler control system	Continuously	every half hour
Boiler combustion O_2 trim control	Oxygen content	Boiler control system	Continuously	every half hour

For the purposes of the table above, *Continuously* shall mean ongoing while the equipment is operating, providing, at a minimum, one data point per specified data recording period.

J. CEMS and COMS

1. NDP shall operate and maintain the following continuous emission monitoring systems (CEMS) and continuous opacity monitoring system (COMS) for Cogen Boilers #6 and #7 whenever either unit is operating:

Continuous Monitors	Units	Averaging Period	Origin and Authority
NO_x CEMS	lb/MMBtu	24-hr block average	06-096 C.M.R. ch. 117, § B(2) 40 C.F.R. § 60.48b(b)(1)
	lb/hr		
SO_2 CEMS	lb/MMBtu	24-hr block average and 30-day rolling average (as applicable)	40 C.F.R. § 60.47b(a) 40 C.F.R. § 63.7525(m)
	lb/hr	3-hour block average	
COMS	% opacity	six-minute block average and daily block average	40 C.F.R. § 60.48b(a) 40 C.F.R. § 63.7525(c)
O_2 CEMS	%	30-day rolling average	40 C.F.R. §§ 60.47b(a) & 60.48b(b)(1) 40 C.F.R. §§ 63.7505(c) & 63.7525(a)

2. The span value for the COMS shall be as determined by 40 C.F.R. § 60.48b(e). [40 C.F.R. § 60.48b(e)(1)]

(16) **40 C.F.R. Part 63, Subpart DDDDD**

Following are applicable requirements of 40 C.F.R. Part 63, Subpart DDDDD for Power Boiler #3 and Cogen Boilers #6 and #7 not addressed elsewhere in this Order:

A. Work Practice Standards

1. Tune-Ups

a. Power Boiler #3 does not have a continuous oxygen trim system. Therefore, as a work practice standard NDP shall perform annual tune-ups on this boiler as specified in §§ 63.7540(a)(10)(i) through (vi). Each tune-up must be conducted no more than 13 months after the previous tune-up. The burner inspection may be delayed until the first outage, not to exceed 36 months from the previous inspection.
b. Cogen Boilers #6 & #7 are equipped with continuous oxygen trim systems as defined in § 63.7575. Therefore, as a work practice standard NDP shall perform tune-ups on these boilers every five years as specified in §§ 63.7540(a)(10)(i) through (vi). The burner inspection may be delayed until the first outage, not to exceed 72 months from the previous inspection.
c. NDP shall conduct the tune-up while burning the type of fuels that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

[40 C.F.R. §§ 63.7515(d), 63.7540(a)(10), and Table 3, Row 3]

2. If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 C.F.R. § 63.7540(a)(13)]

3. In accordance with paragraph (2) of the definition of "startup", startup begins when fuel is fired in the boiler and ends four hours after steam or heat is supplied for heating, cooling, process purposes or electricity generation, whichever is earlier. Power Boiler #3 and Cogen Boilers #6 and #7 are subject to the following work practice standards during startup:

a. NDP shall operate all CMS during startup.
b. NDP shall use only clean fuels during startup. (See Definitions section.)
c. Once the boiler starts firing fuels that are not clean fuels, NDP shall engage all applicable control devices so as to comply with the emission limits within four hours of starting to supply useful thermal energy.

d. NDP shall engage and operate the PM control within one hour of firing fuels that are not clean fuels.
e. NDP shall develop and implement a written startup and shutdown plan as specified in 40 C.F.R. § 63.7505(e).

[40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 5]

4. Shutdown begins when the boiler no longer supplies useful thermal energy (such as heat or steam) for heating, cooling, or process purposes and/or generates electricity or when no fuel is being fed to the boiler (whichever is earlier) and ends when the boiler is no longer supplying useful thermal energy and no fuel is being combusted in the boiler. NDP is subject to the following work practice standards during shutdown:

   a. NDP shall operate all CMS during shutdown.
   b. When firing fuels that are not clean fuels during shutdown, NDP shall operate all applicable control devices.

   [40 C.F.R. §§ 63.7500(a)(1) and 63.7540(d) and Table 3, Row 6]

B. Performance Tests

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. Currently, NDP uses fuel analysis for HCl and Hg for Cogen Boilers #6 and #7. Boiler #3 is currently categorized as a Gas 1 unit which does not have applicable emissions limits in Table 2. NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

1. Except as provided for in the next paragraph, NDP shall conduct performance stack tests for PM and CO annually. If electing to demonstrate compliance with HCl and/or Hg through performance testing, such tests shall be conducted annually. Annual performance tests must be completed no more than 13 months after the previous performance test. [40 C.F.R. § 63.7515(a)]

2. If the performance tests for a given pollutant for at least 2 consecutive years show that emissions are at or below 75% of the emission limit for that pollutant, and there are no changes in the operation of the boiler or its associated air pollution control equipment that could increase emissions, NDP may elect to conduct performance tests for that pollutant every third year. The subsequent performance tests must be conducted no more than 37 months after the previous performance test. If a performance stack test shows emissions exceed 75% of the emission limit for a pollutant, NDP shall resume conducting annual performance stack testing for that pollutant until all performance stack tests for that pollutant over a 2-year period are at or below 75% of the pollutant's emission limit.

   [40 C.F.R. §§ 63.7515(b) and (c)]

3. Performance tests which are conducted shall be performed in accordance with requirements in Table 5. [40 C.F.R. § 63.7520(b)]

4. NDP shall:

   (1) Conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury (more than one performance test may be required);
   (2) Demonstrate compliance and establish operating limits based on these performance tests; and
   (3) Comply with the operating limit for operating load conditions specified in Table 4 following each performance test and until the next performance test.

   [40 C.F.R. § 63.7520(c)]

5. NDP shall conduct a minimum of three separate test runs for each performance test required. [40 C.F.R. § 63.7520(d)]

6. NDP shall use the methodology in § 63.7520(e) to convert measured concentrations to lb/MMBtu emission rates for compliance purposes. If the measured concentration is below the detection level of the method used, NDP shall use the method detection level as the measured emissions level for the pollutant in calculating compliance. [40 C.F.R. §§ 63.7520(e) and (f)]

C. Fuel Analysis

NDP shall demonstrate compliance with the HCl and Hg emission limits through either performance tests or fuel analysis. Currently, NDP uses fuel analysis for HCl and Hg for Cogen Boilers #6 and #7. Boiler #3 is currently categorized as a Gas 1 unit which does not have applicate emissions limits in Table 2. NDP may elect to change the compliance method and that flexibility is intended to be provided for in the following requirements.

If electing to demonstrate compliance with HCl and/or Hg emission limits through fuel analysis, NDP shall comply with the following for each boiler using this option:

1. NDP shall conduct a monthly fuel analysis for HCl and/or Hg (as applicable) except as provided for in the next paragraph. Samples for monthly fuel analyses shall be taken no less than 14 calendar days apart unless multiple samples are taken per month. [40 C.F.R. § 63.7515(e)]

2. If each of 12 consecutive monthly fuel analysis for a given pollutant demonstrates 75% or less of the compliance level for that pollutant, NDP may elect to decrease fuel analysis frequency for that pollutant to quarterly. If any quarterly sample

exceeds 75% of the compliance level for a given pollutant, NDP shall return to monthly monitoring until 12 consecutive months of fuel analysis are again less than 75% of the compliance level. [40 C.F.R. § 63.7515(e)]

3. Fuel analyses which are conducted shall be performed in accordance with Table 6. The concentration of pollutants shall be determined in units of lb/MMBtu. [40 C.F.R. §§ 63.7521(a) & (e)]

4. For Power Boiler #3, fuel analysis is only required for fuel oil since it is the only type of fuel fired in the boiler subject to an emission limit in Tables 2 or 15. [40 C.F.R. § 63.7521(a)]

5. Power Boiler #3 is not subject to the composite fuel sampling requirements contained in 40 C.F.R. §§ 63.7521(c) and (d) since both gaseous and liquid fuels are exempt pursuant to 40 C.F.R. § 63.7521(a).

6. For Cogen Boilers #6 and #7, fuel analysis is required for fuel oil and solid fuels. Fuel analysis is not required for natural gas and the other gases (including LVHC, HVLC, and SOG) fired in Cogen Boilers #6 and #7 since they are not subject to emission limits in Tables 2 or 15 for HCl or Hg. [40 C.F.R. § 63.7515(e) and § 63.7521(a)]

7. NDP shall obtain and prepare composite fuel samples in accordance with 40 C.F.R. §§ 63.7521(c) and (d). The composite fuel sampling requirements contained in these sections do not apply to fuel oil pursuant to 40 C.F.R. § 63.7521(a).

8. NDP shall develop a site-specific fuel monitoring plan according to the procedures and requirements of 40 C.F.R. §§ 63.7521(b)(1) and (2). [40 C.F.R. § 63.7521(b)]

D. Continuous Compliance and Monitoring Requirements

1. At all times, NDP must operate and maintain Power Boiler #3 and Cogen Boilers #6 and #7, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.7500(a)(3)]

2. For each CMS, NDP shall develop a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.8(d) and 63.7505(d)(1)(i) through (iii). NDP is not required to develop or submit a site-specific monitoring plan for the SO_2 CEMS if

it is operated according to the performance specifications of 40 C.F.R. Part 60, Appendix B. [40 C.F.R. § 63.7505(d)(1)]

3. NDP shall monitor and collect CMS data according to 40 C.F.R. § 63.7535. [40 C.F.R. § 63.7535(a)]

   a. NDP shall operate the monitoring systems and collect data at all required intervals at all times that Power Boiler #3 is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the facility's site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. NDP shall complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [40 C.F.R. § 63.7535(b)]

   b. NDP may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. NDP shall record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. NDP shall use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. [40 C.F.R. § 63.7535(c)]

   c. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, no data shall be used that was collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. NDP shall calculate monitoring results using all other monitoring

data collected while the process is operating. NDP shall report all periods when the monitoring system is out of control in the semi-annual report.
[40 C.F.R. § 63.7535(d)]

d. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.
[40 C.F.R. § 63.7540(a)(1)]

E. Recordkeeping

1. Records shall be kept on site, or be accessible from on site, for at least 2 years. Records may be kept off site for the remaining years. [40 C.F.R. § 63.7560(c)]

2. NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

a. Copies of notifications and reports submitted to comply with the subpart along with any supporting documentation; [40 C.F.R. § 63.7555(a)(1)]
b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations; [40 C.F.R. § 63.7555(a)(2)]
c. For each COMS and SO_2 CEMS, the records described in 40 C.F.R. §§ 63.7555(b)(1) through (5);
d. Records required by 40 C.F.R. Part 63, Subpart DDDDD, Table 8 including records of all monitoring data and calculated averages for applicable operating limits to show continuous compliance with each emission limit;
[40 C.F.R. § 63.7555(c)]
e. Monthly fuel use including the types and amounts of fuel fired;
[40 C.F.R. § 63.7555(d)(1)]
f. Records that document how the non-fibrous OCC residuals meet the legitimacy criteria in 40 C.F.R. § 241.3(d)(1); [40 C.F.R. § 63.7555(d)(2)]
g. Records that document that the TDF, CTW, CDD, and fibrous OCC residuals are non-wastes pursuant to 40 C.F.R. § 241.4(a); [40 C.F.R. § 63.7555(d)(2)]
h. Copies of all calculations and supporting documentation of maximum chlorine and mercury fuel input or emission rates (as applicable) that were done to demonstrate continuous compliance with the HCl and Hg emission limits.
[40 C.F.R. §§ 63.7555(d)(3) and (4)]
i. If NDP elects to stack test less frequently than annually, records that document that the emissions in the previous stack test(s) were less than 75% of the applicable emission limit and documentation that there was no change in source operations including fuel composition and operation of air pollution control

equipment that would cause emissions of the relevant pollutant to increase within the past year; [40 C.F.R. § 63.7555(d)(5)]

j. Records of the occurrence and duration of each malfunction of Power Boiler #3 and Cogen Boilers #6 and #7 and their associated air pollution control and monitoring equipment; [40 C.F.R. § 63.7555(d)(6)]

k. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation; [40 C.F.R. § 63.7555(d)(7)]

l. Records of the calendar date, time, occurrence, and duration of each startup and shutdown; [40 C.F.R. § 63.7555(d)(9)]

m. Records of the type(s) and amount(s) of fuel used during each startup and shutdown; [40 C.F.R. § 63.7555(d)(10)]

n. For each startup period, records of the time that clean fuel combustion begins; the time NDP starts feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged; [40 C.F.R. § 63.7555(d)(11)]

o. For each startup period, records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data collected during each startup period to confirm that the control devices are engaged; [40 C.F.R. § 63.7555(d)(12)]

p. For Power Boiler #3, when firing fuel oil, records of the scrubber's liquid flow rate and pressure drop during each hour of startup; and [40 C.F.R. § 63.7555(d)(12)(iii)]

q. For Cogen Boilers #6 and #7, for each startup period, the number of fields in service on each ESP, as well as each field's secondary voltage and secondary current during each hour of startup. [40 C.F.R. § 63.7555(d)(12)(i)]

F. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart DDDDD including, but not limited to, the following:

1. NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.7545(d)]

2. NDP shall submit the results of each performance test to EPA and the Department within 30 days after the date of completing each performance test. [06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d)]

3. The performance stack test report must verify that the operating limits for Power Boiler #3 have not changed or provide documentation of the revised operating limits established. [40 C.F.R. §§ 63.7515(f)]

4. Within 60 days after the date of completing each CEMS performance evaluation, NDP shall submit the results of the CEMS performance evaluation to EPA and the Department. [40 C.F.R. § 63.7550(h)2)]

5. NDP shall prepare and submit to EPA and the Department a compliance report every six months which contains the information contained in §§ 63.7540(b) and 63.7550(c) as applicable. [40 C.F.R. § 63.7550(a)]

6. Each semi-annual compliance report shall cover the reporting period of January 1 through June 30 or July 1 through December 31 (as applicable). Each semi-annual compliance report shall be postmarked or submitted no later than July 31 or January 31 (respectively). [40 C.F.R. §§ 63.7550(b)(3) and (4)]

7. Semi-annual compliance reports, results of compliance tests, and results of CEMS performance evaluations shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail. [40 C.F.R. § 63.7550(h)]

(17) **Lime Kiln**

A. Allowable Fuels

1. The Lime Kiln is licensed to fire fuel oil, natural gas, LVHC gases, and specification waste oil. [06-096 C.M.R. ch. 115, BACT (A-214-77-13-A, 11/12/2015)]

2. The waste oil fired in the Lime Kiln shall meet the definition of *specification waste oil* as defined in *Waste Oil Management Rules,* 06-096 C.M.R. ch. 860. Documentation of compliance with this requirement shall be maintained on-site. [06-096 C.M.R. ch. 115, BACT (A-214-77-13-A, 11/12/2015)]

B. Control Equipment

Emissions of particulate matter and SO_2 from the Lime Kiln shall be controlled by the operation and maintenance of a wet scrubber during all operating times except for periods when only natural gas is being fired and there is no lime in the Lime Kiln. [06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

C. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from the Lime Kiln shall not exceed the following limits:

Pollutant	gr/dscf	Origin and Authority
PM	0.064 @ 10% O_2	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

2. Emissions from the Lime Kiln shall not exceed the following limits:

Pollutant	ppmv	Origin and Authority
NO_x	120 ppmv (wet basis) @ 10% O_2 1-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
TRS	8 ppmdv @ 10% O_2 12-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

3. Emissions from the Lime Kiln shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	24.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
PM_{10}	24.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
SO_2	23.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
NO_x	52.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
CO	39.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
VOC	2.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

D. Visible Emissions

Visible emissions from the Lime Kiln shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time NDP shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

During periods of startup, shutdown, or malfunction, visible emissions from the Lime Kiln shall not exceed 40% opacity on a six-minute block average basis. This alternative visible emissions standard shall not be utilized for more than two hours (20 consecutive

six-minute block averages) per event. Records must be kept of the date, time, and duration of each startup, shutdown, or malfunction event.
[06-096 C.M.R. ch. 101, § 4(A)(8)(a)]

E. Compliance Methods

Compliance with the emission limits associated with the Lime Kiln shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department. [06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	gr/dscf	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		
PM_{10}	lb/hr	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
SO_2	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 6C	As requested
NO_x	ppmv	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 7E	As requested
	lb/hr		
CO	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS, 12-hr block average in accordance with 06-096 C.M.R. ch. 124 See Note 1	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

Note 1: The first four 12-hour block averages in a quarter which exceed this limit are not considered a violation. [06-096 C.M.R. ch. 124, § 5(C)(3)(b)]

F. Performance Tests

1. NDP shall conduct a performance stack test for PM from the Lime Kiln every five years (next test due 9/10/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process

information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

2. Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

3. NDP shall establish operating limits for the scrubber CPMS during performance tests in accordance with 40 C.F.R. § 63.864(j). Multiple performance tests may be conducted to establish a range of parameter values. Operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.

G. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Lime Kiln and its associated air pollution control equipment.

1. Hours the Lime Kiln was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137]
3. Sulfur content (% by weight) of all liquid fuels fired; [06-096 C.M.R. ch. 137]
4. If electing to utilize the alternative visible emission limit during periods of startup, shutdown, and malfunction, records of the date, time, and duration of each of these events. [06-096 C.M.R. ch. 101, § 4(A)(8)(a)(i)]
5. Dates, times, and duration of LVHC firing; [40 C.F.R. § 70.6(c)(1)]
6. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described later in this Order);
7. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described later in this Order);
8. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described later in this Order); and
9. Records of any maintenance activities performed (planned or unplanned) on the wet scrubber. [40 C.F.R. § 63.860(d)]

H. Parameter Monitors

1. During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Lime Kiln and its associated air pollution control equipment:

Parameter	Averaging Period	Origin and Authority
Scrubber Re-Circulation Flow Rate	3-hr rolling average	Alternative Monitoring Determination M060033 and 40 C.F.R. § 63.864(k)(vi)
Scrubber Liquid Pressure		

2. The span of the O_2 CEMS shall be set at 25%. [40 C.F.R. § 60.284(a)(2)(ii)]

3. NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations. [06-096 C.M.R. ch. 124, § 5(A)(2) and 40 C.F.R. § 60.284(c)(2)]

4. Pursuant to the approved alternate monitoring determination (Control Number M060033), NDP shall install, calibrate, maintain, and operate a CPMS for the Lime Kiln scrubbing liquid re-circulation flow rate and scrubbing liquid pressure subject to the following conditions:

    a. NDP shall follow the manufacturer or supplier-recommended maintenance and calibration procedures for the monitors and recorders used to measure the flow rate and supply pressure.
    b. The monitoring equipment shall determine and record the flow rate and pressure values from the lime kiln wet scrubber at least once every successive 15-minute period.
    c. NDP shall develop specific scrubbing liquid flow rate and supply pressure parametric operating ranges (operating limits) for the Lime Kiln scrubber, as indicators of compliance with the emission standard (0.064 gr/dscf of PM corrected to 10% O_2). The parametric operating ranges for the Lime Kiln scrubber will be developed during a performance test and shall be re-defined at any time that NDP makes modifications to the Lime Kiln or associated scrubber system that could alter the operating conditions of the Lime Kiln or scrubber system.

5. NDP shall implement corrective action if an exceedance of an operating limit occurs when lime mud is being fed into the Lime Kiln. [40 C.F.R. § 63.864(k)(1)]

I. CEMS

1. NDP shall operate and maintain the following continuous emission monitoring systems (CEMS) for the Lime Kiln whenever the unit is operating:

Continuous Monitors	Units	Averaging Period	Origin and Authority
TRS CEMS	ppmdv	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)
O_2 CEMS	%	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)

2. The span of the TRS CEMS shall be set at 30 ppm.
[06-096 C.M.R. ch. 124, § 4(A)(1) and 40 C.F.R. § 60.284(a)(2)(i)]

3. NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average TRS concentrations.
[06-096 C.M.R. ch. 124, § 5(A)(1) and 40 C.F.R. § 60.284(c)(1)]

(18) **Recovery Boiler C**

A. Allowable Fuels

1. RBC is licensed to fire black liquor, fuel oil, natural gas, specification waste oil, and soap. [06-096 C.M.R. ch. 115, BACT (A-214-77-13-A, 11/12/2015)]

2. The waste oil fired in RBC shall meet the definition of *specification waste oil* as defined in *Waste Oil Management Rules,* 06-096 C.M.R. ch. 860. Documentation of compliance with this requirement shall be maintained on-site.
[06-096 C.M.R. ch. 115, BACT (A-214-77-13-A, 11/12/2015)]

3. The fuel oil fired in RBC shall have a maximum sulfur content of 0.5% by weight when there is no smelt within the boiler and 2.5% by weight when there is smelt within the boiler. [06-096 C.M.R. ch. 140, BPT and 06-096 C.M.R. ch. 106, § 5(A)]

4. RBC shall not exceed an annual heat input capacity factor for fossil fuel (fuel oil and natural gas combined) of 10%. [06-096 C.M.R. ch. 140, BPT (A-214-70-A-I, 6/30/2003)]

B. Control Equipment

1. Emissions of particulate matter from RBC shall be controlled by the operation and maintenance of an ESP during all operating times except for periods of startup, shutdown, or malfunction. [06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

2. NDP shall maintain proper operation of RBC's ESP automatic voltage control.
[40 C.F.R. § 63.864(e)(1)]

C. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from RBC shall not exceed the following limits:

Pollutant	gr/dscf	Origin and Authority
PM	0.044 @ 8% O_2	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

2. Emissions from RBC shall not exceed the following limits:

Pollutant	ppmdv	Origin and Authority
SO_2	100 @ 8% O_2 30-day rolling avg See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
NO_x	110 @ 8% O_2 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
TRS	5 @ 8% O_2 12-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

Note 1: When RBC is firing only fuel oil, the monitored SO_2 ppmdv emissions during that period shall not be included in determining the 30-day rolling average SO_2 ppmdv emission rate.

3. Emissions from RBC shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	86.7	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
PM_{10}	65.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
SO_2	206.3 See Note 1	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
NO_x	215.0 24-hr block avg	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
	117.3 lb/hr 24-hr block avg See Note 2	06-096 C.M.R. ch. 138, § 6
CO	222.0	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
VOC	3.7	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)

Note 1: As an alternative to the 206.3 lb/hr SO_2 emission limit, NDP shall be determined to be in compliance when Recovery Boiler C exceeds the 206.3 lb/hr limit if all of the following requirements are met:

i. SO_2 emissions from Recovery Boiler C shall not exceed 650.0 lb/hr on a 3-hour block average basis.

ii. SO_2 emissions from Cogen Boilers #6 and #7 combined shall not exceed 250.0 lb/hr on a 3-hour block average basis.

iii. SO_2 emissions from Power Boiler #3 shall not exceed 60.0 lb/hr on a 3-hour block average basis.

iv. NDP shall not utilize these limits to demonstrate compliance for more than 300 hours (i.e., 100 3-hour blocks) in any calendar year and shall report quarterly the dates, times, and number of 3-hour blocks when these limits were utilized for the quarter.

Note 2: Limit applies during periods of startup or shutdown beginning May 1, 2026. This limit is on a 24-hour daily block average basis, or shorter time period if the startup or shutdown event does not last for the entire 24-hour daily block period. Operating times other than periods of startup and shutdown may be excluded from the block average.

D. Alternative NO_x Limits for Startup and Shutdown

1. This alternative NO_x emissions limit for periods of startup and shutdown may not be utilized for more than two consecutive calendar days per event and may not be utilized for more than 10% of the unit's total operating time in any 12-month calendar year period.

2. Compliance with the alternative NO_x emissions limit shall be demonstrated through the use of a CEMS operated pursuant to the requirements of 06-096 C.M.R. ch. 117 and records of the date, time, and duration of all startup and shutdown events.

[06-096 C.M.R. ch. 138, § 6]

E. Visible Emissions

1. Visible emissions from RBC shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, and malfunction.

2. Visible emissions from RBC shall not exceed 20% opacity on a six-minute block average basis for 95% of all six-minute block averages on a quarterly basis. The average of the remaining five percent of all six-minute block averages on a quarterly basis shall not exceed 30% opacity. Periods of startup, shutdown, and malfunctions are included for the purpose of calculating block averages under this subsection. Periods when the unit is not operating are not included for the purpose of calculating block averages under this subsection.

RBC shall be considered to be operating whenever any fuel is being fired, regardless of whether black liquor is being fired or not.

[06-096 C.M.R. ch. 140, BPT]

F. Compliance Methods

Compliance with the emission limits associated with RBC shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.
[06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	gr/dscf	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		
PM_{10}	lb/hr	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
SO_2	ppmdv	SO_2 CEMS, 30-day rolling average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr	SO_2 CEMS, 3-hr block average	
NO_x	ppmdv	NO_x CEMS, 24-hr block average	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
	lb/hr		
CO	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
TRS	ppmdv	TRS CEMS, 12-hr block average in accordance with 06-096 C.M.R. ch. 124 See Note 1	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117
Visible Emissions	% opacity	COMS, six-minute block average basis and daily block average basis	Continuously in accordance with 40 C.F.R. Part 60, Appendix B and 06-096 C.M.R. ch. 117

Note 1: The first two 12-hour block averages in a quarter which exceed this limit are not considered a violation. [06-096 C.M.R. ch. 124, § 5(C)(3)(b)]

G. Performance Tests

1. NDP shall conduct a performance stack test for PM from RBC every five years (next test due 7/22/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

2. Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

H. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for RBC and its associated air pollution control equipment.

1. Hours RBC was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Types and amounts of each fuel fired on a monthly basis; [06-096 C.M.R. ch. 137]
3. Sulfur content (% by weight) of all fuel oil fired; [06-096 C.M.R. ch. 137]
4. Date and time of any firing of only fuel oil; [06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]
5. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described later in this Order);
6. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described later in this Order); and
7. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described later in this Order).

I. CEMS and COMS

1. NDP shall operate and maintain the following continuous emission monitoring systems (CEMS) and continuous opacity monitoring system (COMS) for RBC whenever the unit is operating:

Continuous Monitors	Units	Averaging Period	Origin and Authority
SO_2 CEMS	ppmdv	30-day rolling average	06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)
	lb/hr	3-hr block average	
NO_x CEMS	ppmdv	24-hr block average	06-096 C.M.R. ch. 138, § 3(C)(2)
	lb/hr		
COMS	% opacity	six-minute block average	40 C.F.R. § 60.284(a)(1) & 40 C.F.R. § 63.864(d)

Continuous Monitors	Units	Averaging Period	Origin and Authority
TRS CEMS	ppmdv	12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)
O_2 CEMS		12-hr block average	06-096 C.M.R. ch. 124, § 4(A) & 40 C.F.R. § 60.284(a)(2)

2. The span of the COMS shall be set at 70% opacity. [40 C.F.R. § 60.284(a)(1)]

3. NDP shall implement corrective action if the average of ten consecutive six-minute averages result in a measurement greater than 20% opacity when spent pulping liquor is being fed into RBC. [40 C.F.R. § 63.864(k)(1)]

4. The span of the TRS CEMS shall be set at 30 ppm.
[06-096 C.M.R. ch. 124, § 4(A)(1) and 40 C.F.R. § 60.284(a)(2)(i)]

5. NDP shall calculate and record on a daily basis the two 12-hour block average TRS concentrations for the two periods of each operating day. Each 12-hour block average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average TRS concentrations.
[06-096 C.M.R. ch. 124, § 5(A)(1) and 40 C.F.R. § 60.284(c)(1)]

6. The span of the O_2 CEMS shall be set at 25%. [40 C.F.R. § 60.284(a)(2)(ii)]

7. NDP shall calculate and record on a daily basis the two 12-hour block average O_2 concentrations for the two periods of each operating day. These 12-hour block averages shall correspond to the 12-hour block average for TRS and shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average O_2 concentrations.
[06-096 C.M.R. ch. 124, § 5(A)(2) and 40 C.F.R. § 60.284(c)(2)]

(19) **Smelt Tank C**

A. Control Equipment

Emissions from Smelt Tank C shall continuously vent through one of the two Venturi Scrubber Systems when Smelt Tank C is in operation. [06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R (7/18/1989)]

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from Smelt Tank C shall not exceed the following limits:

Pollutant	lb/ton BLS	Origin and Authority
PM	0.192	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)
PM_{10}	0.190	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)
SO_2	0.067	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)
TRS	0.033 as H_2S	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)

2. Emissions from Smelt Tank C shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	16.0	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)
PM_{10}	15.8	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)
SO_2	5.5	06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)

C. Visible Emissions

Visible emissions from Smelt Tank C shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. § 4(B)(4

D. Compliance Methods

Compliance with the emission limits associated with Smelt Tank C shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department. [06-096 C.M.R. ch. 140]

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 5	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart MM
	lb/hr		

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
PM_{10}	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 51, App. M, Methods 201 or 201A and Method 202	As requested
	lb/hr		
SO_2	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 6C	As requested
	lb/hr		
TRS	lb/ton BLS	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 16B	Once every 2 calendar years in accordance with 06-096 C.M.R. ch. 124
Visible Emissions	% opacity	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 9	As requested

E. Performance Tests

1. NDP shall conduct a performance stack test for TRS from Smelt Tank C every two calendar years (next test due by the end of 2025). [06-096 C.M.R. ch. 124, § 4(C))]

2. NDP shall conduct a performance stack test for PM from Smelt Tank C every five years (next test due 7/24/2025). Performance tests shall be conducted based on representative (i.e., normal) operating conditions. NDP shall record the process information necessary to document operating conditions during the test and include in such record an explanation to support the conditions were representative of normal operation. [40 C.F.R. § 63.865]

3. Performance tests shall be conducted in accordance with 40 C.F.R. § 63.865(b).

4. NDP shall establish operating limits for the scrubber CPMS during performance tests in accordance with 40 C.F.R. § 63.864(j). Multiple performance tests may be conducted to establish a range of parameter values. Operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.

F. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for Smelt Tank C and its associated air pollution control equipment.

1. Hours Smelt Tank C was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described later in this Order);

3. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart MM (described later in this Order); and
4. Records of any maintenance activities performed (planned or unplanned) on the venturi scrubbers. [40 C.F.R. § 63.860(d)]

G. Parameter Monitors

1. During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for Smelt Tank C and its associated air pollution control equipment:

Parameter	Averaging Period	Origin and Authority
Scrubber Pressure Drop	3-hr rolling average	40 C.F.R. § 60.284(b)(2)(i) & 40 C.F.R. §§ 63.864(e)(10) & (k)(1)
Scrubber Liquid Flow Rate		40 C.F.R. § 63.864(e)(10) & (k)(1)
Scrubber Liquid Pressure	N/A	40 C.F.R. § 60.284(b)(2)(ii)

2. The monitoring devices used for the continuous measurement of pressure drop across the scrubbers must be certified by the manufacturer to be accurate to within a gage pressure of +/- 500 pascals (+/- 2 inches of water gage pressure). [40 C.F.R. § 60.284(b)(2)(i) and 40 C.F.R. § 63.864(e)(10)(i)]

3. The monitoring devices used for the continuous measurement of scrubbing liquid flow rate must be certified by the manufacturer to be accurate to within +/- 5% of the design scrubbing liquid flow rate. [40 C.F.R. § 63.864(e)(10)(ii)]

4. Except for periods of startup and shutdown, NDP shall implement corrective action if any 3-hour average scrubber pressure drop is below the minimum operating limit established during the most recent successful PM performance test. [40 C.F.R. § 63.864(k)(1)]

5. NDP shall implement corrective action if any 3-hour average scrubbing liquid flow rate is below the minimum operating limit established during the most recent successful PM performance test. [40 C.F.R. § 63.864(k)(1)]

(20) **40 C.F.R. Part 63, Subpart MM**

Following are applicable requirements of 40 C.F.R. Part 63, Subpart MM for the Lime Kiln, RBC, and Smelt Tank C not addressed elsewhere in this Order:

A. Continuous Compliance and Monitoring Requirements

At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with

safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require NDP to make any further efforts to reduce emissions if the standard has been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. § 63.860(d)]

B. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

1. Records of CPMS data, including any exceedance, with a brief explanation of the cause of the monitoring exceedance, the time the exceedance occurred, the time corrective action was initiated and completed, and the corrective action taken. [40 C.F.R. §§ 63.866(b) and (c)(3)]
2. Records of any violation under 40 C.F.R. § 63.864(k)(2); [40 C.F.R. § 63.866(b)]
3. Daily Lime Kiln production (ton/day); [40 C.F.R. § 63.866(c)(2)]
4. Daily RBC black liquor solids firing rates (ton/day); [40 C.F.R. § 63.866(c)(1)]
5. Records and documentation of supporting calculations for performance tests; [40 C.F.R. § 63.866(c)(4)]
6. Records documenting the establishment of operating limits; [40 C.F.R. § 63.866(c)(5)]
7. In the event of a failure to meet the applicable emission limit or CPMS operating limit, records of the number of failures and the date, start time, and duration of each failure. [40 C.F.R. § 63.866(d)]
8. For any failure to meet an emission limit, an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions; [40 C.F.R. § 63.866(d)(2)(i)]
9. For each failure to meet an operating limit, sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit; [40 C.F.R. § 63.866(d)(2)(ii)] and
10. For any failure, actions taken to minimize emissions in accordance with § 63.860(d) and any corrective action taken to return the Lime Kiln to normal operation. [40 C.F.R. § 63.866(d)(3)]

C. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart MM including, but not limited to, the following:

1. NDP shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
[40 C.F.R. §§ 63.867(a)(1) and 63.7(b)(1)]

2. NDP shall submit the results of each performance test to EPA and the Department within 30 days after the date of completing each performance test.
[06-096 C.M.R. ch. 140, § 3(E)(7)(b)(viii)(d)]

3. NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions report every six months which contains the information contained in §§ 63.867(c)(1) - (5) as applicable. NDP may elect to combine excess emissions reports with those for 40 C.F.R. Part 63, Subpart S. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period.
[40 C.F.R. § 63.867(c)]

4. Semi-annual compliance reports and results of compliance tests shall be submitted electronically to the EPA via their electronic reporting tool (ERT) CEDRI. For any data collected that is not supported by EPA's ERT as listed on the EPA's website at the time of the test/evaluation, NDP shall submit the results via mail.
[40 C.F.R. § 63.867(d)]

(21) **Lime Slaker**

A. Control Equipment

Emissions of particulate matter from the Lime Slaker shall be controlled by the operation and maintenance of a static scrubber during all operating times.
[06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

B. Visible Emissions

Visible emissions from the Lime Slaker shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4) and 06-096 C.M.R. ch. 115, BACT (A-214-77-15-A, 9/14/2018)]

C. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Lime Slaker and its associated air pollution control equipment.

1. Hours the Lime Slaker was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Records of any maintenance activities performed (planned or unplanned) on the Lime Slaker scrubber. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

D. Parameter Monitors

During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Lime Slaker and its associated air pollution control equipment:
[06-096 C.M.R. ch. 115, BACT (A-214-71-E-A/R, 7/18/1989)]

Parameter	Units of Measure	Monitoring Tool/Method	Frequency	
			Monitor	Record
Scrubber media flow rate	gpm	Flow meter	Continuously	once every 15-minutes

(22) **Kraft Pulping Equipment**

A. Control Standards

1. Pulping System equipment (including the Digester System, Brownstock Washer System, Multiple Effect Evaporator System, and Condensate Steam Stripper) shall be enclosed and vented to a closed-vent system and routed to Cogen Boiler #6 or #7, Power Boiler #3, or the Lime Kiln (as applicable) for destruction.
[40 C.F.R. § 60.283(a)(1) and 40 C.F.R. §§ 63.443(c) and (d)(1)]

2. NDP shall not vent emissions of TRS from the LVHC system or its associated equipment which:

   a. Exceeds 40 minutes in duration; or
   b. Contributes to an aggregate TRS venting of more than 1.0% of quarterly operating time.

   [06-096 C.M.R. ch. 124, § 3(C)]

3. The HVLC system shall maintain a 96% collection and control uptime based on quarterly brownstock washer system operating time on a total mass weighted basis.
[06-096 C.M.R. ch. 124, § 3(E)]

4. The Pulping System enclosures and closed-vent system shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.443(c)]

5. NDP shall collect pulping process condensates that contain a total HAP mass of 11.1 lb/ton ODP or more for bleached pulp and 7.2 lb/ton ODP or more for unbleached pulp, calculated as a prorated standard based on the ratio of annual tons of bleached and unbleached ODP. Compliance shall be demonstrated by a rolling average of the last 30 operating days. [40 C.F.R. §§ 63.445(c)(3) and (i)]

6. The pulping condensates shall be conveyed in a closed collection system that is designed and operated to meet the requirements of 40 C.F.R. §§ 63.446(d)(1) and (2). [40 C.F.R. § 63.446(d)]

7. The pulping condensates shall either be recycled back into the Pulping System or treated by the Condensate Steam Stripper. [40 C.F.R. §§ 63.446(e)(1) and (5)]

8. The Condensate Steam Stripper shall remove 10.2 lb of total HAP per ton ODP for mills that perform bleaching (6.6 lb of total HAP per ton ODP for mills that do not perform bleaching) or achieve a total HAP concentration of 330 ppm for mills that perform bleaching (210 ppm for mills that do not perform bleaching) or less by weight at the outlet of the device. Pursuant to § 63.446(i), mills that produce both bleached and unbleached pulp products may meet a prorated mass standard. [40 C.F.R. § 63.446(e)(5)]

9. SOGs shall be vented to a closed-vent system and routed to Cogen Boiler #6 or #7 or Power Boiler #3 for destruction. [40 C.F.R. § 63.446(g)]

10. The enclosures and closed-vent system conveying SOGs for destruction shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.446(g)]

B. Continuous Compliance

1. NDP shall operate the Condensate Steam Stripper in a manner consistent with the minimum or maximum (as appropriate) operating parameter. [40 C.F.R. § 63.453(o)]

2. Inspections of Enclosures, Closed-Vent Systems, and Condensate Closed Collection System

   a. Except as provided for in (c), each enclosure and closed-vent system used by the Pulping System and to convey SOG shall meet the inspection and operating requirements of § 63.453(k).
   b. Except as provided for in (c), the condensate closed collection system shall meet the inspection and operating requirements of § 63.453(l).

c. NDP has demonstrated that unsafe conditions may be created in the inspection and monitoring of some enclosures and closed collection and vent system components as required by 40 C.F.R. § 63.453(k) and (l). Therefore, for equipment required to be inspected pursuant to 40 C.F.R. § 63.453(k) and (l), NDP shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an imminent or potential danger, or if the equipment could not be inspected without elevating the inspecting personnel more than six feet above a supported surface. [40 C.F.R. § 63.453(q)]

C. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Pulping System and its associated air pollution control equipment.

1. Records necessary to calculate annual emissions in accordance with 06-096 C.M.R. ch. 137;
2. Recordkeeping in accordance with the requirements of 06-096 C.M.R. ch. 124 (described earlier);
3. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 60, Subpart BB (described later in this Order); and
4. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart S (described later in this Order).

D. Parameter Monitoring

1. During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Condensate Steam Stripper:

Parameter	Frequency	
	Monitor	Record
Process wastewater feed rate	Monitor continuously, Record every 15 minutes	
Steam feed rate		
Process wastewater column feed temperature		

[40 C.F.R. §§ 63.453(a) and (g)]

2. NDP shall establish operating limits for the Condensate Steam Stripper CMS in accordance with 40 C.F.R. § 63.453(n).

(23) **Bleach Plant**

A. Control Standards

1. The R-8 ClO_2 Generation Plant shall be vented to the ClO_2 Scrubber System. [06-096 C.M.R. ch. 115, BACT (A-214-71-H-A, 8/31/1990)]

2. Bleaching System equipment shall be enclosed and vented to a closed-vent system and routed to the A-Line or B-Line Wet Scrubber Systems. [40 C.F.R. §§ 63.445(b)]

3. The Bleaching System enclosures and closed-vent system shall meet the requirements of 40 C.F.R. § 63.450. [40 C.F.R. § 63.445(b)]

4. The A-Line and B-Line Wet Scrubber Systems shall:

   a. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99% or more; or
   b. Achieve an outlet concentration of 10 ppmv or less of total chlorinated HAP; or
   c. Achieve a treatment device outlet mass emission rate of 0.002 lb/ton ODP.

   [40 C.F.R. § 63.445(c)]

5. NDP shall use no hypochlorite or chlorine for bleaching. [40 C.F.R. § 63.445(d)(2) and 06-096 C.M.R. ch. 134, VOC RACT (A-214-71-X-A, 12/20/1995)]

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

Emissions from the Bleach Plant shall not exceed the following limits:

Pollutant	Limit	Origin and Authority
VOC	0.103 lb/ADT	06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)
Cl_2 See Note 1	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-H-A, 8/31/1990)
ClO_2 See Note 1	3.0 lb/hr	06-096 C.M.R. ch. 115, BACT (A-214-71-H-A, 8/31/1990)

Note 1: Emission limit applies to the combined emissions from A-Line, B-Line, Bleach Plant Scrubber System, R-8 ClO2 Generation Plant, and R-8 ClO2 Scrubber System.

C. Compliance Methods

Compliance with the emission limits associated with the Bleach Plant shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limits	Compliance Method	Frequency
VOC	lb/ADT	Performance testing in accordance with 40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Cl_2 and ClO_2	Control requirements of 40 C.F.R. Part 63, Subpart S	Performance testing in accordance with NCASI TB #520	Once every 5 years in accordance with 40 C.F.R. Part 63, Subpart S
	lb/hr		

D. Performance Tests

1. NDP shall conduct a performance stack test for the A-Line and B-Line Wet Scrubber Systems within 60 months from the date of the previous test (next test due 9/18/2025). [40 C.F.R. § 63.457(a)]

2. Performance tests shall be conducted in accordance with 40 C.F.R. § 63.457.

E. Continuous Compliance

1. NDP shall operate the A-Line and B-Line Wet Scrubber Systems in a manner consistent with the minimum or maximum (as appropriate) operating parameter. [40 C.F.R. § 63.453(o)]

2. Inspections of Enclosures and Closed-Vent Systems

   a. Except as provided for in (b), each enclosure and closed-vent system used by the Bleaching System shall meet the inspection and operating requirements of § 63.453(k).
   b. NDP has demonstrated that unsafe conditions may be created in the inspection and monitoring of some enclosures and closed collection and vent system components as required by 40 C.F.R. § 63.453(k). Therefore, for equipment required to be inspected pursuant to 40 C.F.R. § 63.453(k), NDP shall exempt any closed vent system, fixed roof cover, or enclosure from 30-day and annual inspection, monitoring, and repair requirements if it is determined that personnel performing the inspection or repair would be exposed to an imminent

or potential danger, or if the equipment could not be inspected without elevating the inspecting personnel more than six feet above a supported surface. [40 C.F.R. § 63.453(q)]

F. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the Bleach Plant and its associated air pollution control equipment.

1. Hours the Bleach Plant was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Recordkeeping in accordance with the requirements of 40 C.F.R. Part 63, Subpart S (described later in this Order);
3. Records of any maintenance activities performed (planned or unplanned) on the A-Line, B-Line Wet Scrubber System, or ClO_2 Scrubber System; and [40 C.F.R. § 63.453(q)]
4. Records of the following monitoring for the Bleach Plant and R-8 ClO_2 Plant Scrubber System:

Parameter	Frequency	Origin and Authority
A-Line and B-Line Wet Scrubber Systems Pressure Drop	Monitor continuously, Record once per shift	06-096 C.M.R. ch. 140, BPT (A-214-70-F-A, 12/26/2007)
R-8 ClO2 Plant Scrubber System Recycle Flow ORP		
R-8 ClO_2 Plant Scrubber System fan "on/off"		
R-8 ClO_2 Plant Scrubber System Liquid Influent Flow Rate		
R-8 ClO_2 Plant Scrubber System Pressure Drop		

G. Parameter Monitoring

1. During all operating times, NDP shall continuously operate, record data, and maintain records from the following parameter monitors for the Bleach Plant and its associated control equipment:

Parameter	Frequency	Origin and Authority
A-Line and B-Line Wet Scrubber Systems Recycle Flow ORP	Monitor continuously, Record continuously	40 C.F.R. §§ 63.453(a), (c) and (m)
A-Line and B-Line Wet Scrubber Systems Vent Gas Fan On/Off		
A-Line and B-Line Wet Scrubber Systems Liquid Influent Flow Rate		

2. NDP shall establish operating limits for the A-Line and B-Line Wet Scrubber Systems CMS during performance tests in accordance with 40 C.F.R. § 63.453(n).

(24) **06-096 C.M.R. ch. 124**

Following are applicable requirements of 06-096 C.M.R. ch. 124 for the Lime Kiln, RBC, Smelt Tank C, and Pulping Equipment not addressed elsewhere in this Order:

A. NDP shall maintain a written preventative maintenance program for the LVHC and HVLC systems. [06-096 C.M.R. ch. 124, § 3(G)]

B. NDP must report verbally or in writing (e.g., email) to the Department on the next State working day:

1. Any venting of TRS to the atmosphere from the LVHC system or Steam Stripper of longer than 15 minutes; and
2. Any venting of TRS to the atmosphere from the HVLC collection system of longer than four hours.

[06-096 C.M.R. ch. 124, § 5(B)]

C. NDP shall submit quarterly reports to the Department in accordance with 06-096 C.M.R. ch. 124, § 5(C).

(25) **40 C.F.R. Part 60, Subpart BB**

Following are applicable requirements of 40 C.F.R. Part 60, Subpart BB for the Lime Kiln, RBC, Smelt Tank C, and Pulping Equipment not addressed elsewhere in this Order:

A. NDP shall submit semiannual excess emission reports in accordance with 40 C.F.R. § 60.7(c). All reports shall be delivered or postmarked by the 30th day following the end of the reporting period.

For the Lime Kiln, periods of excess emissions are all 12-hour average TRS concentrations above 8 ppmv. [40 C.F.R. § 60.284(d)(2)]

For RBC, periods of excess emissions are all 12-hour average TRS concentrations above 5 ppmv and all six-minute average opacities that exceed 35%. [40 C.F.R. § 60.284(d)(1)]

For the Digester System, Brownstock Washer System, Multiple Effect Evaporator System, and Condensate Steam Stripper, periods of excess emissions are:

1. All 12-hour average TRS concentrations above 5 ppmv unless the gasses are combusted in the Lime Kiln; or
2. For units required to monitor combustion temperature, all periods in excess of 5 minutes and their duration during which the combustion temperature at the point of incineration is less than 1,200 °F.

[40 C.F.R. § 60.284(d)(3)]

B. Periods of excess emissions will not be considered indicative of a violation of § 60.11(d) provided that:

1. The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed:

   a. One percent for TRS emissions from RBC; and
   b. Six percent for average opacities from RBC.

2. The Department determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

[40 C.F.R. § 60.284(e)]

(26) **40 C.F.R. Part 63, Subpart S**

Following are applicable requirements of 40 C.F.R. Part 63, Subpart S for the Pulping Equipment and Bleaching System not addressed elsewhere in this Order:

A. Continuous Compliance and Monitoring Requirements

At all times, NDP must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.453(q)]

B. Recordkeeping

NDP shall maintain records in accordance with 40 C.F.R. Part 63, Subpart S including, but not limited to, the following:

1. A site-specific inspection plan for each enclosure opening, closed-vent system, and closed collection system; [40 C.F.R. § 63.454(b)]
2. For each inspection of an enclosure opening, closed-vent system, and closed collection system, the information in 40 C.F.R. § 63.454(b);
3. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or air pollution control and monitoring equipment; [40 C.F.R. § 63.454(g)(1)]
4. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 C.F.R. § 63.454(g)(2)]

C. Notifications and Reports

NDP shall submit to the Department and EPA all notifications and reports required by 40 C.F.R. Part 63, Subpart S including, but not limited to, the following:

NDP shall prepare and submit to EPA and the Department a semi-annual excess emissions and monitoring system performance report and summary report every six months which contains the information contained in §§ 63.10(e)(3) and 63.454(g) as applicable. All reports shall be delivered or postmarked by the 30th day following the end of the reporting period. [40 C.F.R. § 63.455(a)]

Periods of excess emissions for the Pulping System shall not be considered a violation provided the time of excess emissions divided by the total process operating time in the semi-annual reporting period does not exceed the levels in 40 C.F.R. § 63.443(e).

Periods of excess emissions for the Condensate Steam Stripper shall not be considered a violation provided the time of excess emissions divided by the total process operating time in the semi-annual reporting period does not exceed 10%. [40 C.F.R. § 63.446(g)]

(27) **Paper Machines and Pulp Dryer**

A. Allowable Fuels

R-10 Dryers #1 - #4 are licensed to fire propane and natural gas.
[06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)]

B. Emission Limits

Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from the paper machines and pulp dryer shall each not exceed the following limits [06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)]

Emissions Unit	Pollutant	Emission Limit
R-10 Paper Machine	PM	0.04 lb/ADT
	PM_{10}	0.09 lb/ADT
	$PM_{2.5}$	0.09 lb/ADT
R-12 Paper Machine	PM	0.04 lb/ADT
	PM_{10}	0.09 lb/ADT
	$PM_{2.5}$	0.09 lb/ADT
R-15 Paper Machine	PM	0.04 lb/ADT
	PM_{10}	0.09 lb/ADT
	$PM_{2.5}$	0.09 lb/ADT

2. Emissions from the R-10 Dryers #1 - #4 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)

3. Emissions from the R-10 Dryers #1 - #4 (all dryers combined) shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	3.47	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)
PM_{10}	3.47	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)
SO_2	0.016	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)
NO_x	4.47	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)
CO	0.61	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)
VOC	0.16	06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)

4. Emissions of VOC from Paper Machines R-10, R-12, and R-15 and from R-9 Pulp Dryer (all equipment combined) shall not exceed 197.0 tpy (12-month rolling total basis). [06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)]

C. Visible Emissions

1. Visible emissions from the paper machine building vents shall not exceed 10% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 115, BACT (A-214-77-20-A, 5/9/2024)]

2. Visible emissions from each of the R-10 Dryers #1, #2, #3, and #4 shall not exceed 10% opacity on a six-minute block average basis.
[06-096 C.M.R. ch. 115, BACT (A-214-71-AB-A, 3/2/1998)]

D. Compliance Methods

1. Compliance with the particulate matter emission limits shall be demonstrated by combusting only natural gas or propane in the R-10 Dryers and compliance with the visible emissions limit. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

2. Compliance with the visible emission limit shall be demonstrated through performance testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 upon request by the Department. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

3. Compliance with the annual VOC emission limit shall be demonstrated by calculations of emissions performed monthly. For machines running bleached fiber,

emissions shall be calculated based on actual chemical use assuming that 100% of the VOC is volatilized and emitted. When only recycle fiber is used, NDP shall calculate emissions from the machine based on an emission factor of 0.295 lb/ADT. When unbleached kraft pulp is used, NDP shall calculate emissions from the machine based on an emission factor of 0.51 lb/ADT. [06-096 C.M.R. ch. 115, BPT (A-214-77-20-A, 5/9/2024)]

4. Compliance with all other emission limits associated with the R-10 Dryers #1 - #4 shall be demonstrated in accordance with the appropriate test methods upon request of the Department. [06-096 C.M.R. ch. 140]

E. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the paper machines and pulp dryer.

1. Hours each paper machine or pulp dryer was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); [06-096 C.M.R ch. 137]
2. Records necessary to calculate annual emissions in accordance with 06-096 C.M.R. ch. 137; and
3. Types and amounts of each fuel fired in R-10 Dryers #1 - #4 on a monthly basis. [06-096 C.M.R. ch. 137]

(28) **Future Project Emissions Reporting**

A. NDP shall monitor, calculate, and maintain a record of the annual emissions, in tons per year on a calendar year basis, of $PM_{2.5}$ and VOC for all emission units that are part of the Unbleached Kraft Project (modified or affected). NDP must monitor, calculate, and maintain a record of the annual emissions for a period of 10 years following the resumption of regular operations after the change. [40 C.F.R. § 52.21(r)(6) and (A-214-77-20-A, 5/9/2024)]

B. If the annual emissions, in tons per year, from the project exceed the baseline actual emissions, excluding any emission increase unrelated to the project and due to demand growth, for any of these pollutants by an amount equal to or greater than the significant emissions increase level for that pollutant, NDP shall submit a report to the Department and EPA within 60 days after the end of the calendar year which contains the following:

1. The facility name, address, and phone number;
2. The annual emissions for the project; and
3. Any other information that the facility wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection.)

[40 C.F.R. § 52.21(r)(6)(v) and (A-214-77-20-A, 5/9/2024)]

(29) **Bulk Handling**

In order to minimize fugitive emissions, NDP shall develop and follow an established Best Management Practice (BMP) Plan for all mill bulk handling and unloading systems. The BMP shall be available to the Department upon request. For the bulk handling systems, NDP shall comply with the following [06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)] **Enforceable by State-only**:

1. Maintain the alarm systems in proper operating condition;
2. Maintain all baghouses to achieve visible emissions no greater than 10% opacity on a six-minute block average basis;
3. Clean-up all spills within 24 hours of the occurrence of each spill;
4. Inspect all unloading systems for leaks and malfunctions as described by the BMP Plan; and
5. Discontinue unloading until leaks and/or malfunctions are eliminated.

(30) **Building Heaters**

A. Allowable Fuels

1. The building heaters (Units 1-4, A-L, and RB) are licensed to fire natural gas. [06-096 C.M.R. ch. 115, BACT (A-214-70-B-A, 8/27/2003), (A-214-70-D-A, 4/12/2004), and (A-214-77-3-A, 11/7/2007)]

2. The total heat input to the building heaters (combined) shall not exceed 812,808 MMBtu per year. Compliance shall be demonstrated by records of fuel consumed on a calendar year basis.
[06-096 C.M.R. ch. 115, BACT (A-214-70-H-A, 11/12/2015)]

B. Emission Limits
Emission limits are on a 1-hour block average basis unless otherwise stated.

1. Emissions from the building heaters with heat input capacities greater than 3.0 MMBtu/hr shall each not exceed the following limits:
[06-096 C.M.R. ch. 115, BACT (A-214-70-D-A, 4/12/2004) and (A-214-77-3-A, 11/7/2007)]

Pollutant	lb/MMBtu	Origin and Authority
PM	0.005	06-096 C.M.R. ch. 103, § 2(B)(1)(a)

2. Emissions from the building heaters shall not exceed the following limits:

	Applicable Emission Standards (lb/hr)					
Equipment	**PM**	**PM_{10}**	**NO_x**	**CO**	**VOC**	**Origin and Authority**
Unit 1	0.03	0.03	0.65	0.65	0.03	06-096 C.M.R. ch. 115, BACT (A-214-70-D-A, 4/12/2004)
Unit 2	0.05	0.05	0.96	0.96	0.05	
Unit 3	0.03	0.03	0.55	0.55	0.03	
Unit 4	0.03	0.03	0.55	0.55	0.03	
Unit A	0.01	0.01	0.21	0.21	0.01	
Unit B	0.07	0.07	1.41	1.41	0.08	
Unit C	0.03	0.03	0.64	0.64	0.03	
Unit D	0.03	0.03	0.63	0.63	0.03	
Unit E	0.03	0.03	0.51	0.51	0.03	
Unit F	0.02	0.02	0.46	0.46	0.02	
Unit G	0.03	0.03	0.64	0.64	0.03	
Unit H	0.07	0.07	1.41	1.41	0.08	
Unit I	0.04	0.04	0.77	0.77	0.04	
Unit J	0.06	0.06	1.28	1.28	0.07	
Unit K	0.04	0.04	0.77	0.77	0.04	
Unit L	0.03	0.03	0.63	0.63	0.03	
Unit RB	0.05	0.05	0.99	0.99	0.05	06-096 C.M.R. ch. 115, BACT (A-214-77-3-A, 11/7/2007)

C. Visible Emissions

Visible emissions from each building heater shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

D. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the building heaters.

1. Hours each unit was active or operating on a monthly and calendar year basis (if reporting less than 8,760 hours per year); and [06-096 C.M.R ch. 137]
2. Total amount of fuel fired in the building heaters and the associated total heat input on an annual basis. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 115, BACT (A-214-70-H-A, 11/12/2015)]

(31) **Stationary Engines**

A. Allowable Operation and Fuels

1. The Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and Diesel Fire Water Pump are licensed to fire distillate fuel. [06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)] **Enforceable by State-only**
2. The ClO_2 Plant Emergency Generator shall fire only distillate fuel. [06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)]
3. The Lift Pump Emergency Generator is licensed to fire distillate fuel. [06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)]
4. The Lime Kiln Auxiliary Drive is licensed to fire natural gas or propane. [06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)] **Enforceable by State-only**

B. Emissions shall not exceed the following limits:
Emission limits are on a 1-hour block average basis unless otherwise stated.

Cogen Emergency Generator			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.47	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
PM_{10}	0.47	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
NO_x	6.62	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
CO	1.43	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
VOC	0.53	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**

R15 Emergency Generator			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.37	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
PM_{10}	0.37	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
NO_x	5.29	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
CO	1.14	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
VOC	0.42	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**

Mill Emergency Generator			
Pollutant	**lb/MMBtu**	**Origin and Authority**	**Enforceability**
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	Federally Enforceable

Mill Emergency Generator			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.65	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
PM_{10}	0.65	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
NO_x	17.28	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
CO	4.59	06-096 C.M.R. ch. 140, BPT	**Enforceable by State-only**
VOC	0.49	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**

Diesel Fire Water Pump			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.50	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
PM_{10}	0.50	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
NO_x	7.06	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
CO	1.52	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
VOC	0.56	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**

Lift Pump Emergency Generator			
Pollutant	**lb/MMBtu**	**Origin and Authority**	**Enforceability**
PM	0.12	06-096 C.M.R. ch. 103, § 2(B)(1)(a)	Federally Enforceable

Lift Pump Emergency Generator			
Pollutant	**g/kW-hr**	**Origin and Authority**	**Enforceability**
PM	0.20	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	Federally Enforceable
NO_x + VOC	6.4	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	Federally Enforceable
CO	3.5	40 C.F.R. Part 60, Subpart IIII, § 60.4205(b)	Federally Enforceable

Lift Pump Emergency Generator			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.26	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	Federally Enforceable
PM_{10}	0.26	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	Federally Enforceable
NO_x + VOC	8.20	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	Federally Enforceable
CO	4.48	06-096 C.M.R. ch. 115, BACT (A-214-77-5-A, 2/29/2008)	Federally Enforceable

ClO_2 Plant Emergency Generator			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.43	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable
PM_{10}	0.43	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable
$PM_{2.5}$	0.43	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable
NO_x	6.17	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable
CO	1.33	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable
VOC	0.50	06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)	Federally Enforceable

Lime Kiln Auxiliary Drive			
Pollutant	**lb/hr**	**Origin and Authority**	**Enforceability**
PM	0.02	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
PM_{10}	0.02	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
NO_x	1.16	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
CO	0.21	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**
VOC	0.07	06-096 C.M.R. ch. 140, BPT (A-214-70-G-R/A, 2/13/2014)	**Enforceable by State-only**

C. Visible Emissions

Visible emissions from each engine shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024) and 06-096 C.M.R. ch. 140, BPT]

D. Compliance Methods

Compliance with the emission limits associated with each engine shall be demonstrated in accordance with the appropriate test methods upon request of the Department.
[40 C.F.R. § 70.6(c)(1)]

E. The Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, Diesel Fire Water Pump, and Lime Kiln Auxiliary Drive shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. NDP shall meet the following operational limitations for the Cogen Emergency Generator, R15 Emergency Generator, Mill Emergency Generator, and Diesel Fire Water Pump:

   a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
   b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
   c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.
   [40 C.F.R. § 63.6602 and Table 2(c); and 06-096 C.M.R. ch. 140, BPT]

2. NDP shall meet the following operational limitations for the Lime Kiln Auxiliary Drive:

   a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
   b. Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
   c. Inspect the hoses and belts every 500 hours or operation or annually, whichever comes first, and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.
   [40 C.F.R. § 63.6602 and Table 2(c); and 06-096 C.M.R. ch. 140, BPT]

3. Oil Analysis Program Option
   NDP has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, NDP must keep records of the parameters that

are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 C.F.R.§ 63.6625(i)]

4. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

5. Maintenance, Testing, and Non-Emergency Operating Situations

   a. The engines shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 140, BPT]

   b. NDP shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

6. Operation and Maintenance
   The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or NDP shall 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. [40 C.F.R. § 63.6625(e)]

7. Startup Idle and Startup Time Minimization
   During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
   [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2c]

F. The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

1. Manufacturer Certification
   The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Distillate Fuel
   The distillate fuel fired in the Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall not exceed 15 ppm sulfur (0.0015% sulfur by weight). Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. § 60.4207(b), 06-096 C.M.R. ch. 140, BPT, and 06-096 C.M.R. ch. 115, BACT (A-214-77-19-A, 3/29/2024)]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on the Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator.
   [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours.
      [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 140, BPT]

   b. NDP shall keep records that include maintenance conducted on each engine and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
   The Lift Pump Emergency Generator and ClO_2 Plant Emergency Generator shall be operated and maintained according to the manufacturer's emission-related written instructions. NDP may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

G. The Upper Gate Emergency Generator shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart JJJJ, including the following:

1. Manufacturer Certification
   The Upper Gate Emergency Generator shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1.

2. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on the Upper Gate Emergency Generator. [40 C.F.R. § 60.4237]

3. Annual Time Limit for Maintenance and Testing
   a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). The limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4243(d)]

   b. NDP shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time.
   [40 C.F.R. § 60.4245(b)]

4. Operation and Maintenance
   The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by NDP that are approved by the engine manufacturer. NDP may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]

H. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the stationary engines.

1. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
2. Log of the duration and reasons for all operating times as they occur.
   [40 C.F.R. § 63.6655(f)]

3. Records of all maintenance conducted. [40 C.F.R. § 63.6655(e)]
4. Sulfur content of the fuel fired for those engines which fire distillate fuel. [06-096 C.M.R. ch. 140, BPT]

(32) **Methanol and Oil Storage Tanks**

A. Emissions from the Methanol Storage Tank, Steam Plant Day Tanks #1 and #2, and the Oil Bulk Storage Tank shall be included in the facility's annual emissions inventory report filed in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Emissions from each storage tank shall be calculated in accordance with the most current version of EPA's Compilation of Air Emissions Factors (AP-42) or other method as approved by the Department. [06-096 C.M.R. ch. 137 and 06-096 C.M.R. ch. 140, BPT]

B. Periodic Monitoring

NDP shall record data and maintain records for the following periodic monitoring values for the storage tanks:

1. Records necessary to calculate annual emissions of VOC and HAP from the storage tanks; and [06-096 C.M.R. ch. 137]
2. Calculations of the VOC/HAP emitted from the storage tanks on a calendar year total basis. [06-096 C.M.R. ch. 137]

(33) **Wastewater Treatment Plant**

NDP shall maintain a NPDES or MEPDES permit. [06-096 C.M.R. ch. 134, VOC RACT]

(34) **Parts Washers**

NDP may operate parts washers subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. NDP shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 140, BPT]

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
2. Wipe cleaning; and,
3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are subject to 06-096 C.M.R. ch. 130.
   1. NDP shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
      a. Waste solvent shall be collected and stored in closed containers.
      b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
      c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
      d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
      e. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the parts washer.
      f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
      g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
      h. Work area fans shall not blow across the opening of the washer unit.
      i. The solvent level shall not exceed the fill line.
   2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
   3. Each parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.
      [06-096 C.M.R. ch. 130]

(35) **Fugitive Emissions**

A. NDP shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. NDP shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(36) **General Process Sources**

A. Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

B. Visible emissions from any baghouse shall not exceed 10% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(3)]

(37) **Performance Test Protocol**

For any performance testing required by this license, NDP shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**

(38) **Parameter Monitor General Requirements**
[06-096 C.M.R. ch. 140 and 117] **Enforceable by State-only**

A. Parameter monitors required by this license shall be installed, operated, maintained, and calibrated in accordance with manufacturer recommendations or as otherwise required by the Department.

B. Parameter monitors required by this license shall continuously monitor data at all times the associated emissions unit is in operation. "Continuously" with respect to the operation of parameter monitors required by this license means providing equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitutes a valid hour.

C. Each parameter monitor must record accurate and reliable data. If any parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action. The Department may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the Department's satisfaction that the failure of the system to record such data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

(39) **CEMS Recordkeeping**

A. The licensee shall maintain records documenting that all CEMS and COMS are continuously accurate, reliable, and operated in accordance with 06-096 C.M.R. ch. 117, 40 C.F.R. Part 51, Appendix P, and 40 C.F.R. Part 60, Appendices B and F.

B. The licensee shall maintain records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 C.F.R. Part 51, Appendix P.

C. The licensee shall maintain records of other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard. [06-096 C.M.R. ch. 140] **Enforceable by State-only**

D. Relative Accuracy Test Audits (RATAs) shall be performed on all required CEMS in accordance with 06-096 C.M.R. ch. 117 at least every fourth successive calendar quarter. If the emission unit has not had 168 unit operating hours in a quarter, then that quarter shall be excluded in determining the deadline for the next RATA.

If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, a RATA must be completed within 720 operating hours after the end of the eighth successive elapsed calendar quarter.

If an emission unit is shutdown during a quarter in which a RATA is due, before the RATA can be completed, then there is a grace period of 30 operating days before the data from the CEMS will be considered invalid. [06-096 C.M.R. ch. 117 §4(B)(5)(d) and 06-096 C.M.R. ch. 115, BACT (A-214-77-8-M, 8/24/2009)]

(40) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS), and Continuous Opacity Monitoring Systems (COMS) required by this license. [06-096 C.M.R. ch. 117]

A. All control equipment downtimes and malfunctions;
B. All CEMS or COMS downtimes and malfunctions;
C. All parameter monitor downtimes and malfunctions;
D. All excess events of emission and operational limitations set by this Order, Statute, state regulations, or federal regulations, as appropriate. The following information shall be reported for each excess event;
   1. Standard exceeded;
   2. Date, time, and duration of excess event;
   3. Amount of air contaminant emitted in excess of the applicable emission standard, expressed in the units of the standard;
   4. A description of what caused the excess event;
   5. The strategy employed to minimize the excess event; and
   6. The strategy employed to prevent reoccurrence.

E. A report certifying there were no excess emissions, if that is the case.

(41) **Semiannual Reporting [06-096 C.M.R. ch. 140]**

Note: This semiannual report is separate from, and in addition to, any semiannual report required by specific NSPS or NESHAP regulations.

A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
B. The semiannual report shall be considered on-time if the postmark of the submittal is on or before the due date or if the report is received by the Department within seven calendar days of the due date.
C. Each semiannual report shall include a summary of the periodic monitoring required by this license.
D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(42) **Annual Emission Statements**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, NDP shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. NDP shall maintain sufficient records to complete and submit the annual emissions statement as required by this rule.

C. Every third year, or as requested by the Department, NDP shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. NDP shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

(43) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	-
06-096 C.M.R. ch. 109	Emergency Episode Regulations	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(44) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(45) **Asbestos Abatement**

When undertaking Asbestos abatement activities, NDP shall comply with the *Standard for Asbestos Demolition and Renovation,* 40 C.F.R. Part 61, Subpart M.

(46) **Expiration of a Part 70 license**

A. NDP shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.

B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire, and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(47) **New Source Review**

NDP is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emission License, A-214-70-K-R/A, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 3rd DAY OF JULY, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for ____
MELANIE LOYZIM, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/27/2018
Date of application acceptance: 7/27/2018

This Order prepared by Lynn Muzzey, Bureau of Air Quality.