



**STATEMENT OF BASIS FOR INLAND EMPIRE PAPER COMPANY'S
CHAPTER 401 AIR OPERATING PERMIT
AOP-1 (Renewal #4)**

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LIST OF ABBREVIATIONS

BACT	Best available control technology
CFR	Code of Federal Regulations
CO	Carbon monoxide
dba	Doing business as
dscf	Dry standard cubic foot
ECOLOGY	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
FCAA	Federal Clean Air Act
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous air pollutant as designated under Title III of FCAA
ISO	International Organization for Standardization (for gas turbines, ISO conditions are 59 degrees Fahrenheit, 60% relative humidity, and an atmospheric pressure of 29.92 inches of mercury absolute)
MMBTU	Millions of British thermal units
MRRR	Monitoring, recordkeeping, & reporting requirements
NAA	Nonattainment area
NOC	Notice of Construction
NOx	Oxides of nitrogen
O2	Oxygen
O&M	Operation & maintenance
Pb	Lead
PM	Particulate matter
PM-10	Particulate matter, 10 microns or less in size
PSD	Prevention of Significant Deterioration
RACT	Reasonably available control technology
RCW	Revised Code of Washington
RM	EPA reference method from 40 CFR Part 60, Appendix A
SCAPCA	Spokane County Air Pollution Control Authority (on June 3, 2007, SCAPCA was renamed to SRCAA)
SRCAA	Spokane Regional Clean Air Agency (prior to June 3, 2007, agency was called SCAPCA)
scf	Standard cubic foot
SO2	Sulfur dioxide
SOx	Oxides of sulfur
VOC	Volatile organic compounds
WAC	Washington Administrative Code

DEFINITIONS OF WORDS AND PHRASES

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations.

Administrator	The administrator of the United States Environmental Protection Agency or her/his designee [WAC 173-401-200(12), 2/3/16]
Chapter 401 Permit	Any permit or group of permits covering a source, subject to the permitting requirements of Chapter 173-401 WAC, that is issued, renewed, amended, or revised pursuant to Chapter 173-401 WAC [WAC 173-401-200(5), 2/3/16]
Emission Limitation	A requirement established under the FCAA or Chapter 70A.15 (formerly 70.94) RCW which limits the quantity, rate or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment work practice, or operational standard promulgated under the FCAA or Chapter 70A.15 RCW [(SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-030(29) (8/25/18))]
Emissions Unit	Any part of a stationary source or source which emits or would have the potential to emit any pollutant subject to regulation under the Federal Clean Air Act, Chapter 70A.15 RCW, or 70.98 RCW [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-030(31) (8/25/18)]
Federal Clean Air Act	Federal Clean Air Act, also known as Public Law 88-206, 77 Stat. 392. December 17, 1963, 42 U.S.C. 7401 et seq., as last amended by the Clean Air Act Amendments of 1990, P.L. 101-549, November 15, 1990 [WAC 173-401-200(14), 2/3/16]
Opacity	The degree to which an object seen through a plume is obscured, stated as a percentage [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-030(61) (8/25/18)]
PM Standard	An emission limitation on the amount of particulate matter an emissions unit may emit, generally expressed in terms of grains per dry standard cubic foot, pounds per hour, or some other concentration or emission rate.
Visible Emissions	An emission limitation on visible emissions expressed in Standard percent opacity.

BACKGROUND

Inland Empire Paper Company (IEPC) operates a pulp and paper mill, producing newsprint and specialty paper products at 3320 North Argonne Road in Spokane, WA. Emission sources at the mill include boilers, a fluidized bed combustor (FBC), pulp refining lines, wood chip handling processes/operations, and wastewater treatment.

The PTE emission estimates for the facility are given in the table below.

Table 1 – PTE Criteria Pollutant and Hazardous Air Pollutant emissions*

Pollutant	Emissions (tons/yr)
Particulate Matter (PM10)	68.36
Sulfur Dioxide (SO2)	0.55
Oxides of Nitrogen (NOx)	247.40
Carbon Monoxide (CO)	59.65
Volatile Organic Compounds (VOC)	42.95
Total Hazardous Air Pollutants (HAPs)	3.86

*The facility's PTE estimates are based on emission factors and capacity limits given in the 2022 emission inventory

The facility is classified as a major source, as defined in Chapter 173-401 WAC, due to the following potential emissions given off by the mill:

- oxides of nitrogen > 100 tpy;

As a major source, IEPC is required to apply for an operating permit under SRCAA's Title V air operating permit program as established in Chapter 173-401 WAC. WAC 173-401-700(8) requires that a statement be provided at the time a draft permit is issued under the Title V program, setting forth the legal and factual basis for permit conditions including reference to the applicable statutory or regulatory provisions for the conditions. This document provides the basis for the draft renewal permit for IEPC.

FACILITY SUMMARY

IEP produces 450 to 600 tons per day of newsprint and specialty paper products, containing up to 100% recycled fibers. Finished paper products are produced from pulp manufactured by mechanical refining of waste wood chips received from local sawmills and recycling of old newspapers, magazines and office waste. The mill typically operates 24 hours per day, 365 days per year and has been in operation since 1911.

Emissions addressed by the operating permit arise primarily from the natural gas-fired steam

plant (boilers), the fluidized bed combustor (FBC), and the pulp refining lines. There are various other emitting processes at the facility including wood chip handling and wastewater treatment. Generally, the papermaking process is as follows:

Wood chips for the refining process are received by truck or rail cars. The wood chip storage and handling system consists of a truck/rail car unloading station, belt conveyors for chip storage and outlet conveyance to the refiner systems, and a truck weigh scale. Chips are brought on-site and discharged into an unload station. The unload station has a live bottom to convey chips to an inclined belt conveyor. The inclined belt conveyor delivers the chips to a horizontal conveyor that distributes the chips to the chip storage area. Front end loaders are used to deliver chips to a reclaim conveying system that transports chips to the process. Wood chips are refined in the pulp mill, consisting of two individual Refiner Mechanical Pulp (RMP) lines, three individual Thermo-Mechanical Pulp (TMP) refiner lines, screening and cleaning equipment, a reject refining line, storage tanks and a bleaching system.

RMP lines #1 and #2 each have a primary and a secondary atmospheric refiner. In the refiners, the wood chips are mechanically broken down into fibers; no heat or steam is used in the process. Wood chips are metered from the chip silo to the primary refiners. The primary refiners discharge into vented conveyors which feed the secondary refiners. Refined stock is diluted and conveyed to a holding tank for cleaning and screening.

TMP lines #3 and #4 each have a primary, secondary, and tertiary refiner. Chips to these lines are preheated to 190 F in a steaming bin and then conveyed to the pressurized primary refiners. The partially refined pulp is blown out of the primary refiner to a cyclone separator which feeds the secondary refiner. Both secondary and tertiary refiners are atmospheric refiners, similar to the #1 and #2 RMP lines. Pulp from the tertiary refiners is diluted and conveyed to chests for cleaning and screening. The cleaning and screening stages consist of perforated and slotted pressurized screening systems and hydrocyclone cleaners to remove unrefined fibers and contaminants such as sand and bark.

The #5 TMP system is similar to the TMP #3 and #4 lines, however the #5 refiner line includes a heat recovery system (HRS) that efficiently recovers waste heat which typically exits the stacks of the older style TMP refiners. The HRS is designed to condense the waste steam from the TMP refiner system, recovering the energy in the form of clean steam for use in IEPC's processes. All waste steam from the refiner is directed to a Venturi Scrubber. Any entrained fiber in the waste steam from the refiner system is conditioned in the Venturi Scrubber. The waste steam and saturated fiber are then directed to the Heat Recovery Unit (or Reboiler) where the fiber is removed in the sump by cyclonic action. The Reboiler is a vertical shell and tube falling film heat exchanger with the waste steam on the tube side and the boiler feed water on the shell side. The waste steam condenses during heat exchange and is collected in the sump. Approximately 7% of the waste steam exits the Reboiler into the Vent Condenser to flush out any non-condensable gases that can adversely affect the heat transfer efficiency of the Reboiler. The vent condenser is a shell-and-tube type heat exchanger that condenses the small amount of waste steam vented from the Reboiler. Of the 7% of waste steam from the vent

condenser, approximately one-half percent is non-condensable gas that is exhausted from the vent condenser to atmosphere. The recovered energy from this system reduces IEPC's dependence on natural gas by approximately 70% which results in significant mill-wide emissions reductions. The #5 TMP refiner line has sufficient capacity to effectively replace the #1 - #4 refiner lines, however IEPC maintains the #1 through #4 refiner lines for back-up purposes.

Unrefined fibers are reprocessed through the reject refining line, which consists of a primary and secondary atmospheric refiner, similar to the #1 and #2 RMP lines. The screened rejects are sent to an unrefined stock chest for storage. The contents of this chest are pumped to the rejects stock press. The unrefined fibers are transferred via screw conveyors to the primary refiner. After passing through the primary refiner, the partially refined pulp is then transferred via screw conveyors to the secondary refiner. Plates with bars mechanically work the unrefined fibers to make them featherlike. After exiting the secondary refiner, the refined pulp is then transferred to the refined stock chest, screened, and then sent to the cleaner feed chest.

In addition to the RMP and TMP lines, additional pulp is produced in the recycling plant. The recycling plant can process up to 350 tons per day of old newspapers, magazines and office waste paper. The recycled paper is pushed onto a conveyor that feeds a pulper, which is periodically charged with recycled paper, water and de-inking chemicals. The pulper slurries the recycled paper and separates the ink from the fibers. After the pulper, the slurried pulp passes through multiple screening stages to remove contaminants and multiple washing and floatation stages to remove ink. After the pulp has been thoroughly de-inked, it is mixed with virgin pulp and bleached with hydrogen peroxide and sodium hydrosulfite to attain the desired brightness. The bleached pulp is stored in a large surge tank before it is sent to the paper machine.

In the paper machine, the pulp undergoes dilution and one final stage of hydrocyclone cleaning and screening before being jetted between two forming fabrics. From the paper machine, the fiber is lifted off the forming fabric and conveyed into a press section for further water removal and surface consolidation. The press section de-waters the sheet from a moisture content of 86% to 52%. Out of the press section, the sheet is sent into a drying section consisting of 30 steam heated dryer cans. The dryer train decreases the moisture content to approximately 8 to 9%. The sheet is wound onto a 25 ton jumbo roll which is transferred to the winder. The winder produces publisher sized rolls that are then wrapped and labeled for shipment.

The paper making process requires steam primarily to dry the sheet on the paper machine. The primary source of low pressure steam is provided by the #5 TMP refiner heat recovery system. Steam may also be produced with a 120 MMBtu/hr natural gas-fired boiler and/or a 48 MMBtu/hr natural gas-fired boiler. Both boilers may also be fired with No. 6 fuel oil in the event that natural gas supply is interrupted. The fluidized bed combustor also produces steam through the combustion of natural gas, wastewater sludge, de-inking sludge, paper sludge, and chip screen rejects. Two baghouses control particulate emissions from the fluidized bed combustor (FBC) and an aqua ammonia Selective Non-Catalytic Reduction (SNCR) system controls NOx emissions from the FBC.

Wastewater from the mill is treated in the facility's wastewater treatment plant. The wastewater treatment system consists of two primary clarifiers for solids separation, two equalization basins, three moving bed biofilm reactors (MBBRs), an activated sludge process for reduction of organics (measured as BOD), a sludge de-watering process, a secondary clarifier for secondary solids separation, and a tertiary Ultra-Filtration (UF) membrane system. A dissolved air floatation (DAF) clarifier treats the de-ink plant process water. The tertiary effluent is then discharged to the Spokane River.

Sludge from the de-ink plant, primary clarifier and waste activated sludge (WAS) is delivered to the FBC via the Andritz press and FKC press. Natural gas is added to the FBC during start-up and at times when the fluidized bed temperature is adversely affected, due to "off-normal" sludge conditions such as excess moisture content or reduced energy value.

The FBC burns sludge utilizing a heated bed of sand suspended (fluidized) within a rising column of air. Sludge from the Andritz press is pneumatically conveyed and injected into the bed of sand. Sludge from the FKC press is injected into the FBC above the fluidized bed. Combustion of the sludge occurs in two zones. Within the bed itself, evaporation of the water and pyrolysis of the organic materials occur as the temperature of the sludge is rapidly raised. In the freeboard area (area between the bed and the top of the FBC), the remaining free carbon and combustible gases are burned. The second zone functions essentially as an afterburner. Fluidization achieves nearly ideal mixing between the sludge and the combustion air, and the turbulence facilitates the transfer of heat from the hot sand to the sludge. The scrubbing action of the bed material on the fuel particle enhances the combustion process by stripping away the carbon dioxide and char layers that normally form around the fuel particle. This allows oxygen to reach the combustible material much more readily and increases the rate and efficiency of the combustion process. As the sludge burns, fine ash particles are carried out the top of the furnace. The SNCR system injects aqueous ammonia (<20%) in a fine droplet-size mist of ammonia and air into the vapor space to reduce NOx emissions from the FBC. IEPC currently generates and burns less than the permitted 50 dtpd sludge; however in the event that more than 50 dtpd sludge is generated, the excess sludge is shipped off site.

The flue gases from the FBC are routed to a 1000 hp firetube type boiler for heat recovery. Prior to entering the boiler, the flue gases pass through an ash de-entrainment section and then enter the firetube type boiler. After the flue gases leave the boiler, they are routed to two baghouses (60% flow to the original baghouse and 40% flow to the baghouse installed in 2006) which operate in parallel, exhausting through one stack, and are therefore considered one overall particulate control system.

Ash collected from the FBC system is pneumatically conveyed to an ash storage chest with 2 to 3 days storage capacity. The ash handling system is controlled by a cyclone and baghouse. The ash from the FBC system may be transferred off-site in dry, wetted, or pelletized form. IEPC's preferable way to handle/transfer the ash is in pelletized form for beneficial reuse as an agricultural supplement. Ash may also be shipped out dry and transported in enclosed trucks where it is beneficially reused as a cement admixture. The least desirable alternative ash

disposal option is transfer of wet ash for disposal at the Graham Road Landfill site.

to load the ash out dry and transport it in enclosed trucks where it is used as a cement admixture. Ash may also be transferred wet for disposal at the Graham Road Landfill site as an alternate disposal option.

Emissions from the facility include combustion emissions (primarily NO_x, CO, and SO_x) and pulping emissions (primarily VOCs). Annual actual criteria pollutant and total HAP emissions from the facility for the last completed operating year emission inventory (2021) are listed in Table 2 below.

Table 2 – 2022 Actual Criteria Pollutant and HAP emissions

Pollutant	Emissions (tons/yr)
Particulate Matter (PM10)	50.97
Sulfur Dioxide (SO ₂)	0.17
Oxides of Nitrogen (NO _x)	82.23
Carbon Monoxide (CO)	11.50
Volatile Organic Compounds (VOC)	7.08
Total Hazardous Air Pollutants (HAP)	1.93
Anthropogenic Carbon Dioxide (CO ₂ e)	17,182.6*

*reported as metric tons

PERMITTING HISTORY

SRCAA has issued the following Notice of Construction (NOC) approval orders to IEPC:

- NOC approved July 1981 for new wood chip transfer silo with a cyclone.
- NOC #238 approved 4/19/89 for two wood chip transfer silos with cyclones (cyclones used to slow down wood chip velocity and not for air pollution control purposes). No approval conditions were included with approval of NOC #238.
- NOC #317 approved 5/19/91 for the fluidized bed combustor (FBC) for the incineration of paper sludge and revised 11/93 and 3/97. This NOC was voided and replaced by NOC #1169 in 12/03.
- NOC #708 A & B approved 11/19/95 for the modification of the chemi/mechanical (cmp) refiner lines #3 & #4 to increase pulp production. This NOC was voided and replaced by NOC #1321 in 12/21/05.

- NOC #1096 approved 10/19/01 for reject refiner systems, revised 4/16/02 to increase pulp production to 58 dtpd, and revised 6/7/05 to increase pulp production limit to 100 dtpd.
- NOC #1169 approved 12/30/03 for expansion of the fluidized bed combustor (FBC) to burn 45 oven dried tons of sludge per day (dtpd) and installation of new P-84 bags in the existing 225 bag baghouse. On 6/10/05, the NOC was revised to increase sludge throughput to 50 dtpd & addition of Selective Non-Catalytic Reduction (ammonia). On 7/13/06, the NOC was revised to add a new supplemental baghouse. On 7/9/08, the NOC was revised to eliminate the requirement to use reagent to control SO₂ from the FBC. On 4/2/19, the NOC was revised to change the FBC's SO₂, CO, & NO_x testing frequency, and to change the baghouse inlet temperature range.
- NOC #1250 approved 1/13/05 for new wood chip storage and handling system. The approved equipment was never constructed; SRCAA voided NOC #1250 on 11/2/16.
- NOC #1321 A & B approved 12/21/05 for expansion of Refiner Lines #3 & #4 (100 ODTDP Per Line).
- NOC #1463 approved 8/13/09 for installation of a new thermo-mechanical pulping (#5 TMP) system with a heat recovery system (HRS). On 9/8/23 the NOC was revised to increase the #5 TMP production limit to 550 oven dried tons/day (odtpd).

SRCAA has issued the following Air Operating Permits (AOP) to IEPC:

- AOP-1 issued 6/24/97, and revised 5/7/99 to include the requirements of 40 CFR Part 60, Subpart Dc.
- AOP-1 Renewal #1 issued 9/5/02, and revised on 11/16/04 to include the requirements of NOC #1169.
- AOP-1 Renewal #2 issued 10/1/07, and revised 3/15/10 to include the requirements of NOC #1463.
- AOP-1 Renewal #3 issued 10/23/13.

CURRENT AND NEW REGULATIONS SINCE LAST PERMIT RENEWAL

CURRENT REGULATIONS AND REQUIREMENTS:

- **40 CFR PART 63 SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers at Area Sources (as amended 2/1/13)**
40 CFR 63, Subpart JJJJJJ applies to boilers operated at any industrial, commercial, or institutional facility that is an area source of hazardous air pollutants. The rule applies mostly to boilers that burn solid or liquid fuel as their primary fuel, however, boilers that burn bio-mass are also subject to the rule. Boilers burning gaseous fuels not combined with any solid fuels are not subject to the rule.

The IEPC facility is considered an area source of hazardous air pollutants. Per 63.11236, “bio-mass” means any biomass-based solid fuel that is not a solid waste, including but 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); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. Per past correspondence with Heather Valdez, EPA Region 10, the material burned in the FBC is considered biomass (not a solid waste), therefore the FBC is considered an existing unit and is subject to the applicable parts of the rule, specifically the work practice standards and the one time-energy assessment requirement. The commercial industrial solid waste incineration (CISWI) rule for existing sources (40 CFR Part 60 Subpart DDDD) does not apply to the FBC, because EPA has made a categorical determination that the material burned in the FBC is considered non-hazardous secondary materials and is not considered a waste. The sewage sludge incineration rule (40 CFR Part 60 Subpart MMMM) does not apply because the FBC is not located at a wastewater treatment facility designed to treat domestic sewage sludge.

The applicable requirements of 40 CFR 63, Subpart JJJJJJ for the FBC are:

- Provide initial notification to EPA that the FBC is subject to Subpart JJJJJJ no later than 2014. The initial notification was submitted to EPA on 1/20/14.
- Performance of an initial tune-up on the FBC by no later than 3/21/14. The initial tune-up was performed on 2/21/14.
- Performance of an energy assessment on the FBC by no later than 3/21/14. The energy assessment was performed 2/18/14 & 2/19/14.
- Perform a tune-up on the FBC biennially.
- Keep records of energy assessment and tune-ups performed.

NEW REQUIRMENTS SINCE LAST PERMIT RENEWAL

- **SRCAA NOC permit revisions**

NOC #1169 was revised 4/2/19 to change the FBC’s SO₂, CO, & NO_x testing frequency to every five calendar years, and to change the inlet temperature range for each baghouse to 250°F to 500°F. The revised requirements of NOC #1169 have been included in the air operating permit renewal.

NOC #1463 was revised 9/8/23 to increase the #5 TMP production limit to 550 oven dried tons/day (odtpd). The revised requirements of NOC #1463 have been included in the air operating permit renewal.

- **Updates to Greenhouse Gas requirements**

Chapter 173-441 WAC – State GHG reporting requirements

On December 1, 2010, Ecology promulgated a regulation, Chapter 173-441 WAC, for state reporting of greenhouse gas (GHG) emissions. Chapter 173-441 WAC establishes GHG reporting requirements that apply to owners and operators of certain facilities that directly emit GHG in Washington. The rule applies to any facility that emits 10,000 metric tons carbon dioxide equivalent (CO_{2e}) or more per calendar year in total GHG emissions. In 2015, Ecology amended chapter 173-441 WAC, in order to maintain consistency with EPA's greenhouse gas reporting program. The amendments included revising the global warming potentials in WAC 173-441-040, updating calculation and monitoring methods, and minor streamlining revisions to reporting requirements. In 2016, Ecology further amended Chapter 173-441 WAC, in order to have terminology consistent with Chapter 173-442 WAC – Clean Air Rule [see Clean Air Rule discussion below]

For an existing facility that began operation before January 1, 2012, GHG emissions must be reported to Ecology for calendar year 2012 and each subsequent calendar year. The report is due by March 31st of each calendar year for GHG emissions in the previous calendar year if a person is also required to report GHG emission to EPA under 40 CFR Part 98. The report is due by October 31st of each calendar year for GHG emissions in the previous calendar year if a person is not required to report GHG emissions to EPA under 40 CFR Part 98.

The most recently estimated actual emissions for IEPC were in 2022: 37,007 total MTCO_{2e} (including emissions from biomass combustion in the FBC). Because the actual GHG emissions for IEPC exceed 10,000 metric tons CO_{2e}, the annual GHG emission reporting requirements of Chapter 173-441 WAC apply. These reporting requirements are included in the air operating permit in the “General Monitoring, Recordkeeping, & Reporting” section of the permit.

40 CFR Part 98 - Federal GHG reporting requirements

On October 30, 2009, and as amended on July 12, 2010, September 22, 2010, November 30, 2010, December 1, 2010, December 17, 2010, December 27, 2010, and March 18, 2011, EPA promulgated regulations for mandatory federal GHG reporting in 40 CFR Part 98. In general, the regulations require that facilities that emit 25,000 metric tons of anthropogenic CO_{2e} must report their GHG emissions to EPA. Emissions of CO_{2e} from IEPC (excluding emissions from biomass combustion in the FBC) are below the 25,000 metric tons of anthropogenic CO_{2e}, therefore the federal GHG reporting requirements in 40 CFR Part 98 are not required.

Additionally, the federal GHG reporting requirements given in 40 CFR Part 98 are not considered “applicable requirements,” as defined in 40 CFR 70.2, under the title V operating permit program. Therefore, inclusion of the federal GHG reporting requirements in 40 CFR Part 98 is not required for the Title V permit.

40 CFR Parts 51, 52, 70, and 71 - "Tailoring Rule"

On May 13, 2010, EPA issued a final rule that "tailors" the applicability criteria given in 40 CFR Parts 51, 52, 70, and 71 that determine which stationary sources and modification projects become subject to permitting requirements for GHG emissions under the PSD and Title V programs of the Clean Air Act. Per the 2010 version of the tailoring rule, on and after July 1, 2011, any existing or new source with the potential to emit more than 100,000 tpy CO₂e needed a Title V permit. Additionally, for PSD, permitting requirements were triggered if the project was expected to increase GHG emissions by more than 75,000 tpy CO₂e.

On June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("UARG"). The Court held that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

On April 10, 2015, in accordance with the Supreme Court decision, the D.C. Circuit issued an amended judgment in *Coalition for Responsible Regulation, Inc. v. EPA*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015), which, among other things, vacated the PSD and title V regulations under review in that case to the extent that they require a stationary source to obtain a PSD or title V permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds. The D.C. Circuit also directed EPA to consider whether any further revisions to its regulations are appropriate in light of UARG, and if so, to undertake to make such revisions.

On April 30, 2015, in response to the court decision, EPA issued a direct final rule to narrowly amend the permit rescission provisions in the PSD regulations. This action allows the rescission of Clean Air Act PSD permits that issued by the EPA or delegated state and local permitting authorities on the sole basis of a source's GHG emissions.

On August 26, 2016, the EPA proposed a set of common sense changes needed to bring EPA's air permitting regulations in line with Supreme Court and D.C. Circuit decisions on greenhouse gas permitting. This rulemaking proposes revisions to existing PSD and title V regulations to ensure that neither the PSD nor title V rules require a source to obtain a permit solely because the source emits or has the potential to emit GHGs above the applicable thresholds.

As part of the AOP-4 renewal application, IEPC submitted the following PTE estimates for their total GHG emissions, based on the maximum fuel consumption rating of the boilers and FBC:

Unit Name	Fuel	Nameplate/ Rating	Annual Fuel PTE Capacity	Annual Metric Tons*
Fluidized Bed Combustor (FBC)	Paper Sludge	50 dtpd	18,250 dtpy	19,242.21
Boiler #1	Natural Gas	40,000 pph	340 MCF/year	22,222.04
Boiler #2	Natural Gas	100,000 pph	850 MCF/year	55,555.11
Total =				97,019.36

*Given as CO2e

Based on PTE emission estimates given above, the facility’s potential for GHG is 97,019 metric tons as CO2e, with 19,242 tons of the GHG emissions considered biogenic. Since anthropogenic GHG PTE emissions are under 100,000 tpy, IEPC is not considered a major source for GHG emissions under the tailoring rule.

SRCAA is meeting the requirements of the tailoring rule by incorporating the applicable state GHG reporting requirements under Chapter 173-441 WAC into this Title V permit. In addition, the permit incorporates the most recent version of Chapter 173-400 WAC (last updated 11/29/21), which adopts the tailoring rule new source review thresholds on a state level. This version of Chapter 173-400 WAC adopts by reference the subparts of 40 CFR 52.21, in effect on December 23, 2020, into WAC 173-400-720, “Prevention of significant deterioration (PSD),” which includes the tailoring rule new source review thresholds. While it is unlikely that IEPC will increase their PTE GHG emissions to the PSD permitting level, the permit requires that IEPC meet the requirements given in the current version of Chapter 173-400 WAC for any new source review project that might occur (see Condition I.G.1). This condition will ensure that IEPC must obtain a PSD permit and meet BACT for any future project that causes an increase of GHG emissions above the thresholds established in the tailoring rule.

Clean Air Rule

On September 15, 2016, Ecology promulgated a regulation, Chapter 173-442 WAC, which establishes GHG emissions standards starting in 2017 for petroleum product producers and importers, natural gas distributors, and other “covered” stationary sources. The rule defines “Covered stationary source GHG emissions” as GHG emissions from source categories listed in WAC 173-441-120.

The rule triggers GHG emission reduction requirements for a covered source when their three calendar year rolling average of GHG emission, beginning with calendar year 2012, are greater than or equal to the specified compliance threshold in the corresponding compliance period, as given in the table below:

Table 3 - WAC 173-442-030

Compliance Threshold (MT CO ₂ e/Year)	First Compliance Period (Calendar Year)
100,000	2017-19*
95,000	2020-22
90,000	2023-25
85,000	2026-28
80,000	2029-31
75,000	2032-34
70,000	2035 and beyond

*The 100,000 MT CO₂e/year threshold is used for the three calendar year rolling average applicability determination beginning in 2012.

Based on the estimated GHG emissions for IEPC of < 35,000 metric tons of CO₂e per year in the 2020-2022 compliance period, Chapter 173-442 WAC does not apply to IEPC. Additionally, in March 2018, Thurston County Superior Court ruled that parts of the Clean Air Rule are invalid. The Superior Court's ruling prevents implementation of the Clean Air rule regulations and compliance with the rule is suspended. On May 14, 2018, Ecology filed an appeal with the Washington State Supreme Court. Until the legal issues are resolved, the Clean Air Rule will not be placed in the air operating permit renewal.

- **Updates to excess emissions/emergency provisions**

On 5/22/15, Ecology received a SIP call from EPA regarding the Excess Emissions provisions given in WAC 173-400-107, specifically the treatment of excess emissions during periods of startup, shutdown, and malfunction (SSM). To address the SIP call, Ecology completed rulemaking with revised requirements given in WAC 173-400-108, titled "Emission limits during startup and shutdown" and a new section in WAC 173-400-082, titled "Alternative emission limit that exceeds an emission standard in the SIP" (filed on 8/16/18) that will be submitted to EPA for inclusion into Washington's SIP. Until the SIP is revised to include WAC 173-400-081 and -082, WAC 173-400-107 (version in effect on September 20, 1993) remains in effect. After the effective date of EPA's removal of the September 20, 1993 version of WAC 173-400-107 from the SIP, it will no longer be effective. Ecology also retained two state-only sections,(not federally enforceable), given in WAC 173-400-108 and 173-400-109, pertaining to unavoidable excess emissions that will take effect on the effective date of EPA's removal of the September 20, 1993 version of WAC 173-400-107 from the SIP. The renewal permit includes the requirements from WAC 173-400-107, along with the requirements from WAC 173-400-108 and -109, which will become state/local only requirements when WAC 173-400-107 is no longer effective. The requirements of WAC 173-081 and -082 are not specifically listed as applicable requirements in the renewal permit

because neither section currently apply to IEPC. If either section became applicable to IEPC, it would be part of a new source review, regulatory order, or rulemaking action.

- **Recodification of Washington Clean Air Act.**

The Washington Clean Air Act, Chapter 70.94 RCW was recodified to Chapter 70A.15. All references to 70.94 were revised to 70A.15, and all references in the permit to specific sections of the Chapter were revised accordingly.

COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY REVIEW

40 CFR Part 64 (Compliance Assurance Monitoring aka CAM) requires monitoring sufficient to provide a reasonable assurance of compliance with the applicable requirements (e.g., emissions limits) and to ensure operators pay the same level of attention to pollution control measures as to production activities. The rule applies to each pollutant-specific emissions unit (PSEU) at a facility that meets the following criteria:

- Is located at major source subject to Title V operating permits program [40 CFR 64.2(a)(1)] and
- Is subject to an emission limitation and has a control device to meet that limit (e.g., electrostatic precipitators, scrubbers, fabric filters) [40 CFR 64.2(a)(2)], and
- Has pre-controlled emissions > major source size threshold (e.g., >100 tons/year uncontrolled emissions) [40 CFR 64.2(a)(3)]

Table 3 shows the CAM applicability for the significant emission units at the IEPC facility.

Table 3 – CAM Applicability

Emission Point #	Emission Unit Description	Pollutant and emission limit (if applicable)	APC Used to Control Pollutant	Pre-Controlled PTE (tpy)	CAM Applies?
2-1	#2 Boiler	none	none	N/A per 40 CFR 64.2(a)(2)	No
2-1	Fluidized Bed Combustor	PM - 0.023 gr/dscf NOx - 243 ppmv SO2 - 4.05 lb/hr CO - 50 ppmv VOC - 30 ppmv NH3 - 20 ppmv	PM – Baghouse, NOx – SNCR, None for SO2, CO, VOC, & NH3	PM – 5,031 NOx – 79.4	Yes for PM
2-2	Ash Handling System	PM - 0.1 gr/dscf	Cyclone and Baghouse	PM – 5,031	Yes
2-3	Ash Trailer	none	none	N/A per 40 CFR 64.2(a)(2)	No

2-4	Wastewater Treatment Plant (2 primary clarifiers, 3 moving bed biofilm reactors, 2 equalization basins, 1 aeration basin, 1 secondary clarifier, and tertiary ultra-film membrane system)	none	none	N/A per 40 CFR 64.2(a)(2)	No
2-5	#1 Boiler	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-1	Chip Unloading & Handling	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-2	Chip Pile Building	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-3	Chip Handling for Reclaim	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-4	#3 TMP Chip Silo Separator	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-5	#3 TMP Cyclone Separator	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-6	#3 TMP Exhaust	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-7	#1 RMP Chip Silo Separator	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-8	#1 RMP Exhaust	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-9	#4 TMP Primary Refiner	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-10	#4 TMP Secondary Refiner	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-11	#4 TMP conveyor exhaust	PM - 0.04 gr/dscf	none	N/A per 40 CFR 64.2(a)(2)	No
3-12	#2 RMP Chip Silo Separator	none	none	N/A per 40 CFR	No

				64.2(a)(2)	
3-13	#2 RMP Exhaust	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-14	Reject Refiner Exhaust	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-15	#5 TMP Start-up Scrubber	none	none	N/A per 40 CFR 64.2(a)(2)	No
3-16	#5 TMP Vent Condenser	none	none	N/A per 40 CFR 64.2(a)(2)	No

Based on the information summarized in Table 3, the CAM requirements from 40 CFR Part 64 apply to the fluidized bed combustor and the ash handling system (Emission Points 2-1 and 2-2) for PM.

COMPLIANCE HISTORY

SRCAA has performed a compliance inspection at IEPC at least once every year since 1996. Since 1996, SRCAA has issued two Notices of Violation to IEPC. These NOV's are described below:

- In May 2003, SRCAA issued NOV #6969 to IEPC for missing hourly parametric monitoring data for the Fluidized Bed Combustor baghouse and ash handling baghouse. The violation has been resolved.
- In May 2006, SRCAA issued NOV #7447 to IEPC because the source test performed on the baghouse outlet on the Fluidized Bed Combustor with the increased sludge throughput of 50 dtpd showed that the particulate matter (PM10) emissions exceeded the PM10 emission limit contained in Notice of Construction (NOC) #1169 Condition 6 (as revised on 6/10/05). The violation has been resolved because IEPC installed a new supplemental baghouse on the FBC to handle the increased PM10 emissions from increasing the sludge throughput to 50 dtpd. IEPC performed a source test on the FBC particulate control system (which consists of the original baghouse and the supplemental baghouse operating in parallel with the airflow split between them) which showed PM10 emissions below the PM10 emission limit contained in NOC #1169.

EMISSION UNITS

Significant emission units at IEPC can be broken into two main categories: fluidized bed combustor and pulp mill. These emission units have requirements from NOC permits and/or specific federal regulations, and are also subject to the facility-wide emission limitations and associated monitoring, recordkeeping, and reporting requirements. A section on each of these

significant emission unit categories follows. There are also several emission units that are considered “significant” emission units, but do not have additional requirements that apply. These sources are subject only to the facility-wide emission limitations and associated monitoring, recordkeeping, and reporting requirements and are listed after the two categories listed above. At the end of this section, the insignificant emission units at IEPC are discussed and listed.

Fluidized Bed Combustor (FBC)

The FBC was installed at the facility in 1991 and has the capacity to burn 50 tons per day of sludge. Installation of the FBC was approved under NOC #1169. The FBC emissions units consist of the FBC and the ash handling system. Air pollution controls for the FBC consist of i) two baghouses (original baghouse and supplemental baghouse) operated in parallel with the airflow from the FBC split between them, and ii) a selective non-catalytic reduction system (ammonia injection system) for NOx control. Air pollution controls for the ash handling system consist of a single baghouse. Pertinent information on the FBC emission units is given in Table 4 below.

Table 4 – Fluidized Bed Combustor Significant Emission Units

Emission Point #	Description	Permits	Air Pollution Control Equipment
2-1*	Fluidized Bed Combustor (23.0 MMBtu/hr (LHV) and 20,000 acfm at 400 F) with capacity to burn 50 oven-dried tons sludge per day	SRCAA NOC #1169	<ul style="list-style-type: none"> Two baghouses operated in parallel for particulate matter control: Ultra Industries Inc. BW-225-120-III “original” baghouse (16,100 scfm); Aeropulse, Inc. Model No. PR-128(6)-10-WIP-H-N “supplemental” baghouse (7,300 scfm); and Selective non-catalytic reduction system (ammonia injection system) for NOx control
2-2	Ash Handling System	No permits issued	Baghouse (6,000 scfm)
2-3	Ash Trailer	No permits issued	None

*The Fluidized Bed Combustor exhausts through the same stack as Boiler #2

Pulp Mill Sources

RMP lines #1 - #2 and TMP lines #3 - #4 were installed prior to SRCAA's Notice of Construction

program. RMP lines #1 and #2 are not listed under Table 5 below because they do not have any applicable requirements other than facility-wide requirements. TMP lines #3 and #4 are thermo-mechanical pulp (TMP) lines originally installed in 1980 (Line #3) and 1982 (Line #4). Lines #3 and #4 were modified in 1995 to increase pulp production to 85 dry tons per day per line (approved per SRCAA NOC #708) and in 2005 to increase pulp production to 100 dry tons per day per line (approved by SRCAA NOC #1321). Note that NOC #708 was voided when NOC #1321 was issued. Lines #3 & #4 each have a primary, secondary, and tertiary refiner. The refiner line #3 has two exhaust stacks: one on the primary refiner/cyclone and one on the secondary refiner. The refiner line #4 has three exhaust stacks: one on the primary refiner/cyclone, one on the conveyor, and one on the secondary refiner.

The #5 TMP refiner line was constructed in 2009; the new system was approved under NOC #1463 and has enough capacity to effectively replace the four existing refiner lines at the facility. However, IEPC maintains the ability to operate the four existing refiner lines when the #5 TMP is down for maintenance. Additionally, IEPC has maintained the capability to operate all five lines concurrently if demand requires. Emissions from the #5 TMP are exhausted through a start-up scrubber exhaust (during start-up operation) and a vent condenser (during normal operation).

Unrefined fibers are reprocessed through a reject refining line, which consists of a primary and secondary atmospheric refiner. Both the primary and secondary reject refiner exhaust to the atmosphere. The reject refiner system was originally installed in 1978 and consisted only of the primary reject refining stage. The secondary reject refiner was installed in 1988. In April 2001, IEPC brought a new paper machine online. At that time, the mill reject throughput was at 40 tons per day. Concurrent with submittal of their first AOP renewal application, IEPC submitted an NOC application for the reject refiner line, and the line was approved under NOC #1096. Per the current revision to NOC #1096, the reject refiner line is approved to process 100 dtpd. Pertinent information on the pulp lines is given in Table 5 below.

Table 5 – Pulp Mill Significant Emission Units

Emission Point #	Description	Permits	Air Pollution Control Equipment
3-4	#3 TMP Primary Refiner approved to process 100 dtpd	SRCAA NOC #1321	Cyclone
3-5	#3 TMP Secondary Refiner approved to process 100 dtpd	SRCAA NOC #1321	None
3-6	#3 TMP Exhaust	SRCAA NOC #1321	Cyclone

Emission Point #	Description	Permits	Air Pollution Control Equipment
3-9	#4 TMP Primary Refiner approved to process 100 dtpd	SRCAA NOC #1321	None
3-10	4 TMP Secondary Refiner approved to process 100 dtpd	SRCAA NOC #1321	None
3-11	#4 TMP Conveyor approved to process 100 dtpd	SRCAA NOC #1321	None
3-14	Reject Refiner System (primary & secondary reject refiner), approved to process 100 dtpd	SRCAA NOC #1096	None
3-15	#5 TMP System, approved to process 550 dtpd – start-up scrubber	SRCAA NOC #1463	cyclone, start-up scrubber
3-16	#5 TMP System, approved to process 550dtpd – vent condenser	SRCAA NOC #1463	None

Other Emission Units

The following emission units are considered significant emission units, but do not have specific requirements (i.e., Notice of Construction approval conditions, NSPS standards, etc.) that apply. These sources are subject only to the facility-wide emission limitations and are described below:

- #1 & #2 RMP exhausts (Refiner Lines #1 & #2 were installed in 1966) and Boilers #1 and #2 (#1 boiler was installed in 1955 and #2 boiler was installed in 1959). This equipment was constructed/installed prior to the existence of SRCAA 's new source review program.
- The wastewater treatment plant (installed in 1989). At the time of construction, SRCAA did not require registration of wastewater treatment plants. Consequently, a Notice of Construction for this project was not required by SRCAA.
- Two wood chip transfer silos with cyclones (cyclones used to slow down wood chip velocity and not for air pollution control purposes) associated with chip handling & transfer operations (installed in 1989). NOC #238 was approved 4/19/89 for the equipment installation, however no approval conditions were included with approval of

NOC #238.

- Paper machine (installed in 2001). During SRCAA’s preliminary review of the paper machine in 1998, there were no published information on paper machine emissions. Therefore, a Notice of Construction was not required for the paper machine. However, based on subsequent review of information from the National Council of the Paper Industry for Air and Stream Improvement (NCASI), the paper machines is a source of VOC emissions. Therefore, the paper machine / dryers are considered significant emission units and subject to the facility-wide emission limitations.

Significant emission units, subject only to facility-wide emission limitation, are given in Table 6 below.

Table 6 – Significant Emission Units Subject Only to Facility-wide Emission Limitations

Emission Point #	Description	Permits	Air Pollution Control Equipment
3-1	Chip Unloading & Handling	N/A	None
3-2	Chip Pile Building	N/A	None
3-3	Chip Handling for Reclaim	N/A	None
2-4	Wastewater Treatment Plant (2 primary clarifiers, 3 moving bed biofilm reactors, 2 equalization basins, aeration basin, 1 secondary clarifier, and tertiary ultra-film membrane system)	N/A	None
N/A	Paper Machine and Dryers	N/A	N/A
3-7	#1 RMP Chip Silo Separator	N/A	Cyclone
3-12	#2 RMP Chip Silo Separator	N/A	Cyclone
3-8	#1 RMP Exhaust	N/A	None
3-13	#2 RMP Exhaust	N/A	None
2-5	#1 Boiler (48 MMBTU/hr)	Natural gas with fuel oil #6 back-up	None
2-1*	#2 Boiler (120 MMBTU/hr)	Natural gas with fuel oil	None

Emission Point #	Description	Permits	Air Pollution Control Equipment
		#6 back-up	

*Boiler #2 exhausts through the same stack as the Fluidized Bed Combustor

Insignificant Emission Units

Insignificant emission units (IEUs) include any activity or emission unit located at a major source which qualifies as insignificant under the criteria listed in WAC 173-401-530. These units and activities are exempt from permit program requirements, except as provided in WAC 173-401-530.

Insignificant emission units are subject to the generally applicable requirements (i.e., facility-wide emission limitations). According to WAC 173-401-530, testing, monitoring, recordkeeping, and reporting are not required for insignificant emission units unless determined by the permitting authority to be necessary to assure compliance or unless it is otherwise required by a generally applicable requirement in the State Implementation Plan (SIP). SRCAA has determined that testing, monitoring, recordkeeping, and reporting are not necessary for the insignificant emission units presented in Table 6 to assure compliance with the generally applicable requirements. SRCAA’s determination was based on the following:

- SRCAA has not documented a violation of any of the generally applicable requirements in the past from the list of IEUs in Table 6 (i.e., the IEUs have had a consistent compliance history); and
- Most of the IEUs are tanks that emit small quantities of pollutants; and
- The majority of the IEUs are emission units or activities that are not directly vented (i.e., do not have an exhaust stack).

A list of the IEUs, identified in the permit application, is presented below in Table 7 below. Emissions from units designated insignificant, based solely on WAC 173-401-530(1)(a), must remain below threshold levels.

Table 7 – Insignificant Emission Units Emission Unit Description	Basis / Justification for IEU Designation
Laboratory Operations	WAC 173-401-532(51) & (73)
Propane Heater, rated at 150,000 BTU/hr	WAC 173-401-533(2)(r)
Propane Heater, rated at 350,000 BTU/hr	WAC 173-401-533(2)(r)
Portable Propane Heaters, each rated at 350,000 BTU/hr	WAC 173-401-533(2)(r)
Mill lube oil storage tanks	WAC 173-401-532(3)
Clean condensate tanks	WAC 173-401-532(4) & (96)
Bleaching towers	WAC 173-401-532(4)
Liquid Sodium hydrosulfite tanks	WAC 173-401-532(4)
Hydrogen peroxide (50%) tanks	WAC 173-401-532(4) & (100)
Surfactant tanks (2)	WAC 173-401-532(4)
Water treatment polymer tank	WAC 173-401-532(4)
Sodium silicate tank	WAC 173-401-532(4)
Sodium hydroxide (50%) tanks (2)	WAC 173-401-532(4)
Alum tank	WAC 173-401-532(4) & (97)
Aqua ammonia (20%) tank	WAC 173-401-532(4)
Phosphoric acid tank	WAC 173-401-532(4)
Urea storage tank	WAC 173-401-532(4)
Deink process storage tanks	WAC 173-401-532(4) & (98)
Mill lubricants and hydraulic fluid reservoirs and pumping equipment	WAC 173-401-532(3) & (4)
Broke beaters & repulpers	WAC 173-401-532(98)
Stock chests and pulp handling	WAC 173-401-532(4) & (98)
Mill maintenance gases	WAC 173-401-532(5)
Maintenance & repair	WAC 173-401-532(5), (12), (33), (45), (55), & (74)
Open containers	WAC 173-401-532(6) & (79)
Dumpsters	WAC 173-401-532(6) & (79)
Auto repair & maintenance shop vehicle exhaust	WAC 173-401-532(7)

Mill vents from rooms, buildings and enclosures that contain permitted emission units or activities	WAC 173-401-532(9)
Building exhaust vents	WAC 173-401-532(9)
Building openings (doors, windows, etc.)	WAC 173-401-532(9)
Paper machine dryer	WAC 173-401-532(97)
Steam leaks	WAC 173-401-532(89)
Mill fork lifts & clamp trucks	WAC 173-401-532(10)
Mill cutting torches	WAC 173-401-532(12)
Maintenance metal press	WAC 173-401-532(18)
Janitorial services	WAC 173-401-532(32) & (33)
Painting & coating/routine maintenance & repair	WAC 173-401-532 (33)
General plant upkeep, including painting, preparation for painting, paving, aerosol cans	WAC 173-401-532 (33) (74)
Non-asbestos insulation removal	WAC 173-401-532 (33)
Sweeping, vacuuming, and mopping activities	WAC 173-401-532(32) & (35)
Yard & ground sweeping	WAC 173-401-532 (35)
Steam cleaning operations	WAC 173-401-532 (39)
Portable drums & totes	WAC 173-401-532(42)
Lawn & landscape activities	WAC 173-401-532(43)
Vehicle maintenance	WAC 173-401-532(45) & (77)
Mill air conditioning & refrigerators	WAC 173-401-532(46)
Refrigerators	WAC 173-401-532 (46)
Steam vents, safety & relief valves	WAC 173-401-532(47) & (87)
Mill bathrooms & showers	WAC 173-401-532(48) & (50)
Mill office activities	WAC 173-401-532(49)
Fire training & fire fighting equipment	WAC 173-401-532(52)
Woodworking	WAC 173-401-532(55)
Hydroblasting & sandblasting	WAC 173-401-532(55)
Paper machine winders & slitters	WAC 173-401-532(55), (72), &

	(111)
Boiler house oxygen scavenger	WAC 173-401-532(61)
Structural changes	WAC 173-401-532(67)
Batteries & battery chargers	WAC 173-401-532(77)
Air compressors, pneumatically operated equipment, & hand tools	WAC 173-401-532(88)
Process water & white water storage tanks	WAC 173-401-532(94)
Paper forming, drying and cooling systems	WAC 173-401-532(106) & (107)
Vacuum system exhaust	WAC 173-401-532(108)
Stock cleaning	WAC 173-401-532(110)
Sludge dewatering & handling	WAC 173-401-532(114)
Screw press vents	WAC 173-401-532(115)
Polymer tanks and associated pumping & handling equipment used for solids dewatering & flocculation	WAC 173-401-532(117)
Degreaser, 20 gal. Capacity (2 units)	WAC 173-401-530(4)(d) – VOC emissions of 0.057 tons/year per unit are below threshold of 2 tons/year
Degreaser, 50 gal. Capacity	WAC 173-401-530(4)(d) – VOC emissions of 0.142 tons/year are below threshold of 2 tons/year
LPG tank, 1000 gallon	WAC 173-401-533(2)(d)
Water cooling tower, 900 gpm Capacity	WAC 173-401-533(2)(m)
Welding operations – average welding rod usage at IEPC is 1 lb/day, which is less than threshold of 1 ton/day	WAC 173-401-533(2)(i)

SECTION I - STANDARD TERMS AND CONDITIONS

This section of IEPC's permit contains standard terms and conditions that apply to all sources in SRCAA 's Title V program. These conditions include all terms required in Chapter 173-401 WAC as well as requirements from other air quality laws and regulations. This section is organized into the following subsections:

- A. PERMIT ADMINISTRATION
- B. INSPECTION & ENTRY
- C. EMERGENCY PROVISIONS
- D. GENERAL MONITORING, RECORDKEEPING, & REPORTING
- E. COMPLIANCE CERTIFICATION
- F. TRUTH AND ACCURACY OF STATEMENTS AND DOCUMENTS AND TREATMENT OF DOCUMENTS
- G. APPLICABLE WHEN TRIGGERED REQUIREMENTS

A discussion of each subsection follows. The requirements in each subsection are briefly discussed, along with the citations for each requirement. Using the same methodology as the permit, requirements that are not required under the FCAA are indicated by the phrase "STATE/LOCAL ONLY" after the legal citation. Although, in and of itself, Chapter 173-401 WAC is not federally enforceable, the requirements of this regulation are based on federal requirements for the operating permit program. Upon issuance of the permit, the terms based on Chapter 173-401 WAC will become federally enforceable for the source.

I.A Permit Administration

Below are standard terms included in this subsection. Generally, the language tracks the rule language closely with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirement.

- I.A.1. Federal Enforceability. All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. [WAC 173-401-625, 10/4/93]
- I.A.2. Duty to Comply. The permittee must comply with the terms and conditions of the permit. [WAC 173-401-620(2)(a), 10/4/93]
- I.A.3. Schedule of Compliance. The permittee must continue to comply with all applicable requirements and must comply with new requirements on a timely basis. [WAC 173-401-630(3), 2/3/16]
- I.A.4. Need to Halt or Reduce Activity Not a Defense. The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action. [WAC 173-401-620(2)(b), 10/4/93]
- I.A.5. Permit Actions. This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If IEPC files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance. [WAC 173-401-620(2)(c), 10/4/93]

- I.A.6. Reopening for Cause. This term lists instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements. [WAC 173-401-730, 10/4/93]
- I.A.7. Emissions Trading. No permit revision will be required, under any approved, economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit. [WAC 173-401-620(2)(g), 10/4/93]
- I.A.8. Property Rights. The permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d), 10/4/93]
- I.A.9. Duty to Provide Information. The permittee must furnish, within a reasonable time to SRCAA, any information, including records required in the permit, that is requested in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. [WAC 173-401-620(2)(e), 10/4/93]
- I.A.10. Duty to Supplement or Correct Application. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, must promptly submit such supplementary facts or corrected information. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit. [WAC 173-401-500(6), 9/16/02]
- I.A.11. Permit Fees. The permittee must pay fees as a condition of this permit in accordance with SRCAA 's fee schedule and RCW 70.94.162. Failure to pay fees in a timely fashion will subject the permittee to civil and criminal penalties, as prescribed in Chapter 70A.15 RCW. [WAC 173-401-620(2)(f), 10/4/93]
- I.A.12. Severability. If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable. [WAC 173-401-620(2)(h), 10/4/93]
- I.A.13. Permit Appeals. The permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on SRCAA within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal is separate from and additional to any federal rights to petition and review under §505(b) of the FCAA, including petitions filed pursuant to 40 CFR 70.8(c) and 70.8(d). [WAC 173-401-620(2)(i), 10/4/93] [WAC 173-401-735(1), 4/2/97]
- I.A.14. Permit Renewal and Expiration. The permit is in effect for five years. The permittee's right to operate this source terminates with the expiration of the permit unless a timely and complete application for renewal is submitted. Chapter 173-401-710(1) allows

SRCAA to set, in the permit, the due date for the renewal as long as it is no more than 18 months and no less than six months prior to expiration of the permit. SRCAA specifies in the permit that the renewal must be submitted no more than 18 months and less than 12 months prior to the permit expiration. The facility may continue to operate subject to final action by SRCAA on the application, as long as a timely and complete application has been filed and all requested additional information necessary to process the permit is submitted by the deadline specified in writing by SRCAA . [WAC 173-401-610, 10/4/93] [WAC 173-401-705, 10/4/93] [WAC 173-401-710(1), 9/16/02]

I.A.15. Permit Continuation. The permit will not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j), 10/4/93]

I.A.16. Permit Shield. Compliance with a permit condition is deemed compliance with the applicable requirements identified in the permit upon which that condition is based, as of the date of permit issuance except that this shield will not affect the following:

- a. The provisions of Section 303 of the FCAA (emergency orders), including the authority of the Administrator under that section;
- b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The ability of EPA to obtain information from the permittee pursuant to Section 114 of the FCAA;
- d. The ability of SRCAA to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in Chapter 252, Laws of 1993.

[WAC 173-401-640(1) & (4), 10/4/93]

I.B Inspection and Entry

Below are standard terms included in this subsection. This subsection of the permit contains requirements for allowing authorized access to a facility for purposes of assuring/determining compliance with air quality requirements. Generally the language tracks the rule language closely with only minor changes for clarity and conciseness. There is no intent to alter the effect of the requirements.

I.B.1. Inspection and Entry. No person shall obstruct, hamper, or interfere with any authorized representative of SRCAA who requests entry for the purpose of inspection, and who presents appropriate credential; nor shall any person obstruct, hamper or interfere with any such inspection. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow SRCAA, or an authorized representative, to

perform the following:

- a. enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- b. have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. enter the facility premises at reasonable times to inspect equipment and/or records specific to the control, recovery, or release of contaminants into the atmosphere, in accordance with SRCAA Regulation I, Article II and RCW 70.15A.2500; and
- e. as authorized by WAC 173-400-105 and the FCAA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.

[WAC 173-401-630(2), 10/4/93] [RCW 70A.15.2500 (formerly 70.94.200), 1998 - STATE/LOCAL ONLY] [SRCAA Regulation I, Section 2.02.E, 7/9/20p – STATE/LOCAL ONLY] [NOC #1169, Condition 16, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [NOC #1321, Condition 9, 12/21/05] [NOC #1096, Condition 7, 10/19/01, as revised on 4/16/02 and 6/7/05] [NOC #1463, Condition 9, 8/13/09]

Nothing in this condition shall limit the ability of EPA to inspect or enter the premises of the permittee under Section 114 of the FCAA. [WAC 173-401-640(4)(d), 10/4/93]

I.C. Emergency Provisions

Below are standard terms that are included in this subsection. This subsection of the permit contains provisions, governing the treatment of periods of emissions in excess of applicable standards, when such emissions stem from unforeseeable events or arise from start-up, shutdown or maintenance, where design or operational practices could not preclude such emissions. Generally, the language closely tracks the rule language, with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirements.

- I.C.1. Emergencies - This term incorporates the emergency provisions established in Chapter 173-401 WAC, which allow for a positive defense to noncompliance with technology-based emissions limitations, if certain conditions are met. [WAC 173-401-645, 10/4/93] [WAC 173-401-615(3)(b), 9/16/02]
- I.C.2. Excess Emissions (prior to removal of WAC 173-400-107 from SIP). If excess

emissions due to startup or shutdown conditions, scheduled maintenance, or malfunctions / upsets are determined to be unavoidable under the procedures and criteria in WAC 173-400-107, such emissions are violations of the applicable statute, regulation, permit, or regulatory order but are not subject to penalty. The permittee shall submit a notification of the excess emissions in accordance with I.D.7-Prompt Reporting of Deviations below, and submits a full written report, including the information required in WAC 173-400-107. After the removal of WAC 173-400-107 from the SIP, this condition is no longer in effect. [(SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-107 (9/20/93)] [WAC 173-401-615(3)(b), 9/16/02]

- I.C.3. Excess Emissions (after removal of WAC 173-400-107 from SIP). After the removal of WAC 173-400-107 from the Washington state SIP, if excess emissions due to an upset or malfunction are determined to be unavoidable under the procedures and criteria in WAC 173-400-109, such emissions are violations of the applicable statute, regulation, permit, or regulatory order but are not subject to penalty. Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under this condition. The permittee shall submit a notification of the excess emissions in accordance with Condition I.D.7-Prompt Reporting of Deviations below and submit a full written report including information required under WAC 173-400-109(5) supporting the claim that the excess emissions were unavoidable.

This condition does not apply to an exceedance of an emission standard in 40 C.F.R. Parts 60, 61, 62, 63, and 72, or SRCAA's adoption by reference of these federal standards.

Note: Nothing in a state rule limits a federal court's jurisdiction or discretion to determine the appropriate remedy in an enforcement action.

[SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-108 and -109 (8/16/18)] – STATE/LOCAL ONLY [WAC 173-401-615(3)(b), 9/16/02]

- I.C.4. Report of Breakdown for State/Local Only Requirements in SRCAA Regulation I. If pollutants are emitted in excess of any limit established by Ecology or SRCAA in any order(s), rule(s) or regulation(s) that apply to the facility as a direct result of unavoidable upset conditions or unavoidable and unforeseeable breakdown of equipment or control apparatus, the permittee may be exempt from penalties if the permittee submits a notification of the breakdown in accordance with Condition I.D.7-Prompt Reporting of Deviations below and upon request by SRCAA's control officer, submits a report giving the causes, the steps to be taken to repair the breakdown and a time schedule for the completion of the repairs. In order to prove to the control officer that the excess emissions due to breakdown were unavoidable, the permittee must adequately demonstrate that:

- a. The event was not caused by poor or inadequate design, operation, maintenance, or

any other reasonably preventable condition;

b. The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

c. The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emissions unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

The control officer, upon receipt of a report from the permittee describing a breakdown, may:

a. Allow operation exempt from penalties, but only for a limited time period, after which the permittee will be required to comply with SRCAA Regulation I or be subject to the penalties in SRCAA Regulation I, Section 2.11. Such an exemption may be withdrawn if the exempt operation becomes a cause of complaints; or

b. Require that the permittee curtail or cease operations until repairs are completed if the quantity of pollutants or the nature of the pollutants could cause damage.

Note: This provision does not provide relief against federally enforceable applicable requirements.

[SRCAA Regulation I, Section 6.08, 7/9/20 - STATE/LOCAL ONLY]

I.D General Monitoring, Recordkeeping, & Reporting

Below are standard terms included in this subsection. This subsection contains general requirements for monitoring, recordkeeping, and reporting. Monitoring, recordkeeping, & reporting requirements (MRRR) that apply to specific emission standards or specific emission activities are located in the second section of the permit. Generally, the language tracks the rule language closely, with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirements. However, in the terms, Monitoring Reports and Data Recovery, attempts have been made to clarify SRCAA's expectation of how the requirements will be met. The discussions below provide more detail on these efforts and the regulatory authority relied upon to establish the terms.

I.D.1. Records of Required Monitoring Information. This term details what records must be kept relating to monitoring. [WAC 173-401-615(2)(a), 9/16/02]

I.D.2 Permanent Shutdown of an Emission Unit. If an emission unit is permanently shut down, thereby rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the shutdown, to meet any monitoring, recordkeeping, and reporting requirements, no longer applicable for that emission unit, once any residual requirements have been met. All records, relating to the shutdown emission unit, generated while the emission unit was in operation, shall be kept in accordance with Conditions I.D.1- Records of Required Monitoring Information and I.D.5 – Retention of Records.

Contemporaneous with the shutdown of the emission unit, the permittee shall record the date that operation of the emission unit ceased, using a log or file on site. The shutdown date shall be reported to SRCAA on the monitoring report, required under Condition I.D.6 – Monitoring Reports, covering the period during which the shutdown occurred. [WAC 173-401-725(4)(a), 10/4/93] [WAC 173-401-650(1)(a), 10/4/93]

I.D.3. Operational Flexibility. In the event that an emission unit is not operated during a period equal to or greater than the monitoring period designated, no monitoring is required. Recordkeeping and reporting must note the reason why and length of time that the emission unit was not operated. [WAC 173-401-650(1)(a), 10/4/93]

I.D.4. Records of Changes. The permittee must keep records of changes made at the source that result in emissions of a regulated air pollutant, subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from such a change. [WAC 173-401-615(2)(b), 9/16/02]

I.D.5. Retention of Records. The permittee must keep monitoring data and support information for a period of five years. Records may be kept in electronic format, however, originals of support information, generated in hardcopy format, must be kept for the required five years. [WAC 173-401-615(2)(c), 9/16/02] [NOC #1169, Conditions 3,8,11, & 14, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

I.D.6. Monitoring Reports. The permittee must submit monitoring reports to SRCAA as follows:

- Monitoring report covering the period from January 1 – June 30 each year shall be submitted to SRCAA and postmarked no later than July 30 of the same calendar year; and
- Monitoring report covering the period from July 1 – December 31 each year shall be submitted to SRCAA and postmarked no later than April 15 of the following calendar year.

All instances of permit deviations must be identified in the monitoring reports. In addition, any permanent emission unit shutdowns must be reported in accordance with Condition I.D.2.-Permanent Shutdown of an Emission Unit, above. The monitoring reports must be

certified by a responsible official. SRCAA has added language to this condition that if monitoring reports are required, by an underlying requirement, to be submitted more frequently than every six months, the responsible official certification is only required for the semiannual reports but that the certification must cover all reports submitted since the last certification. The addition of this last requirement meets the intent of the law in that all reports are certified, while minimizing the burden on a source to go to the responsible official every time a report is submitted. Allowing a source this flexibility could become more important in the future, e.g., if SRCAA were to require a source to submit monitoring data electronically or by some other real time mechanism where responsible official certification would be difficult, if not impossible. [WAC 173-401-615(3)(a), 9/16/02]

- I.D.7. Prompt Reporting of Deviations. The permittee must promptly report deviations from permit requirements, the probable cause of such deviations, and any corrective measures taken. (Prompt is defined in this permit term). [WAC 173-401-615(3)(b), 9/16/02; WAC 173-401-645(3)(d), 10/4/93; (SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-107 (8/16/18)), (WAC 173-400-107, 9/20/93); SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-108 (8/16/18) – STATE/LOCAL ONLY; and SRCAA Regulation I, Section 6.08.A.1, 7/9/20 – STATE/LOCAL ONLY]
- I.D.8. Emission Inventory. The permittee must submit an inventory of emissions from the source each year and must maintain records sufficient to document reported emissions. [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-105 (10/25/18)]
- I.D.9. Reporting of Emissions of Greenhouse Gases. The permittee shall comply with the applicable requirements given in Chapter 173-441 WAC related to the reporting of emissions of greenhouse gases. [Chapter 173-441 WAC, 2/9/22 – STATE/LOCAL ONLY]
- I.D.10. WAC 173-401-530(1)(a) Insignificant Emission Units. Emissions from emission units designated insignificant based solely on WAC 173-401-530(1)(a) must remain below threshold levels. Upon request from SRCAA, the permittee must demonstrate that the actual emissions from such a unit or activity are below the applicable emission thresholds. SRCAA shall include in its request a deadline by which the permittee shall submit the emissions data. [WAC 173-401-530(6), 9/16/02]
- I.D.11. Report Submittals. This term provides the address to which reports must be sent and requires all reports to be certified by a responsible official. [WAC 173-401-520, 10/4/93]
- I.D.12. Rendering Device or Method Inaccurate. IEPC may not render inaccurate any monitoring device or method required under Chapter 70A.15 (formerly 70.94) or 70A.25

(formerly 70.120) RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto. [SRCAA Regulation I, Section 2.08(F), 7/9/20]

I.E Compliance Certification

As part of SRCAA 's Title V program, sources are required to submit annual compliance certifications. (SRCAA may require more frequent certifications if the source is out of compliance or if an underlying requirement specifies more frequent submittals.) This subsection of the permit addresses the details of these compliance certification submittals including how often submittals must occur, what the submittals must contain and to whom the certifications must be sent. Generally, the language tracks the rule language closely, with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirements.

- I.E.1. Compliance Certification Submittals. This term covers the frequency for submitting compliance certifications. [WAC 173-401-630(5)(a), 2/3/16]
- I.E.2. Compliance Certification Contents. This term describes what must be included in each compliance certification. [WAC 173-401-630(5)(c), 2/3/16]
- I.E.3. Credible Evidence. For the purpose of submitting compliance certifications or establishing violations, the permittee shall not preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [SRCAA Regulation I, Section 2.16(A), 7/9/20, which adopts by reference 40 CFR 60.11(g), 1/12/11]
- I.E.4. Submittal to EPA. This term requires that certifications be sent to EPA as well as SRCAA. [WAC 173-401-630(5)(d), 2/3/16]

I.F Truth and Accuracy of Statements and Documents and Treatment of Documents

Below are standard terms contained in the subsection, Truth and Accuracy of Statements and Documents and Treatment of Documents. The terms are based on SRCAA 's Regulation I. Generally, the language tracks the rule language closely, with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirements.

- I.F.1. False Information. This term specifies that IEPC may not make any false statement, representation, or certification in any form, notice, or report required under Chapter 70A.15 (formerly 70.94) or 70A.25 (formerly 70.120) RCW or any ordinance, resolution, regulation, permit, or order in force pursuant thereto. [SRCAA Regulation I, 2.08.A & 2.08.E, 7/9/20 - STATE/LOCAL ONLY]
- I.F.2. Alteration of Documents. This term prohibits the reproduction or alteration of any document issued by SRCAA, if the purpose of such is to evade or violate any requirement. [SRCAA Regulation I, 2.08.B, 7/9/20- STATE/LOCAL ONLY]

I.F.3. Availability of Documents. This term specifies that any order required to be obtained by SRCAA Regulation I must be available on the premises designated on the order[SRCAA Regulation I, 2.08.C, 7/9/20 - STATE/LOCAL ONLY]

I.F.4. Posting of Notices. This term specifies that any notices which SRCAA requires to be displayed shall be posted. The permittee may not mutilate, obstruct, or remove any notice unless authorized to do so by the SRCAA. [SRCAA Regulation I, 2.08.D, 7/9/20 - STATE/LOCAL ONLY]

I.G Applicable When Triggered Requirements

The subsection contains requirements that do not apply to the facility unless certain activities at the site trigger the requirement. SRCAA has included these requirements in the permit, either because they are often triggered at sources or are important enough that their inclusion in the permit is warranted. Generally, the language tracks the rule language closely with only minor changes for clarity or conciseness. There is no intent to alter the effect of the requirements. However, in the term, Source Testing, language has been added to clarify what an approved test method is, as the rule does not elaborate on what "approved" means. The discussion below provides more detail in regards to this.

I.G.1. New Source Review. Prior to the establishment of a new source, including modifications, the permittee may be required to file and obtain approval under SRCAA 's Notice of Construction program. [Chapter 173-400 WAC, 11/28/12 – STATE/LOCAL ONLY] [SRCAA Regulation I, Section 2.14(A)(8), 7/9/20, which adopts by reference Chapter 173-460 WAC (11/22/19)] [SRCAA Regulation I, Article V, 7/9/20 – portions of which are STATE/LOCAL ONLY]

I.G.2. Replacement or Substantial Alteration of Existing Control Equipment. Prior to replacing or substantially altering existing control equipment, the permittee shall file and obtain approval under SRCAA 's Notice of Construction program. [SRCAA Regulation I, Section 2.14(A), 7/9/20, which adopts by reference WAC 173-400-114 (11/28/12)] [SRCAA Regulation I, Article V, 7/9/20 - STATE/LOCAL ONLY]

I.G.3. Demolition and Renovation (Asbestos). The permittee must comply with applicable local, state, and federal requirements regarding demolition and renovation. [40 CFR Part 61 Subpart M, 2016] [SRCAA Regulation I, Section 2.17, 7/9/20, which adopts by reference 40 CFR 61, Subpart M, 2016] [SRCAA Regulation I, Article IX, 8/5/10 - STATE/LOCAL ONLY]

I.G.4. Source Testing. To demonstrate compliance Ecology or SRCAA may conduct or require that a test be conducted using approved EPA methods from 40 CFR Parts 51, 60, 61, and 63 which are adopted by reference or approved procedures contained in "Source Test Manual - Procedures for Compliance Testing," State of Washington, Department of Ecology, as of September 20, 2004, on file at Ecology. All testing shall be performed in

accordance with SRCAA Regulation I, Section 2.09, "Source Tests." The permittee may be required to provide the necessary platform and sampling ports for Ecology personnel or others to perform a test of an emission unit. Ecology or SRCAA shall be allowed to obtain a sample from any emission unit. The permittee shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

Methods or procedures shall be considered approved if the source submits a source test plan to SRCAA at least 30 days prior to the testing date, or a shorter time if designated in writing by SRCAA, and SRCAA approves the plan in writing. In order to maintain the approved status for the methods and/or procedures, any changes to the plan shall be approved by SRCAA in writing prior to implementation.

[WAC 173-401-615(1), 9/16/02] [SRCAA Regulation I, Section 2.09, 7/9/20 – STATE/LOCAL ONLY]

- I.G.5. Chemical Accident Prevention Provisions. If regulated substances are stored on-site in quantities, at the process level, that are above the threshold quantities, as determined under 40 CFR §68.115, the permittee shall comply with the requirements of 40 CFR Part 68 - Chemical Accident Prevention Provisions no later than either three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR §68.130, or the date on which a regulated substance is first present above a threshold quantity in a process. [40 CFR Part 68, 12/19/19]

SECTION II - EMISSION LIMITATIONS & MONITORING, RECORDKEEPING & REPORTING

This section contains emission limitations and emission related requirements, including general requirements for the facility. The section is divided into several subsections. The first subsection lists limitations that apply facility-wide. Subsequent subsections focus on individual emission units or classes of similar emission units. As in all other sections of the permit, requirements that are not required under the FCAA are indicated by the phrase "STATE/LOCAL ONLY" after the legal citation

This section of the permit is formatted differently from the STANDARD TERMS AND CONDITIONS section. Requirements are presented in tables. Applicable requirements are listed in the third column in emission limitation tables. The basis for the applicable requirements is listed in the second column of the emission limitation tables. The averaging time and reference test method, used to determine compliance with the requirement, are listed in the fourth and fifth columns, if applicable. The monitoring, recordkeeping, and reporting requirements (MRRR) used to assure compliance with the requirement are listed in the sixth columns of the emission limitation tables. The monitoring, recordkeeping, and reporting requirements (MRRR) are enforceable and are given in the last subsection in the permit. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying emission limitation.

For IEPC, this section contains four subsections:

- A. FACILITY-WIDE EMISSION LIMITATIONS
- B. FLUIDIZED BED COMBUSTOR EMISSION LIMITATIONS
- C. PULP MILL EMISSION LIMITATIONS
- D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (MRRR)

Each subsection and its contents are discussed in detail below except for the MRRR. MRRR are discussed in context of the applicable requirement(s) to which they apply.

If an applicable requirement does not include sufficient monitoring, recordkeeping, and reporting to satisfy WAC 173-401-615(1) & (2), the permit will establish adequate monitoring, recordkeeping and reporting. This is known as gapfilling. Applicable requirements for which gapfilling is proposed can be identified by the note, following the MRRR citation, indicating that at least a portion of the MRRR is from gapfilling.

II.A. Facility-wide Emission Limitations

This subsection contains applicable emission limitations which apply facility-wide. These emission limitations are applicable to all significant and insignificant emission units at the facility. However, monitoring, recordkeeping, and reporting requirements are not required for the insignificant emission units because SRCAA has determined that they are not necessary to assure compliance with facility-wide emission limitations. IEPC is required to certify compliance with the facility-side emission limitations for insignificant emission units.

The following requirements are included in this section.

Condition II.A.1: Use of reasonably available control technology, in accordance with WAC 173-400-040(1). [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(1)(c) (8/16/18) – STATE/LOCAL ONLY]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period

Condition II.A.2: Visible emissions may not exceed 20% except as allowed in WAC 173-400-040. [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(2) (8/16/18)]

MRRR: IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. The requirements for the weekly inspections are specified in the permit (e.g., observer shall be educated in the general procedures for determining the presence of visible emissions, each inspection

shall consist of a 15-second visual observation of each emission source, etc.) Weekly inspections should reasonably assure compliance because IEPC has a consistent compliance history (i.e., the likelihood of violation is low) and because the processes conducted at the facility do not vary a lot over time (i.e., the facility runs at a relatively constant production rate).

If visible emissions are observed during an inspection or are otherwise observed by the permittee, the permittee shall verify and certify that:

- 1) the visible emissions or PM emissions are not the result of equipment malfunction, and the equipment, if any, from which the emissions are released, is performing its normal, designed function;
- 2) the air pollution control equipment, if any, is being operated properly in accordance with normal operating procedures; and
- 3) if the visible emissions are the result of fugitive emissions, reasonable precautions are being taken to minimize emissions.

If 1), 2), and/or, 3) are not being met, corrective action must be taken as soon as possible, but no later than three days from discovery, to correct the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations.

If visible emissions are still observed and 1), 2), and 3) are being met, the permittee shall perform visible emissions testing and, if a particulate matter standard applies, particulate testing, according to the following.

As a means of demonstrating compliance with the visible emissions standard(s), the permittee shall perform, or have performed, RM 9 (August 20, 1996) or Ecology Method 9A (September 20, 2004), whichever is applicable, on the source of the visible emissions. The test shall occur within a reasonable timeframe but no later than 24 hours after discovery of the emissions. If the visible emissions exceed the applicable standard, the permittee shall take timely and appropriate corrective action (as soon as possible, but within 24 hours) to address the problem. The results of the RM 9 or Ecology Method 9A test shall be submitted to SRCAA within two working days of the test.

As a means of demonstrating compliance with PM emission limit(s), the permittee shall perform, or have performed, RM 5 (February 2000) on the source of the emissions. The test shall occur within a reasonable timeframe but no later than 30 days after discovery of the emissions. The results of the RM 5 test shall be submitted to SRCAA as soon as possible but no later than

45 days after the testing. If measured emissions exceed the applicable standard, the permittee shall take appropriate and timely corrective action to address the problem.

Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR

Condition II.A.3: Visible Emissions shall not equal or exceed 20%, as specified in SRCAA Regulation I, Section 6.02 - STATE/LOCAL ONLY. [SRCAA Regulation I, 6.02, 7/9/20- STATE/LOCAL ONLY]

MRRR: The same monitoring is required as for Visible Emissions, WAC 173-400-040, in Condition II.A.2. [WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR.

Condition II.A.4: No person shall cause or permit the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited or to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(3) (8/16/18) – STATE/LOCAL ONLY] [SRCAA Regulation I, 6.05.A, 7/9/20 STATE/LOCAL ONLY]

MRRR: IEPC must perform weekly inspections of the facility during daylight hours while the facility is in operation to verify that this requirement is being met. Records must be kept of each inspection, including the name of the observer, the date and time of the inspection, and the observations made during the inspection. Records shall be kept in accordance Condition I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives.

In addition, IEPC must record and investigate complaints received regarding air quality problems. Complaints shall be investigated as soon as possible, but no later than 8 hours of receipt or by the end of the first regular business day

during which the complaint was received, whichever is later. Receipt of a complaint does not, in and of itself, establish a violation. Records shall be kept of each complaint investigation, including the date and time that the complaint was received, the date and time of the complaint investigation, and observations made during the investigation. Records shall be kept in accordance Condition I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives.

If potential violations of the requirement(s) are observed during the weekly inspections, as part of the complaint investigation, and/or at any other time, IEPC is required to take timely and appropriate corrective action. Action shall be considered timely and appropriate if the problem is solved as soon as possible, but no later than 24 hours of first observing the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the requirement to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations. Records shall be kept of all correction action(s) taken by the permittee. Records shall be kept in accordance Condition I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives.

[WAC 173-401-615(1) &(2), 9/16/02] NOTE: This is a gapfilling MRRR.

Condition II.A.5: Reasonable precautions must be taken to:

- a. Prevent PM from becoming airborne when constructing, altering, repairing, or demolishing buildings, appurtenances, and roads;
- b. Prevent tracking of PM onto paved roadways open to the public;
- c. Prevent the release of air contaminants, as specific in WAC 173-400-040(3)(a), if located in an attainment area and not impacting a NAA;
- d. Prevent PM from becoming airborne when handling, transporting, and /or storing PM; and
- e. Prevent fugitive dust from becoming airborne and source must be maintained and operated to minimize emissions.

[SRCAA Regulation I, 6.05.C, 7/9/20] [SRCAA Regulation I, 6.05.D, 7/9/20]
[SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(4) & (9) (8/16/18)] [SRCAA Regulation I, 6.05.B, 7/9/20]

MRRR: The same monitoring is required as for WAC 173-400-040(2) – Fallout, see Condition II.A.4, above. IEPC must perform weekly inspections during daylight

hours while the emission unit and/or activity is in operation to ensure that the requirements are being met, investigate complaints, and take corrective action if potential problems are identified. [WAC 173-401-615(1) & (2), 9/16/02]
NOTE: This is a gapfilling MRRR.

Condition II.A.6: Recognized good practices and procedures must be used to reduce odors to a reasonable minimum, in accordance with WAC 173-400-040(5) – STATE / LOCAL ONLY [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(5) (8/16/18) – STATE/LOCAL ONLY]

MRRR: The monitoring is the same as required for WAC 173-400-040(2) - Fallout, see Condition II.A.4 above. IEPC must perform weekly inspections, investigate complaints, and take corrective action if potential problems are identified. [WAC 173-401-615(1) & (2), 9/16/02] NOTE: This is a gapfilling MRRR.

Condition II.A.7: It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be:

- a. Injurious to the health and safety of human, animal or plant life;
- b. Injurious or cause damage to property; or
- c. Which unreasonably interferes with enjoyment of life and property.

Compliance with this requirement shall be determined per the provisions given in SRCAA Regulation I, Section 6.04 (7/9/20) [SRCAA Regulation I, Section 6.04, 7/9/20- STATE/LOCAL ONLY]

MRRR: The monitoring is the same as required for WAC 173-400-040(3) - Fallout, see Condition II.A.4 above. IEPC must perform weekly inspections during daylight hours of the emission units at the facility, investigate complaints, and take corrective action if potential problems are identified. Examples of what are effective control apparatus and measures to reduce odors are included in the monitoring condition. [WAC 173-401-615(1) & (2), 9/16/02] Note: At least a portion of this MRRR is gapfilling.

Condition II.A.8: No person shall cause or permit the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of Chapter 173-400 WAC. SRCAA Regulation I, 6.07, 7/9/20

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable

inquiry to determine if this prohibited activity was conducted during the reporting period.

Condition II.A.9: Particulate matter emissions from combustion and incineration units shall not exceed 0.1 gr/dscf corrected to 7% oxygen, as specified in WAC 173-400-050(1) & WAC 173-400-050(3). [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1) & (3) (8/16/18)]

MRRR: The only emission units that are subject to this requirement are the two boilers and the Fluidized Bed Combustor at IEPC. The Fluidized Bed Combustor is subject to a more stringent grain loading standard in Condition II.B.7 (0.023 gr/dscf required in NOC #1169), so compliance with the more stringent grain loading limit will assure compliance with the 0.1 gr/dscf emission limit.

For the two boilers, because of the general correlation between particulate matter emissions and visible emissions (i.e., visible emissions are an indicator of particulate matter), monitoring focuses on identifying visible emissions. IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the boilers have a consistent compliance history and run at a constant production rate on a fairly consistent fuel.

The two boilers have not been source tested for particulate in the past, so there is not an established relationship between particulate emissions and opacity for the boilers. However, the “no visible emissions” (a.k.a., “smoke / no smoke”) concept is acceptable monitoring for the particulate emission standard because SRCAA is of the opinion that something will be visible before a compliance problem exists.

If visible emissions are observed, IEPC must verify and certify that:

- 1) the visible emissions or PM emissions are not the result of equipment malfunction, and the equipment, if any, from which the emissions are released, is performing its normal, designed function;
- 2) the air pollution control equipment, if any, is being operated properly in accordance with normal operating procedures; and
- 3) if the visible emissions are the result of fugitive emissions, reasonable precautions are being taken to minimize emissions.

If visible emissions are still observed and 1), 2), and 3) are being met, the permittee shall perform RM5 particulate testing on the source of the emissions. The test shall occur within a reasonable timeframe but no later than 30 days after discovery of the emissions. The results of the RM 5 test shall be

submitted to SRCAA as soon as possible but no later than 45 days after the testing. If measured emissions exceed the applicable standard, the permittee shall take appropriate and timely corrective action to address the problem.

In addition to the weekly inspections to ensure that the boilers are kept in proper working order, IEPC will be required to service the boilers at least once each calendar year to assure proper combustion is occurring and that the boilers are in proper operating condition. Records must be kept of the date and results of each boiler service. Lastly, IEPC will be required to certify that only natural gas and #6 fuel oil (as back up fuel) were used in the boilers.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1) & (3) (8/16/18)]

NOTE: This is a gapfilling MRRR.

Condition II.A.10: Particulate matter emissions from general process units shall not exceed 0.1 gr/dscf, as specified in WAC 173-400-060 [WAC 173-400-060, 2/19/91] [WAC 173-400-060, 1/10/05 – STATE/LOCAL ONLY]

MRRR: The same monitoring is required as for Condition II.A.9. Because of the general correlation between particulate matter emissions and visible emissions (i.e., visible emissions are an indicator of particulate matter), monitoring focuses on identifying visible emissions.

Additionally, as indicated in Table 3 – CAM Applicability, the ash handling system is subject to Compliance Assurance Monitoring (CAM), as required per 40 CFR Part 64. The proposed CAM for the ash handling system is designed to rely on four performance indicators: ash handling system baghouse pressure drop monitoring, ash handling system baghouse visible emissions, ash handling system transfer line vacuum, and ash load-out visible emissions. Each of these is discussed in detail below:

a. Ash Handling Baghouse Pressure Drop

Baghouse pressure drop was selected as one of the performance indicators because it provides a means of detecting a change in operation that could lead to an increase in emissions. An increase in pressure drop may indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags, but this is also indicated by the presence of visible emissions, which in the second indicator (discussed below). A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

IEPC is required to monitor the pressure drop across the baghouse continuously with a differential pressure gauge whenever the ash handling system is in operation. At least once every hour, the instantaneous pressure drop across the baghouses must be recorded. Hourly pressure drop records shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. The baghouse pressure gauge must be calibrated quarterly, in accordance with the manufacturer recommended procedures. Records of each quarterly calibration shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

The indicator range chosen for the baghouse pressure drop is 2 to 15 inches of water. This range is based on manufacturer recommendations and on IEPC observations of the normal operational pressure drops values. If the pressure drop is outside of this acceptable range, an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment to normal operation (i.e., pressure drop brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all pressure drop excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all pressure drop excursions to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all pressure drop excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

b. Ash Handling Baghouse Visible Emissions

Visible emissions (opacity) was selected as one of the performance indicators. The ash handling system baghouse is subject to an opacity standard of 20% per State and RCAA general requirement for emission units. Because of the general correlation between particulate matter emissions and visible emissions (i.e., visible emissions are an indicator of particulate matter), monitoring focuses on identifying visible emissions. The same monitoring is required for

Condition II.A.2. The permittee shall report all ash handling baghouse opacity excursions and opacity and/or particulate matter exceedances to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6 The report shall include the date, time, duration, and magnitude of all excursions and exceedances that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

c. Ash Transfer Line Vacuum

Similar to the baghouse pressure drop monitoring referenced above, the ash transfer line vacuum was selected as one of the performance indicators because it provides a means of detecting a change in operation that could lead to an increase in emissions. A change in vacuum may indicate problems with the system.

IEPC is required to monitor the pressure drop across the baghouse continuously with a differential pressure gauge whenever the ash handling system is in operation. At least once every hour, the instantaneous pressure drop across the baghouses must be recorded. Hourly pressure drop records shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. The baghouse pressure gauge must be calibrated quarterly, in accordance with the manufacturer recommended procedures. Records of each quarterly calibration shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

The indicator range chosen for the ash transfer line is 3 to 30 inches of water (vacuum). This range is based on manufacturer recommendations and on IEPC observations of the normal operational pressure drops values. If the vacuum is outside of this acceptable range, an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment to normal operation (i.e., vacuum brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all vacuum excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information

and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all pressure drop excursions to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all vacuum excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

d. Ash Load-out visible emissions

Visible emissions (opacity) was selected as one of the performance indicators. The ash load-out is subject to an opacity standard of 20% per State and SRCAA general requirement for emission units. Ash load-out operations must be enclosed to the extent that no visible emissions are observed leaving the enclosure. The permittee shall observe each ash load-out to assure no visible emissions leave the enclosure.

The permittee shall monitor visible emissions as described above. Records of the date and time of each ash load-out and results of the observations of each load-out shall be kept, in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representative.

The permittee shall report all ash load-out excursions and exceedances to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all excursions and exceedances that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1) & (3) (8/16/18)] [40 CFR Part 64, 7/1/01] NOTE: This is a gapfilling MRRR.

Condition II.A.11: SO₂ emissions from each unit shall not exceed 1000 ppm on a dry basis, corrected to 7% oxygen, as specified in WAC 173-400-040(7). [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(7) (8/16/18)]

MRRR: Because SO₂ emissions at this source would only occur from combustion units, monitoring for this requirement consists of using only allowed fuels. The permit limits IEPC to use of natural gas, propane (LPG), and/or fuel oil #2 for all units except for #1 & #2 Boilers which can also burn fuel oil #6 and the FBC

which can burn natural gas, deinking sludge, and paper sludge. Using AP-42 emission factors for boilers, the SO₂ emissions from the boilers will not exceed the 1000 ppm SO₂ emission limit when burning natural gas or fuel oil #6.

IEPC has tested the SO₂ emissions from the FBC at least annually in the past. The most recent test, performed on 11/20/12, showed SO₂ emissions of 0.32 ppm_{dv} from the FBC, which is well below the 1000 ppm limit. Since the FBC runs at a consistent rate with a consistent sludge as the primary fuel, certifying that only allowed fuels were burned should assure compliance with the SO₂ limit.

In addition, the FBC is subject to a more stringent SO₂ standard in Condition II.B.2 (4.05 lb/hr, which correlates to ~56 ppm_v, required in NOC #1169), so compliance with the more stringent SO₂ emission limit will assure compliance with the 1000 ppm SO₂ emission limit.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-040(7) (8/16/18)] NOTE: This is a gapfilling MRRR.

Condition II.A.12: No use of excess stack height or dispersion techniques to meet ambient air quality standards or PSD increments except as allowed under WAC 173-400-200. [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-200 (1/10/05)]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this prohibited activity was conducted during the reporting period.

Condition II.A.13: No varying of emissions according to atmospheric conditions or ambient concentrations except as allowed under WAC 173-400-205. [WAC 173-400-200, 2/19/91]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this prohibited activity was conducted during the reporting period.

Condition II.A.14: No outdoor burning, except as allowed under Chapter 173-425 WAC and/or Regulation I of SRCAA, Section 6.01 [SRCAA Regulation I, Section 2.14(A)(3), 7/9/20, which adopts by reference Chapter 173-425 WAC (3/13/00) – STATE/LOCAL ONLY] [SRCAA Regulation I, 6.01, 7/9/20 - STATE/LOCAL ONLY] [Chapter 173-425 WAC, 10/18/90]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this prohibited activity was conducted during the reporting period.

Condition II.A.15: Handling and use of chlorofluorocarbons (CFCs) must be in accordance with 40 CFR Part 82. [40 CFR Part 82, 4/10/20]

MRRR: Additional monitoring, recordkeeping, and reporting requirements are not necessary to assure compliance with this condition, because the monitoring, recordkeeping, and reporting requirements are included with the applicable requirement (i.e., 40 CFR Part 82, 4/10/20). As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

II.B. Fluidized Bed Combustor Emission Limitations

This portion of the permit covers the fluidized bed combustor (FBC) and ash handling system. Significant fluidized bed combustor emission units are listed in Table 2 on Page 10. The FBC was originally installed in 1991 to burn 30 tons of sludge per day and controlled by a baghouse (FBC and baghouse were approved under NOC #317). In 2003, the FBC was expanded to 45 tons per day and approved (expansion approved under NOC #1169; NOC #317 was voided when NOC #1169 was issued). In 2005, the FBC was expanded to 50 tons per day (expansion approved under revision to NOC #1169). In 2006, a new supplemental baghouse was added to the FBC to handle the additional particulate matter emissions associated with the increased sludge throughput of 50 tons per day (addition of supplemental baghouse approved under revision to NOC #1169). The two FBC baghouses (original baghouse and supplemental baghouse) operate in parallel with the airflow from the FBC split between them. In January 2007, SRCAA approved IEPC's request to use Graymont Lime reagent in the FBC at an addition rate of 75 lbs/hour. In July 2008, NOC #1169 was revised to eliminate the requirement to use the reagent for control of SO₂ emissions from the FBC; this was based on test data provided by IEPC which showed that the FBC can meet the SO₂ limit without using reagent.

Source testing of the FBC occurred after it was expanded to 50 tons per day (March 2006 test) and for particulate again after the supplemental baghouse was added (October 2006 test). This testing showed compliance with the emission limitations of NOC #1169. Many of the MRRR below rely on the assumption that, if operational conditions are similar to those present during the testing are maintained (e.g., the baghouse is operating, temperatures are similar, etc...), emissions from the unit should be in compliance with the NOC and thereby with this operating permit.

The following requirements are included in this section.

Condition II.B.1: A copy of NOC #1169 and the conditions of approval shall be kept on site and made available to SRCAA personnel upon request. [NOC #1169, Condition 1, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.B.2: SO₂ emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 4.05 pounds per hour. [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: NOC #1169 requires IEPC to measure the SO₂ emissions from the fluidized bed combustor at least once every five calendar years, using a portable SO₂ monitor, or by an alternate method approved by SRCAA. The average of the last five SO₂ tests, all performed at a fuel feed rate of 50 dry tons/day of paper sludge, showed SO₂ emissions ranging from 0.03 to 0.04 lbs/hr, which is well below the SO₂ emission limit.

To ensure that the fuel is consistent with the fuel used during the testing, IEPC is required to certify that only natural gas, de-inking sludge, paper sludge, and/or chip screen rejects have been used to fuel the fluidized bed combustor during each reporting period.

[NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.3: NO_x emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 243 ppmv corrected to 7% oxygen. [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: NOC #1169, the approval for the FBC, required initial source testing to measure NO_x emissions. The initial testing, performed on 3/28/06 with the FBC at 50 dry tons per day, showed that the NO_x emissions from the FBC baghouse exhaust averaged 180.1 ppm at 7% O₂, which is below the NO_x emission limit of 243 ppm.

As part of the source testing conducted in March 2006, IEPC conducted ammonia optimization testing to determine the minimum ammonia addition rate necessary for the SNCR system to inject into the vapor space of the FBC. Per

testing results, a minimum of 2.0 gallons per hour ammonia injection rate is required to meet the 243 ppm NOx limit. To ensure that the minimum ammonia injection rate is met, at all times that the fluidized bed combustor is in operation with a throughput of 50 dry tons per day, IEPC is required to continuously monitor the ammonia flow into the vapor space of the FBC to ensure that the 2.0 gallon per hour injection rate is met. At least once every hour, the ammonia flow rate into the FBC must be recorded. If the ammonia flow drops below 2 gallons per hour, corrective action must be taken within 30 minutes to bring the ammonia flow to at least 2 gallons per hour. If corrective action does not bring the ammonia flow to the required minimum rate (i.e., 2 gallons per hour) within 30 minutes, the permittee shall reduce the wood waste derived fuel to the combustor to 45 dry tons per day or less until the ammonia flow problem has been resolved.

The NOx emissions from the FBC are predominantly a result of fuel-bound nitrogen. Therefore, if the fuel burned in the FBC is consistent with the fuel used during the source test, the NOx emissions should not exceed the level measured during the last source test. During the source test, paper sludge (which included chip screen rejects at the time), de-inking sludge, and natural gas were used as fuel in the FBC. To ensure that the fuel does not change, IEPC will be required to certify that only natural gas, deinking sludge, paper sludge, and/or chip screen rejects have been used as fuel in the FBC.

In addition to the ammonia addition and certification that acceptable fuels were used, IEPC is required to perform a combustion test on the fluidized bed combustor to verify compliance with the NOx limit at least once every five calendar years. The average of the last five NOx tests, all performed at a fuel feed rate of 50 dry tons/day of paper sludge, showed NOx emissions ranging from 102 to 160 ppmv (corrected to 7% O2), which is well below the limit of 243 ppmv corrected to 7% O2.

[NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [WAC 173-401-615(1)&(2), 9/16/02] – NOTE: Portion of this MRRR are gapfilled]

Condition II.B.4: CO emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 50 ppmv corrected to 7% oxygen. [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: NOC #1169, the approval for the FBC, required initial source testing to measure CO emissions. The initial testing, performed on 3/28/06 with the FBC at 50 dry tons per day, showed that the CO emissions from the FBC baghouse

exhaust averaged 2.1 ppm at 7% O₂, which is below the CO emission limit of 50 ppm.

CO emissions from the FBC are a product of incomplete combustion, which are related to time, temperature, and turbulence within the FBC. Turbulence is a function of the design of the equipment, and is not something that varies over time. Therefore, since the CO emissions were well below the emission limit during the initial source test, it can be assumed that the turbulence in the FBC is adequate for proper combustion. The FBC has been designed for residence time of at least 2 seconds, at bed temperatures ranging from 1400 to 1800° F. The residence time depends on the size of the combustion chamber and will not change unless the unit is modified. Therefore, based on the initial source test results, it can be assumed that the residence time in the FBC is adequate for proper combustion. During the March 2006 source test, the average vapor space temperature was 1781.7° F. Condition II.B.12 of this permit requires that the vapor space temperature in the fluidized bed combustor be maintained at a minimum temperature of 1600°F, with a residence time of at least 2 seconds, whenever burning wood waste derived fuel (i.e., de-inking sludge, paper sludge, and/or chip screen rejects). If the FBC is operated in this combustion temperature range, CO emissions are expected to remain below the emission standard. For this reason, IEPC will be required to continuously monitor and record the vapor space temperature, in lieu of CO measurements. The vapor space temperature shall be continuously monitored, using a thermocouple or other SRCAA approved method, and shall be electronically recorded using a Distributed Control System (DCS), or SRCAA approved alternative recording device, whenever the FBC is in operation [Note: The change from strip chart to DCS recording was approved under a settlement agreement in response to Civil Penalty No. 8248 dated July 17, 2017]. Records shall be kept, on the DCS or SRCAA approved recording device, of the date, time when wood waste derived fuel is stopped being fed to the combustor, time when wood waste derived fuel commences being fed to the combustor, and explanation for each occasion when wood waste derived fuel (i.e., de-inking sludge, paper sludge, and/or chip screen rejects) is not burned in the fluidized bed combustor.

If the fluidized bed combustor's vapor space temperature falls below 1600° F, when wood waste derived fuel is being burned in the fluidized bed combustor, corrective action must be taken within 30 minutes to bring the vapor space temperature above 1600° F. Records shall be kept, on the DCS or SRCAA approved alternative recording device, of the date, time when the vapor space temperature dropped below 1600° F, time when the vapor space temperature rose above 1600° F, and corrective action taken for each occasion when the vapor space temperature falls below 1600° F. If corrective action cannot bring the vapor space temperature to the required minimum temperature (i.e., 1600° F) within 30 minutes, IEPC shall stop feeding wood derived waste to the

combustor and keep records as described above. Records of these temperatures must be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, made available to SRCAA staff or other authorized representatives.

In addition to the continuous vapor space temperature monitoring, IEPC is required to perform a combustion test on the fluidized bed combustor to verify compliance with the CO limit at least once every five calendar years. The average of the last five CO tests, all performed at a fuel feed rate of 50 dry tons/day of paper sludge, showed CO emissions ranging from 0.1 to 1.3 ppmv (corrected to 7% O₂) which is well below the limit of 50 ppmv corrected to 7% O₂.

[NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.5: VOC emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 30 ppmv (total nonmethane hydrocarbons weighted as methane). [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: NOC #1169, the approval for the FBC, required initial source testing to measure VOC emissions. The initial testing, performed on 3/28/06 with the FBC at 50 dry tons per day, showed that the VOC emissions from the FBC baghouse exhaust averaged 0.6 ppmv (as methane) at 7% O₂, which is well below the VOC emission limit of 30 ppm.

Like CO, VOC emissions from the FBC are a product of incomplete combustion, which are related to time, temperature, and turbulence within the FBC. Therefore, the monitoring involves continuously monitoring the FBC vapor space temperature as a surrogate to VOC emissions (described in the MRRR associated with Condition II.B.4). If the vapor space temperature falls below 1600° F when sludge is being burned in the FBC, corrective action must be taken within 30 minutes, or the FBC must be shut down. [NOC #1169, Condition 10, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.6: Visible emissions from the fluidized bed combustor stack (downstream of both FBC baghouses) shall not exceed 10% for more than 3 minutes in any one hour period. [NOC #1169, Condition 7, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR:

The required monitoring was established for the purposes of Compliance Assurance Monitoring (CAM) for the Fluidized Bed Combustor, authorized by 40 CFR Part 64, 7/1/01. CAM must be designed to provide reasonable assurance of compliance with emission limitations or standards for a pollutant-specific emission unit (PSEU). In order for a PSEU to be subject to CAM, the three conditions described below must be met. The manner in which they are met by the FBC for particulate matter is discussed below:

1. The PSEU must have pre-controlled emissions of the applicable pollutant which exceeds the major source thresholds established in WAC 173-401-200(17). In the case of the FBC, IEPC has estimated the pre-controlled PTE of particulate matter to be 5,031 tpy (based on a PTE of 50 ton/day sludge (27.57% dry weight) combusted. This exceeds the major source threshold of 100 tpy, established in WAC 173-401-200(19).

For emission units subject to CAM, if the post-controlled PTE is estimated to be more than 100 tons per year, the unit is considered a large emissions unit. For large emissions units, data collection frequency must be at least 4 times per hour. The post-controlled PTE of particulate matter from the FBC is estimated to be 8.6 tons per year, based on the grain loading limit of 0.023 gr/dscf. Therefore, the FBC is not considered to be a large emissions unit, since post-controlled emissions are less than 100 tons per year. Per 40 CFR 64.3(b)(iii), the frequency of data collection may be less frequent than 4 times per hour, but must include some data collection at least once per 24-hour period.

2. The PSEU must utilize air pollution control equipment to reduce emissions of the applicable pollutant to a level that meets the established emission limit(s). In the case of the FBC, the particulate emissions of the PSEU are controlled by two pulse-jet baghouses operated in parallel (the exhaust from the FBC is split 60% / 40% between the two baghouses). It is not possible for the FBC exhaust to by-pass the baghouses. Therefore, CAM does not need to address the potential for bypass.
3. The PSEU must be subject to an emission limit for the applicable pollutant. In the case of the FBC, the PSEU is subject to a grain loading particulate limit of 0.023 gr/dscf, given in a Notice of Construction approval, (see Condition II.B.8) and a 10% opacity limit, given in a Notice of Construction approval (Condition II.B.7).

The proposed CAM has been designed to rely on three performance indicators: FBC opacity monitoring, FBC baghouse pressure drop monitoring, and FBC baghouse inlet temperature monitoring. Each of these is discussed in detail below:

a. FBC Opacity Monitoring

Visible emissions (opacity) was selected as one of the performance indicators because it is required to be used under 40 CFR 64.3(d). This section states that if a Continuous Opacity Monitor (COM) is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy the requirements of the CAM rule. The NOC for the FBC requires the use of a COM to demonstrate compliance with the opacity standard. The FBC is subject to an opacity standard of 10%, for not more than 3 minutes during any one hour period.

IEPC is required to monitor the opacity from the fluidized bed combustor (downstream of both baghouses), with a COM and data processing and recording equipment meeting the requirements of 40 CFR 60.13 (1995) and 40 CFR 60, Appendix B (1995). Records of the opacity shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

Daily monitor checks shall be made, including verifying that the recorder is working and that the daily calibration results are showing that the COM is meeting accuracy requirements. If results indicate a malfunction, the monitor shall be serviced as expeditiously as possible to correct the deficiency. In addition, the monitor shall be audited at least every quarter and shall maintain a calibration error of 3% or less, calculated in accordance with 40 CFR Part 60, Appendix B, Performance Specification 1 (1998). If greater errors are detected during any audit, the source of the error shall be identified, corrected, and the monitor re-audited as expeditiously as possible. Correction of the error shall be considered expeditious as long as the COM meets the data availability requirement described below. Records of each daily check and quarterly audit shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

IEPC will be required to recover valid opacity monitoring data for at least 90% of the applicable monitoring periods during each month. Monitoring period means the period over which data are averaged to determine compliance with the applicable requirement. Monitoring periods do not include any period that the fluidized bed combustor does not operate. The 90% value is not explicit in any rule. WAC 173-401-615(1)(b) provides the authority to establish these minimum requirements in that it requires that permits stipulate "periodic monitoring sufficient to yield reliable data from the relevant time period that are

representative of the source's compliance with the permit..."

SRCAA believes that 100% data recovery is not always attainable and that Control Officer review of every instance where data recovery is less than 100% is of questionable value. Instead, SRCAA has determined that a data recovery level of 90% to 100% is acceptable. If the data recovery for any month is lower than 90%, IEPC must file a report within 30 days of the end of that month, explaining the circumstances leading to the lower data recovery percentage. The report will be used to determine if the problem was unavoidable. The monitoring condition will allow IEPC to recover a lower percentage of opacity data than 90% if IEPC can show that the lower rate is due to unavoidable monitoring system malfunctions.

In determining whether a malfunction was unavoidable, the following criteria shall be considered:

- whether the malfunction was caused by poor or inadequate operation, maintenance, or any other reasonably preventable condition;
- whether the malfunction was of a recurring pattern indicative of inadequate operation or maintenance; and
- whether the permittee took appropriate action as expeditiously as practicable to correct the malfunction.

A report shall be filed with SRCAA no later than 30 days after the end of every month during which data was recovered for less than 90% of the monitoring periods for an applicable requirement. The report shall provide the reason the data was not collected (e.g., a description of the malfunction), information regarding operation of the monitored process during the monitoring system malfunction (e.g., process parameters which would be indicative of the compliance status of the process with applicable requirements), information regarding the above three bulleted items, and any further actions that the permittee will take to ensure adequate collection of such data in the future.

The indicator range selected is an opacity less than 10% (3-minute average, as measured by the COM). If the opacity during any 3-minute average exceeds 10% in any one hour period, an exceedance of the opacity standard has occurred, and corrective action shall be initiated as soon as possible, but no later than 12 hours after discovery of the violation to identify and correct the problem. The goal of the corrective action taken shall be to achieve compliance with the opacity standard as soon as possible and to prevent recurrence of the problem. Records of all corrective actions taken and the results of such actions shall be kept, in accordance with Condition I.D.1- Records of Required

Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all opacity exceedances to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all opacity exceedances that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

b. FBC baghouse pressure drop monitoring

Baghouse pressure drop was selected as one of the performance indicators because it provides a means of detecting a change in operation that could lead to an increase in emissions. An increase in pressure drop may indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags, but this is also indicated by the presence of visible emissions, which was the first indicator discussed. A pressure drop across the baghouse also serves to indicate that there is airflow through the control device.

IEPC is required to monitor the pressure drop across each of fluidized bed baghouses continuously with a differential pressure gauge whenever the Fluidized Bed Combustor is in operation. At least once every hour, the instantaneous pressure drop across the baghouses must be recorded. Hourly pressure drop records shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. The baghouse pressure gauges must be calibrated quarterly, in accordance with the manufacturer recommended procedures. Records of each quarterly calibration shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

The indicator range chosen for the baghouse pressure drop is 2 to 8 inches of water. This range is based on manufacturer recommendations and on IEPC observations of the normal operational pressure drops values. If the pressure drop is outside of this acceptable range, an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment to normal operation (i.e., pressure drop brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to

report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all pressure drop excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all pressure drop excursions to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all pressure drop excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

c. FBC temperature monitoring

Baghouse inlet temperature was selected as a performance indicator because it assures the integrity of the bags, especially for a baghouse controlling a combustion process like the FBC. An increase in temperature may cause a concern about burning the bags.

Similar to the pressure drop, IEPC is required to monitor the baghouse inlet temperature continuously for both baghouses with a thermocouple and temperature monitor or gauge whenever the Fluidized Bed Combustor is in operation. At least once every hour, the instantaneous baghouse inlet temperature must be recorded. Hourly temperature records shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. The baghouse inlet temperature monitor or gauge must be calibrated annually, in accordance with the manufacturer recommended procedures. Records of each annual calibration shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

The indicator range chosen for the temperature is 250°F to 500°F. This range is based on manufacturer recommendations and on IEPC observations of the normal operational temperature values [note that the upper temperature limit was increased from 425 to 500°F based on the use of high-temperature bags, per the 4/2/19 revision to NOC #1169]. The average baghouse inlet temperature during the initial particulate source test in October 2006 was 356.5° F. Temperatures higher than 500° F, indicate the potential to damage to the bags. Temperatures lower than 250° F indicate a potential problem with the FBC. If the baghouse inlet temperature is outside of the acceptable range,

an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment to normal operation (i.e., baghouse inlet temperature brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in Condition I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all baghouse inlet temperature excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all baghouse inlet temperature excursions to SRCAA as part of the semiannual monitoring report, described in Condition I.D.6. The report shall include the date, time, duration, and magnitude of all baghouse inlet temperature excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

[NOC #1169, Conditions 8, 12, & 13, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [40 CFR Part 64, 7/1/01]

Condition II.B.7: Particulate matter (PM₁₀) emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 0.023 gr/dscf (front half and back half) corrected to 7% oxygen. [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: The required monitoring was established for the purposes of Compliance Assurance Monitoring (CAM), authorized by 40 CFR Part 64, 7/1/01. CAM must be designed to provide reasonable assurance of compliance with emission limitations or standards for the pollutant specific emission unit (PSEU). In order for a PSEU to be subject to CAM, the three conditions described in the MRRR for Condition II.B.6 must be met. These three conditions are met by the FBC, as explained in the MRRR for Condition II.B.6.

The proposed CAM is the same as for the opacity standard (Condition II.B.6) and has been designed to rely on three performance indicators: FBC opacity monitoring, FBC baghouse pressure drop monitoring, and FBC baghouse inlet temperature monitoring. The indicator ranges for the grain loading standard are the same as those described in the MRRR for Condition II.B.6 for the opacity standard. The applicability of these indicator ranges to the grain loading standard is described below.

a. FBC Opacity Monitoring

Visible emissions (opacity) was selected as one of the performance indicators because it is required to be used under 40 CFR 64.3(d). This section states that if a COM is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy the requirements of the CAM rule. The NOC for the FBC requires the use of a COM to demonstrate compliance with the opacity standard. The FBC is subject to an opacity standard of 10%, for no more than 3 minutes during any one hour period. 40 CFR 634.3(d)(3)(ii) requires that an indicator range for a COM be used to assure compliance with a particulate matter standard. This section states that if an opacity standard applies to the emissions unit, such limit may be used as an appropriate indicator range after considering the type of control device and other site-specific factors applicable to the emissions unit.

NOC #1169, the approval for the FBC, required one-time source testing to measure particulate emissions. Source testing performed on 10/4/06 (after the supplemental baghouse was installed) with the FBC at 50 dry tons per day showed that the PM emissions from the FBC baghouse exhaust averaged 0.0178 gr/dscf @ 7% O₂, which is below the PM emission limit of 0.023 gr/dscf @ 7% O₂. During the test, ammonia was injected into the FBC at a rate of 3.3 gph. The ammonia injection rate is important because higher ammonia injection rates can increase the back half particulate catch (condensable PM emissions). IEPC keeps the ammonia injection pumps at a flow rate of 2.0 gph or above. IEPC does not want to over-inject ammonia into the FBC because it is costly and the permit only requires that they inject 2.0 gph into the FBC. Since IEPC operates the FBC with an ammonia injection rate that is equivalent or less than the level during the 3/28/06 stack test (i.e., less than 4 gph), the back half particulate emissions should remain consistent with the level measured during the stack test, which were in compliance with the PM emission limit.

There is no direct correlation between grain loading and visible emissions for the FBC. However, opacity is an appropriate performance indicator for the grain loading limit because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating optimally, there should be minimal visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the baghouse (e.g., loose or torn bags). If the baghouse is in good working order, the emissions should be similar to those measured during the last source test.

Since the FBC is subject to a 10% opacity limit (based on a three minute

average), an opacity of less than 10% will be used as the indicator range for the grain loading standard. The opacity from the FBC typically runs from 0 – 5.6% opacity, with an average of 1.6% during the past six month period. Therefore, an indicator range of 10% would detect any potential problems with the baghouse. If the opacity during any 3-minute average exceeds 10%, IEPC must initiate corrective action as soon as possible, but no later than 12 hours after discovery of the violation to identify and correct the problem. The goal of the corrective action taken shall be to achieve compliance with the opacity standard as soon as possible and to prevent recurrence of the problem. Records of all corrective actions taken and the results of such actions shall be kept, in accordance with I.D.1- Records of Required Monitoring Information and I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all opacity exceedances to SRCAA as part of the semiannual monitoring report, described in I.D.6. The report shall include the date, time, duration, and magnitude of all opacity exceedances that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

b. FBC baghouse pressure drop monitoring

Baghouse pressure drop was selected as one of the performance indicators because it provides a means of detecting a change in operation that may lead to an increase in emissions. An increase in pressure drop may indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in pressure drop may indicate broken or loose bags, but this is also indicated by the presence of visible emissions, which was the first indicator discussed. IEPC is required to monitor the pressure drop across the fluidized bed baghouses continuously with a differential pressure gauge whenever the Fluidized Bed Combustor is in operation. At least once every hour, the instantaneous pressure drop across the baghouses must be recorded. The baghouse pressure gauge must be calibrated quarterly, in accordance with the manufacturer recommended procedures.

The indicator range chosen for the baghouse pressure drop is: 2 to 8 inches of water. This range is based on manufacturer recommendations and on IEPC observations of the normal operational pressure drops values. The average baghouse pressure drop measured during the initial source test in October 2006 was 2.7 inches of water. The pressure drop across the baghouse averaged 2.9 inches of water during the past six month period, with 5.6 inches of water as the maximum. If the pressure drop is outside of the acceptable range, an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment

to normal operation (i.e., pressure drop brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all pressure drop excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with I.D.1- Records of Required Monitoring Information and I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all pressure drop excursions to SRCAA as part of the semiannual monitoring report, described in I.D.6. The report shall include the date, time, duration, and magnitude of all pressure drop excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

c. FBC temperature monitoring

Baghouse inlet temperature was selected as a performance indicator because it assures the integrity of the bags, especially for baghouses controlling a combustion process like the FBC. An increase in temperature may cause a concern about burning the bags. Similar to the pressure drop, IEPC is required to monitor the baghouse inlet temperature from both baghouses continuously with a thermocouple and temperature monitor or gauge whenever the Fluidized Bed Combustor is in operation. At least once every hour, the instantaneous baghouse inlet temperature must be recorded. The baghouse inlet temperature monitor or gauge must be calibrated annually, in accordance with the manufacturer recommended procedures.

The indicator range chosen for the temperature is: 250°F to 500°F. This range is based on manufacturer recommendations and on IEPC observations of the normal operational temperature values [note that NOC #1169 was revised 4/2/19 to increase the upper limit temperature from 425°F to 500°F based on use of high temperature bags in the baghouse]. The FBC baghouse operates at an average temperature of 364° F. The average baghouse temperature during the initial source test for particulate, conducted in October 2006, was 356.5° F. Temperatures higher than 425° F, indicate the potential for the bags to burn. Temperatures lower than 250° F indicate a potential problem with the FBC. If the baghouse inlet temperature is outside of the acceptable range, an excursion has occurred, and corrective action must be taken as soon as possible, but no later than 12 hours from discovery, to return the equipment to normal operation (i.e., baghouse inlet temperature brought within acceptable range) and to prevent recurrence of the problem. Taking corrective action does

not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in I.D.7-Prompt Reporting of Deviations. Records shall be kept of the date, time, duration, and magnitude of all baghouse inlet temperature excursions. In addition, records shall be kept of all corrective actions taken and the results of such actions. All records shall be kept in accordance with I.D.1-Records of Required Monitoring Information and I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives. IEPC is required to report all baghouse inlet temperature excursions to SRCAA as part of the semiannual monitoring report, described in I.D.6. The report shall include the date, time, duration, and magnitude of all baghouse inlet temperature excursions that occurred during the reporting period. The report shall also include a description of all corrective actions taken and the results of such actions.

Overall, the proposed CAM is expected to assure compliance with the grain loading standard. If the opacity level is 10% or less (the opacity limit given in Condition II.B.6 of this permit), as measured by the COM, based on a three minute average, and the temperature and pressure drop are kept within the acceptable ranges, the baghouse will be assumed to be in good working order. If the baghouse is in good working order, the level of emissions should be similar to those measured during the last source test.

[NOC #1169, Conditions 8, 12, & 13, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [40 CFR Part 64, 7/1/01]

Condition II.B.8: Ammonia emissions from the combined new fluidized bed combustor baghouse exhaust and the original fluidized bed combustor baghouse system exhaust stack shall not exceed 20 ppm. [NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: NOC #1169, the approval for the FBC, required initial source testing to measure ammonia emissions. Source testing performed on 3/28/06 with the FBC at 50 dry tons per day showed that the ammonia emissions from the FBC baghouse exhaust averaged 1.04 ppm at 7% O₂, which is below the ammonia emission limit of 20 ppm.

During the stack test on 3/28/06, the ammonia injection rate was 4.0 gallons per hour. IEPC keeps the ammonia injection pumps set at an ammonia flow rate at or above 2.0 gallons per hour. IEPC is required to continuously monitor the ammonia flow into the vapor space of the FBC at all times that the fluidized bed combustor is in operation with a throughput of 50 dry tons per day. At least once every hour, the ammonia flow rate into the FBC must be recorded.

IEPC does not want to over-inject ammonia into the FBC because it is costly, and the permit only requires that they inject 2 gph into the FBC. Since IEPC operates the FBC with an ammonia injection rate that is equal to or less than the level during the 3/28/06 stack test (i.e., \leq 4 gallons per hour), the ammonia emissions should remain consistent with the level measured during the stack test, which were well below the 20 ppm emission limit.

[NOC #1169, Condition 4, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [WAC 173-401-615(1)&(2), 9/16/02] – NOTE: This is a gapfilling MRRR]

Condition II.B.9: Only natural gas, de-inking sludge, paper sludge, chip screen rejects, and/or other SRCAA approved fuels shall be used to fire the fluidized bed combustor. [NOC #1169, Condition 3, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: IEPC will be required to certify that only these fuels are used. [WAC 173-401-615(1), 9/16/02] – This is a gapfilling MRRR

Condition II.B.10: No more than 50 tons of wood waste derived fuel (i.e., de-inking sludge, paper sludge, and/or chip screen rejects) shall be burned in the FBC each day. [NOC #1169, Condition 3, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: IEPC is required to keep records of types and amounts of natural gas and wood waste derived fuel burned in the FBC each day. Wood waste derived fuel shall include chip screen rejects, paper sludge, and de-inking sludge. In lieu of records of the amount of wood waste derived fuel burned each day, it is acceptable for the permittee to multiply the number of hours that the fluidized bed combustor operates each day by the maximum rated capacity of the fluidized bed combustor (i.e., 50 tons per day). [NOC #1169, Condition 3, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.11 Ash from the fluidized bed combustor shall be handled in a manner to minimize fugitive emissions. [NOC #1169, Condition 9, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: In order to ensure that fugitive emissions from the ash handling are minimized, IEPC must do the following:

a. The fluidized bed combustor ash collection system baghouse shall be properly maintained and operated at all times that particulate matter emissions from the unit are occurring. Proper operation and maintenance shall include, but is not limited to:

- i. Maintaining the vacuum in the ash transfer line within the following range: 3 to 30 inches of water (vacuum); and
- ii. Maintaining the ash baghouse pressure drop within the following range: 2 to 15 inches of water.

The acceptable range for the vacuum in the ash transfer line (i.e., 3-30 inches of water) and the acceptable baghouse pressure drop range (2 to 15 inches of water) were provided by IEPC and represent the ranges for proper operation of the equipment. These ranges are based on manufacturer recommendations.

IEPC will be required to perform hourly checks of the vacuum in the ash transfer line and the pressure drop across the ash handling baghouse filters.

If the vacuum in the ash transfer line or baghouse pressure drop are outside the above ranges, corrective action will be taken as soon as possible, but no later than three days from discovery, to correct the problem.

Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the obligation to report any permit deviations as required in I.D.7-Prompt Reporting of Deviations.

Records of each hour's readings and any corrective actions taken as a result of such readings shall be kept, in accordance with I.D.1- Records of Required Monitoring Information and I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

b. Ash load-out operations must be enclosed to the extent that no visible emissions are observed leaving the enclosure. The permittee shall observe each ash load-out to assure no visible emissions leave the enclosure. Records of the date and time of each ash load-out and results of the observations of each load-out shall be kept, in accordance with Condition I.D.1- Records of Required Monitoring Information and Condition I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representative.

If emissions are observed by the permittee, appropriate corrective action shall be taken. Taking corrective action does not relieve the permittee from complying with the underlying requirement, nor does it relieve the permittee from the requirement to report any permit deviations as required in I.D.7-Prompt Reporting of Deviations.

Records shall be kept of each transfer, including the date and time of the transfer, a description of emissions observed, if any, corrective actions taken, if any, and other information required in I.D.1-Records of Required Monitoring Information. Records shall be kept in accordance with I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives.

[WAC 173-401-615(1) & (2), 8/15/01] – This is a gapfilling MRRR

Condition II.B.12: Vapor space temperature in the fluidized bed combustor shall be maintained at a minimum of 1600°F, with a residence time of at least 2 seconds, whenever wood waste derived fuel (i.e., de-inking sludge, paper sludge, and/or chip screen rejects) is being burned in the combustor. [NOC #1169, Condition 10, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: The FBC has been designed with a residence time of at least 2 seconds in the temperature range that IEPC operates the unit. The residence time depends on the size of the combustion chamber and will not change unless the unit is modified.

Per NOC #1169, IEPC is required to continuously monitor the vapor space temperature in the FBC and keep records. If the fluidized bed combustor's vapor space temperature falls below 1600° F when wood waste derived fuel is being burned in the fluidized bed combustor, corrective action must be taken within 30 minutes to bring the vapor space temperature above 1600° F. Records shall be kept on the DCS or SRCAA approved alternative recording device, of each occasion when the vapor space temperature falls below 1600° F, including the date, time when the vapor space temperature dropped below 1600° F, time when the vapor space temperature rose above 1600° F, and corrective action taken. If corrective action cannot bring the vapor space temperature to the required minimum temperature (i.e., 1600° F) within 30 minutes, the permittee shall stop feeding wood derived waste to the combustor.

Records shall be kept, on the DCS or SRCAA approved alternative recording device, of each occasion when the flow of wood waste derived fuel (i.e., de-inking sludge, paper sludge, and/or chip screen rejects) to the combustor is stopped, including the date, time when wood waste derived fuel is stopped being fed to the combustor, time when wood waste derived fuel commences being fed to the combustor, and explanation for each shutdown. All required records shall be kept in accordance with I.D.1-Records of Required Monitoring Information and I.D.5- Retention of Records and, upon request, shall be made available for inspection by SRCAA staff or other authorized representatives. [NOC #1169, Condition 11, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06,

7/9/08, and 4/2/19]

Condition II.B.13: At all times that the fluidized bed combustor is in operation with a throughput of 50 dry tons per day, the selective non-catalytic reduction system shall be in operation and injecting a 20% aqua ammonia solution into the vapor space of the FBC at a minimum flow rate of 2.0 gallons per hour or an alternate flow rate approved by SRCAA. [NOC #1169, Condition 15, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: At all times that the fluidized bed combustor is in operation with a throughput of 50 dry tons per day, IEPC is required to continuously monitor the ammonia flow into the vapor space of the FBC. At least once every hour, the ammonia flow rate into the FBC must be recorded. Hourly ammonia flow rate records shall be kept in accordance with I.D.1-Records of Required Monitoring Information and I.D.5-Retention of Records and, upon request, shall be made available to SRCAA staff or other authorized representatives.

If the ammonia flow drops below 2 gallons per hour, corrective action must be taken within 30 minutes to bring the ammonia flow to at least 2 gallons per hour. Records shall be kept of the date, time when the ammonia flow dropped below 2 gallons per hour, time when the ammonia flow rose to at least 2 gallons per hour, and any corrective action taken. All records shall be kept for five years in accordance with I.D.5 and upon request, made available to SRCAA staff or other authorized representatives. If corrective action does not bring the ammonia flow to the required minimum rate (i.e., 2 gallons per hour) within 30 minutes, the permittee shall reduce the wood waste derived fuel to the combustor to 45 dry tons per day or less until the ammonia flow problem has been resolved.

[WAC 173-401-615(1)&(2), 9/16/02] – NOTE: This is a gapfilling MRRR

Condition II.B.14: Mercury emissions to the atmosphere from the FBC exhaust stack shall not exceed 3.2 kg (7.1 lbs) per 24 hour period. [SRCAA Regulation I, Section 2.17(A)(1), 7/9/20, which adopts by reference 40 CFR 61.52(b), 2000]

MRRR: Mercury emissions from the FBC occur primarily as a result of mercury in the paper and de-ink sludge. The mercury in the sludge is emitted from the FBC (i.e., it is not removed in the FBC). Therefore, the mercury level in the sludge is an indicator of the mercury emissions from the FBC. IEPC has tested its paper and de-ink sludges for mercury, and the results showed mercury levels of less than 600 grams per 24 hour period. 40 CFR §61.55 does not require any further monitoring if emissions are below 1600 grams per 24 hour period. IEPC must use only the fuels allowed in its approved Notice of Construction (i.e., natural gas, paper sludge, de-ink sludge, and/or chip screen rejects.) With the

use of these fuels, mercury emissions should be below the emission standard. [WAC 173-401-615(1) & (2), 9/16/02] – NOTE: This is a gapfilling MRRR

Condition II.B.15: Incineration shall occur during approved hours only. (This unit is approved for 24-hour per day operation.) Incinerator is a unit of approved design only. [SRCAA Regulation I, Section 6.03.C, 7/9/20 - STATE/LOCAL ONLY]

MRRR: No monitoring is required. The FBC is a unit of approved design. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.B.16: Records shall be kept of the types and amounts of fuel combusted each day in the FBC. [SRCAA Regulation I, Section 2.17(A)(1), 7/9/20, which adopts by reference 40 CFR §60.48c(g), 2009]

MRRR: The MRRR for this condition is outlined in the NSPS, given in 40 CFR 60, Subpart Dc. The following records shall be kept for the fluidized bed combustor:

- a. Records of types and amounts of fuel burned each day. Fuel types shall include natural gas and wood waste derived fuel. Wood waste derived fuel shall include chip screen rejects, paper sludge, and de-inking sludge. Since it is not possible for IEPC to monitor the amount of wood waste derived fuel sent to the boiler each day, it is acceptable for IEPC to multiply the number of hours that the fluidized bed combustor operates each day by the maximum rated capacity of the fluidized bed combustor (i.e., 50 tons per day) to determine the amount of wood waste derived fuel is burned each day;
- b. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the fluidized bed combustor; and
- c. Records of the occurrence and duration of any malfunction of the fluidized bed combustor's air pollution control equipment.

The records shall be kept in a file and each record shall be kept for at least 5 years¹ following the date of the record. The records shall also be kept in accordance with I.D.1- Records of Required Monitoring Information and I.D.5 – Retention of Records and shall be made available to SRCAA staff or other authorized representatives. [SRCAA Regulation I, Section 2.17(A)(1), 7/9/20,

¹ 40 CFR 60.7(f) and 60.48c(l) require that records be kept for at least two years. The requirement in WAC 173-401-615 is that *Records be kept for five years overrides the two year requirement given in the CFR.

which adopts by reference 40 CFR §60.48c(g), 2009] [NOC #1169, Conditions 3 & 14, 12/30/03 as revised on 4/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.17: At all times, including periods of startup, shutdown, and malfunction, the fluidized bed combustor, two baghouses, and Selective Non-Catalytic Reduction (SNCR) system shall be operated in a manner consistent with good air pollution control practices. [SRCAA Regulation I, Section 2.17(A)(1), 7/9/20, which adopts by reference 40 CFR §60.11(d), 2000] [NOC #1169, Condition 2, 12/30/03 as revised on 4/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

MRRR: Per NOC #1169, IEPC is required to develop an operation and maintenance (O&M) plan which provides a description of how the fluidized bed combustor, two baghouses, and selective non-catalytic reduction system will be operated to minimize emissions. Manufacturer O&M plans are generally acceptable. The plan shall include the manufacturer recommended pressure drop ranges for the baghouses.

Maintenance records shall be kept to document that the O&M plan is being followed. Records shall be kept in accordance with I.D.5, and, upon request, shall be made available for inspection by SRCAA staff or other authorized representatives.

[NOC #1169, Condition 2, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19]

Condition II.B.18: A tune-up shall be conducted on the FBC biennially, as described in 40 CFR 63.11223 (b). Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. [SRCAA Regulation I, Section 2.18(A), 7/9/20, which adopts by reference 40 CFR §63.11223(a), 2/1/13]

MRRR: The monitoring for this federal condition is given in the rule, 40 CFR 63, Subpart JJJJJJ. Beginning in 2015, by no later than March 1 of every calendar year, a compliance certification report shall be prepared, and upon request, submitted to EPA, Region 10, or delegated authority. The compliance certification report shall contain the information specified in 40 CFR 63.11225(b)(1)&(2) and include records of the most recent biennial tune-up. Records of compliance certification reports shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records*. [SRCAA Regulation I, Section 2.18(A), 7/9/20, which adopts by reference 40 CFR §63.11223(a), 2/1/13]

Condition II.B.19: At all times the FBC and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with

safety and good air pollution control practices for minimizing emissions. [SRCAA Regulation I, Section 2.18(A), 7/9/20, which adopts by reference 40 CFR §63.11223(a), 2/1/13]

MRRR: The monitoring for this condition is same as for Condition II.B.17. Per NOC #1169, IEPC is required to develop an operation and maintenance (O&M) plan which provides a description of how the fluidized bed combustor, two baghouses, and selective non-catalytic reduction system will be operated to minimize emissions. Manufacturer O&M plans are generally acceptable. The plan shall include the manufacturer recommended pressure drop ranges for the baghouses.

Maintenance records shall be kept to document that the O&M plan is being followed. Records shall be kept in accordance with I.D.5, and, upon request, shall be made available for inspection by SRCAA staff or other authorized representatives.

Additionally, beginning in 2015, by no later than March 1 of every calendar year, a compliance certification report shall be prepared, and upon request, submitted to EPA, Region 10, or delegated authority. The compliance certification report shall contain the information specified in 40 CFR 63.11225(b)(1)&(2) and include records of the most recent biennial tune-up. Records of compliance certification reports shall be kept in accordance with Condition I.D.1-Records of Required Monitoring Information and Condition I.D.5-Retention of Records.

[[NOC #1169, Condition 2, 12/30/03 as revised on 3/29/04, 6/10/05, 7/13/06, 7/9/08, and 4/2/19] [SRCAA Regulation I, Section 2.18(A), 7/9/20, which adopts by reference 40 CFR §63.11223(a), 2/1/13]

Some requirements of 40 CFR 63, Subpart JJJJJ and the NOC #1169 approval conditions are no longer applicable because they are one time requirements that have been satisfied. These requirements and conditions are listed below and are not included in IEPC's operating permit. It should also be noted that there are some one-time requirements that were included as part of NOC #1169, which were already satisfied and therefore were taken out of the NOC #1169 approval order during one of the permit revisions (e.g., initial source testing requirement for NOx, CO, ammonia, SO2, and PM10 with FBC at 50 tons per day, which occurred prior to the installation of the supplemental FBC baghouse). These requirements that are no longer contained in the most current NOC #1169 approval order are not listed in the table below.

CITATION	DESCRIPTION	REASON NOT INCLUDED IN THE PERMIT
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NOC #1169, Condition 1, 12/30/03, as revised on 3/29/04, 6/10/05, and 7/13/06	SRCAA must be notified seven days prior to start-up of the supplemental FBC baghouse.	Notification was received prior to start-up. This is a one-time requirement that has been met.
NOC #1169, Condition 2, 12/30/03, as revised on 3/29/04, 6/10/05, and 7/13/06	Approval becomes void if supplemental baghouse is not constructed within 18 months	Supplemental baghouse was installed within 18 months, so this condition is no longer applicable.
NOC #1169, Condition 7, 12/30/03, as revised on 3/29/04, 6/10/05, and 7/13/06	Source testing must be done within 90 days after the supplemental baghouse commences operation to demonstrate compliance with the particulate emission limit.	Source testing of the FBC with the supplemental baghouse was conducted on October 4, 2006. Results showed that the FBC was in compliance with the particulate emission limit. Test results showed average PM grain loading was 0.0178 gr/dscf (front and back half combined), which is lower than PM limit of 0.023 gr/dscf given in Condition 6 of NOC #1169.
40 CFR §63.11225(a)(2), 2/1/13	Submittal of an Initial Notification to EPA by no later than 1/20/14.	The initial notification was submitted to EPA on 1/20/14.
40 CFR §63.11214(b), 2/1/13	Performance of an initial tune-up on the FBC by no later than 3/21/14.	The initial tune-up was performed on 2/21/14.
40 CFR §63.11214, 2/1/13	Performance of an energy assessment on the FBC by no later than 3/21/14	The energy assessment was performed 2/18/14 & 2/19/14.

II.C. Pulp Mill Emission Limitations

This portion of the permit covers the pulp mill emission limitations. Significant pulp mill emission units are listed in Table 3 on Page 11. The entire pulp mill (RMP lines #1 & #2 and TMP refiner lines #3 & #4) was installed prior to SRCAA 's Notice of Construction program. TMP Refiner Lines #3 and #4 were modified in 1995 to increase pulp production to 85 dry tons per day per line (approved by SRCAA under NOC #708). In 2005, TMP Refiner Lines #3 and #4 were expanded to process 100 dry tons per day (approved by SRCAA under NOC #1321; NOC #708 was voided when NOC #1321 was issued). The #5 TMP Refiner Line was constructed in 2009 (approved under NOC #1463).

TMP Refiner Lines #3 & #4 each have a primary, secondary, and tertiary refiner. The refiner line #3 has two exhaust stacks: one on the primary refiner/cyclone and one on the secondary refiner. The refiner line #4 has three exhaust stacks: one on the primary refiner/cyclone, one on the conveyor, and one on the secondary refiner.

The pulp mill also includes a reject refining line, which consists of a primary and secondary

atmospheric refiner. The reject refiner system was originally installed in 1978. The original system consisted only of the primary reject refining stage. The system was modified in 1988, to add the secondary reject refiner. After 1991, when the newsprint recycling plant was on-line, the reject refining line was not used extensively. In April 2001, IEPC brought a new paper machine online. With the new paper machine, the mill reject throughput was at 40 tons per day. IEPC submitted a NOC application for the reject refiner line when the first AOP renewal application was submitted to SRCAA. Since the reject refiner line was not used during the initial review of the Air Operating Permit for IEPC, this equipment was not referenced on the original Air Operating Permit application or in SRCAA 's inspection reports. The reject refiner line was approved by SRCAA under NOC #1096. In April 2002, SRCAA approved IEPC's request to increase the pulp processing limit for the reject refiner line to 58 dtpd (approved under revision to NOC #1096). In June 2005, SRCAA approved IEPC's request to increase the pulp processing limit for the reject refiner line to 100 dtpd (approved under revision to NOC #1096).

In 2009, IEPC installed a new thermo-mechanical pulping line with a heater recovery system at the facility. The new system (#5 TMP) was approved under NOC #1463, and has enough capacity to effectively replace the four refiner existing lines at the facility. However, IEPC maintains the ability to operate RMP #1 & #2 lines and TMP #3 & #4 lines when the #5 TMP is down for maintenance. Additionally, IEPC has preserved the capability to operate all five lines concurrently at some future time if market conditions for wood supply or recycled materials change. The #5 TMP is expected to have an average annual up time of approximately 95%. Emissions from the #5 TMP are exhausted through a start-up scrubber exhaust (during start-up operation) and a vent condenser (during normal operation).

The following requirements are included in this section:

Condition II.C.1: Particulate matter emissions from each of the #3 and #4 refiner line exhaust stacks shall not exceed 0.04 gr/dscf. [NOC #1321, Condition 6, 12/21/05]

MRRR: For the two refiner lines, because of the general correlation between particulate matter emissions and visible emissions (i.e., visible emissions are an indicator of particulate matter), monitoring focuses on identifying visible emissions. IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the refiner lines have a consistent compliance history and run at a constant production rate.

The refiner lines have not been source tested for particulate in the past, so there is not an established relationship between particulate emissions and opacity for the boilers. However, the "no visible emissions" (a.k.a., "smoke / no smoke") concept is acceptable monitoring for the particulate emission standard because SRCAA is of the opinion that because we concur that something will be visible before a compliance problem exists.

If visible emissions are observed, IEPC must verify and certify that:

- 1) the visible emissions or PM emissions are not the result of equipment malfunction, and the equipment, if any, from which the emissions are released, is performing its normal, designed function;
- 2) the air pollution control equipment, if any, is being operated properly in accordance with normal operating procedures; and
- 3) if the visible emissions are the result of fugitive emissions, reasonable precautions are being taken to minimize emissions.

If visible emissions are still observed and 1), 2), and 3) are being met, IEPC must perform RM5 particulate testing on the source of the emissions. The test shall occur within a reasonable timeframe but no later than 30 days after discovery of the emissions. The results of the RM 5 test shall be submitted to SRCAA as soon as possible but no later than 45 days after the testing. If measured emissions exceed the applicable standard, the permittee shall take appropriate and timely corrective action to address the problem.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR

Condition II.C.2: A copy of the Notice of Construction and the conditions of approval shall be kept on site and made available to SRCAA personnel upon request. [NOC #1321, Condition 3, 12/21/05]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.3: The exhaust stacks associated with the refiner lines #3 & #4 shall exhaust vertically. No elbows, tees, or stack caps that impede the vertical flow of exhaust air shall be installed at the end of the stacks. [NOC #1321, Condition 4, 12/21/05]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.4: Visible emissions from each of the exhaust stacks associated with the refiner lines #3 & #4 shall not exceed 10% opacity. [NOC #1321, Condition 4, 12/21/05]

MRRR: The monitoring is the same as for Condition II.A.2. IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the refiner lines have a consistent compliance history and run at a constant production rate. In addition, the pulp that is processed through the refiner lines has high moisture content, so particulate emissions are not expected.

If visible emissions are observed, IEPC must verify and certify that:

- 1) the visible emissions or PM emissions are not the result of equipment malfunction, and the equipment, if any, from which the emissions are released, is performing its normal, designed function;
- 2) the air pollution control equipment, if any, is being operated properly in accordance with normal operating procedures; and
- 3) if the visible emissions are the result of fugitive emissions, reasonable precautions are being taken to minimize emissions.

If visible emissions are still observed and 1), 2), and 3) are being met, as a means of demonstrating compliance with the visible emissions standard(s), the permittee shall perform, or have performed, RM 9 (July 1, 1993) on the source of the visible emissions. The test shall occur within a reasonable timeframe but no later than 24 hours after discovery of the emissions. If the visible emissions exceed the applicable standard, the permittee shall take timely and appropriate corrective action (as soon as possible, but within 24 hours) to address the problem. The results of the RM 9 test shall be submitted to SRCAA within two working days of the test.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR

Condition II.C.5: Visible emissions from each chip silo separator and cyclone separator shall not exceed 5% opacity. [NOC #1321, Condition 7, 12/21/05]

MRRR: The monitoring is the same as for Condition II.C.4 IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the chip silo separator and cyclone separator have a consistent compliance history and do not have moving parts. In addition, the wood chips are large, so particulate emissions are not expected. The purposes of the chip silo separator and cyclone separator are to size the wood chips; not for air pollution

purposes. Provided that the pulp mill is operated using proper operating procedures, there should not be any particulate emissions from the silo separators and cyclone separators.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR

Condition II.C.6: No more than 35,500 tons of oven dried pulp shall be processed in refiner line #3 or #4 during any consecutive 12 month period. [NOC #1321, Condition 8, 12/21/05]

MRRR: The monitoring for this condition is contained in NOC #1321, which is the approval order for the refiner lines #3 & #4. No later than the 15th of each month, the amount of pulp processed in refiner line #3 and #4 during the previous month must be totaled and recorded. If the amount of pulp processed in either refiner line #3 or #4 during any month exceeds 2,950 oven dried tons, the amount of pulp processed in refiner line #3 and #4 during the last consecutive twelve month period shall be totaled and recorded. Records shall be kept in accordance with I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives. [NOC #1321, Condition 8, 12/21/05]

Condition II.C.7: A copy of the approved NOC #1096 and the conditions of approval must be kept on site and made available to SRCAA personnel upon request. [NOC #1096, Condition 1, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.8: The reject refiner system shall be maintained in proper working condition, according to the manufacturer recommended practices and procedures. [NOC #1096, Condition 2, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR: IEPC is required to keep the manufacturer operation and maintenance plan for the reject refiner system (i.e., primary refiner and secondary refiner) on site. Records shall be kept to document that the manufacturer recommended practices and procedures are being followed. Records shall include information required in I.D.1- Records of Required Monitoring Information. Records shall be kept in accordance with I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives. [WAC 173-401-615(1) & (2), 9/16/02]

NOTE: This is a gapfilling MRRR.

Condition II.C.9: The primary and secondary refiner stacks shall exhaust vertically. No elbows, tees, or stack caps that impede the vertical flow of exhaust air shall be installed at the end of the stacks. [NOC #1096, Condition 3, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.10: Visible emissions from the primary and secondary reject refiner stacks shall not exceed 5% opacity. [NOC #1096, Condition 4, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR: The monitoring is the same as for Condition II.C.4. IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the refiner lines have a consistent compliance history and run at a constant production rate. In addition, the pulp that is processed through the refiner lines has high moisture content, so particulate emissions are not expected.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR

Condition II.C.11: No more than 100 tons of oven dried pulp per day, as measured at the dewatering screw press feed, shall be processed in the primary or secondary reject refiner. [NOC #1096, Condition 5, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR: Per NOC #1096, IEPC is required to keep records of the total amount of oven dried pulp processed in the primary and secondary reject refiners each day. Records shall include information required in I.D.1- Records of Required Monitoring Information. Records shall be kept in accordance with I.D.5- Retention of Records, and, upon request, such records shall be made available for inspection by SRCAA staff or other authorized representatives. [NOC #1096, Condition 5, 10/19/01 as revised on 4/16/02 and 6/7/05]

Condition II.C.12: Within 90 days after the reject refiner system achieves a potential throughput of 100 tons of oven dried pulp per day, a stack test shall be performed on the primary and secondary refiner exhausts to quantify the chloroform emissions. [NOC #1096, Condition 6, 10/19/01 as revised on 4/16/02 and 6/7/05]

MRRR:

Because of “bottle-necking” issues in the process flow downstream of the refiner system, IEPC has not yet achieved a potential throughput of 100 tons of oven dried pulp per day and has not performed the testing described above. However, per NOC #1096, within 90 days after the reject refiner system does achieve a potential throughput of 100 tons of oven dried pulp per day, a stack test shall be performed on the primary and secondary refiner exhausts to quantify the chloroform emissions. The testing, specified below, shall be conducted, unless alternate test methods or equivalent tests are requested in writing and approved by SRCAA:

- a. The source test plan is subject to SRCAA approval. It is the responsibility of IEPC to submit the source test plan sufficiently in advance for SRCAA to review and approve the plan, prior to the test.
- b. During the test, the primary and secondary refiners shall be operated as close to 100% of the maximum capacity as possible (i.e., 100 tons of oven dried pulp per day).
- c. The source test shall consist of three separate test runs.
- d. The following constituents shall be measured during each test run:
 - i. Volumetric flow rate, per EPA Method 1; and
 - ii. Chloroform, per EPA Method TO-14.
- e. A report, detailing the source test results, shall be submitted to SRCAA for approval no later than 45 days after each test is performed. If the results show that total chloroform emissions from the reject refining system (primary and secondary refiners) are lower than 10 pounds per year (Small Quantity Emission Rate for chloroform given in Chapter 173-460 WAC), no further analysis is required. However, if the results show that total chloroform emissions from the reject refining system are higher than 10 pounds per year, IEPC must submit an analysis to SRCAA which demonstrates ambient impact compliance for chloroform, according to the requirements given in WAC 173-460-080. If IEPC cannot demonstrate compliance with the requirements of WAC 173-460-080 for chloroform, a request for a second tier analysis, according to WAC 173-460-090, shall be submitted to SRCAA.

[NOC #1096, Condition 6, 10/19/01 as revised on 4/16/02 and 6/7/05]

Condition II.C.13: A copy of the Notice of Construction and the conditions of approval shall be kept on site and made available to SRCAA personnel upon request. [NOC #1463, Condition 1, 8/13/09 as revised on 9/7/23]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.14: IEPC shall continue to meet the compliance plan, dated 8/2/10, submitted to SRCAA on 8/4/10. [NOC #1463, Condition 2, 8/13/09 as revised on 9/7/23]

MRRR: No monitoring is required. As with all permit terms, IEPC must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Condition II.C.15: The #5 TMP system and heat recovery system shall be maintained in proper working condition, according to the manufacturer recommended practices and procedures.

MRRR: The monitoring for this requirement is given in NOC #1463, Condition 3. IEPC is required to keep maintenance records for the #5 TMP system and heat recovery system for the previous 5 years of operation and make the records available to SRCAA personnel upon request. [NOC #1463, Condition 3, 8/13/09 as revised on 9/7/23]

Condition II.C.16: Visible emissions from the vent condenser exhaust associated with the #5 TMP shall not exceed 5% opacity. [NOC #1463, Condition 4, 8/13/09 as revised on 9/7/23]

MRRR: The monitoring for this condition is the same as for Condition II.A.2. IEPC must perform weekly inspections during daylight hours for the purpose of identifying visible emissions. Weekly inspections should reasonably assure compliance because the refiner lines have a consistent compliance history and run at a constant production rate. In addition, the pulp that is processed through the refiner lines has high moisture content, so particulate emissions are not expected.

If visible emissions are observed, IEPC must verify and certify that:

- 1) the visible emissions or PM emissions are not the result of equipment malfunction, and the equipment, if any, from which the emissions are released, is performing its normal, designed function;
- 2) the air pollution control equipment, if any, is being operated properly in accordance with normal operating procedures; and
- 3) if the visible emissions are the result of fugitive emissions, reasonable precautions are being taken to minimize emissions.

If visible emissions are still observed and 1), 2), and 3) are being met, as a means of demonstrating compliance with the visible emissions standard(s), the permittee shall perform, or have performed, RM 9 (July 1, 1993) on the source of the visible emissions. The test shall occur within a reasonable timeframe but no later than 24 hours after discovery of the emissions. If the visible emissions exceed the applicable standard, the permittee shall take timely and appropriate corrective action (as soon as possible, but within 24 hours) to address the problem. The results of the RM 9 test shall be submitted to SRCAA within two working days of the test.

[WAC 173-401-615(1) & (2), 9/16/02] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-050(1), (8/16/18)] [SRCAA Regulation I, Section 2.14(A)(1), 7/9/20, which adopts by reference WAC 173-400-060 (10/25/18)] NOTE: This is a gapfilling MRRR. .

Condition II.C.17: The amount of oven dried pulp processed in the #5 TMP line shall not exceed 550 tons per calendar day [NOC #1463, Condition 5, 8/13/09 as revised on 9/7/23]

MRRR: NOC #1463 requires that IEPC must keep of the amount of oven dried pulp processed in the #5 TMP each day. Records shall be kept for the previous 5 years of operation and made available to SRCAA personnel upon request. [NOC #1463, Condition 8, 8/13/09 as revised on 9/7/23]

Some conditions of the approved Notice of Constructions for the pulp mill lines, NOC #1321 (TMP lines #3 & #4), and NOC #1463 (TMP # 5 line) are no longer applicable because they are one time requirements that have been satisfied. These conditions are listed below and are not included in IEPC's operating permit.

CITATION	DESCRIPTION	REASON NOT INCLUDED IN THE PERMIT
NOC #1321, Condition 1, 12/21/05	SRCAA must be notified seven days prior to start-up of the TMP lines #3 & #4 after the expansion project has been completed.	Notification was received prior to start-up. This is a one-time requirement that has been met.
NOC #1321, Condition 2, 12/21/05	Approval becomes void if construction of expansion project for TMP lines #3 & #4 is not constructed within 18 months	Expanded refiner lines were constructed within 18 months, so this condition is no longer applicable.
NOC #1463, Condition 1,	SRCAA shall be notified of the	Notification was received prior to start-

8/13/09 [note that NOC #1463 was revised 9/7/23]	anticipated start-up date of the #5 TMP system with a heat recovery system.	up. This is a one-time requirement that has been met.
NOC #1463, Condition 2, 8/13/09 [note that NOC #1463 was revised 9/7/23]	<p>The NOC #1463 order of approval shall become invalid if:</p> <ul style="list-style-type: none"> a. Construction is not commenced within eighteen months after the receipt of the approval, or b. Construction is discontinued for a period of eighteen months or more, or c. Construction is not completed within eighteen months of commencement. <p>SRCAA may extend any of the eighteen month periods referenced above, provided the proponent demonstrates that an extension is justified and the criteria given in SRCAA Regulation I, Section 5.13.B are met.</p>	The approved equipment was installed within 18 months, so this condition is no longer applicable.
NOC #1463, Condition 3, 8/13/09 [note that NOC #1463 was revised 9/7/23]	No later than 90 days after the #5 TMP line commences steady-state operation, IEPC shall perform testing to quantify formaldehyde, acetaldehyde, and total VOC emissions from the vent condenser exhaust and start-up scrubber exhaust.	This requirement was completed on 6/4/10. The test results showed that formaldehyde emissions from the #5 TMP line had potential to exceed the applicable Acceptable Source Impact Levels (ASIL) at the line PTE production rate of 475 ODTPD.
NOC #1463, Condition 4, 8/13/09 [note that NOC #1463 was revised 9/7/23]	The #5 TMP line shall comply with the requirements of Chapter 173-460 WAC (version in effect on April 7, 2009).	Results from the testing, required per NOC #1463, Condition 3, Condition showed that formaldehyde emissions from the #5 TMP line had potential to exceed the applicable Acceptable Source Impact Levels (ASIL) at the line PTE production rate of 475 ODTPD. On 8/2/10, IEPC submitted a compliance plan to SRCAA detailing actions and deadlines that IEPC will implement to bring the #5 TMP line into compliance with the requirements of Chapter 173-460 (version in effect on April 7, 2009). The compliance plan was completed on 10/14/10. On 12/9/10, revised air dispersion modeling was performed,

		<p>using AERMOD, to demonstrate compliance with the requirements of Chapter 173-460 WAC. No further action is required to verify compliance with the requirements of Chapter 173-460.</p> <p>On 8/15/23, IEPC submitted refined air dispersion modeling results for acetaldehyde and formaldehyde impacts from the vent condenser exhaust; the current version of AERMOD (version 22112) was used. The refined modeling demonstrated acetaldehyde and formaldehyde impacts will comply with the requirements of Chapter 173-460 WAC at an increased production limit of 550 odtpd.</p>
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SECTION III - PERMIT SHIELD

This section of the permit lists regulations for which the facility has requested, and SRCAA proposes to grant, a permit shield per WAC 173-401-640(2).

This section lists the requirements for which a shield has been requested and the findings related to this request, i.e., whether or not a shield is appropriate and the facts used to make this determination.

III A. Requirements For Which a Shield Will Be Granted

1PS. 40 CFR Part 60, Subparts D & Db (New Source Performance Standards for Fossil Fuel-Fired Industrial Steam Generators), 1999

Findings: IEPC's #2 Boiler, rated at 120 MMBTU/hour, was constructed in 1959. The boiler has not been modified or reconstructed, as defined in 40 CFR Part 60, since installation. Because of the construction date and heat input rating of #2 Boiler, 40 CFR 60, Subparts D and Db do not apply to this boiler. Subpart D applies only to boilers rated at more than 250 MMBTU/hour constructed after August 17, 1971. Subpart Db applies only to boilers constructed, modified or reconstructed after June 19, 1984.

2PS. 40 CFR Part 60, Subpart Dc (New Source Performance Standards for Fossil Fuel-Fired

Industrial Steam Generators), 1999

Findings: IEPC's #1 Boiler, rated at 48 MMBTU/hour, was constructed in 1955. The boiler has not been modified or reconstructed, as defined in 40 CFR Part 60, since installation. Because of the construction date of #1 Boiler, 40 CFR 60, Subpart Dc does not apply to this boiler. Subpart Dc applies only to boilers constructed, modified or reconstructed after June 9, 1989.

3PS. Chapter 173-434 WAC (State Regulation for Solid Waste Incineration Facilities), 12/22/03
– STATE/LOCAL ONLY

Findings: Chapter 173-434 WAC, SOLID WASTE INCINERATOR FACILITIES, applies to all solid waste incinerators designed to burn 12 tons or more per day. Solid waste is defined in the rule to exclude wood waste or sludge from waste water treatment plants. The sludge burned in the permittee's fluidized bed combustor is sludge from the facility's wastewater treatment plant. Because the sludge is, by definition, not solid waste, this rule does not apply to the permittee's fluidized bed combustor.

4PS. Chapter 173-490 WAC (Emission Standards and Control for Sources of VOCs), 2/2/98

Findings: This chapter applies only to areas that have been classified as nonattainment for ozone. In addition, the rule only regulates specific categories of VOC sources. These categories include

- Petroleum refineries;
- Petroleum liquid storage tanks;
- Gasoline loading terminals;
- Bulk gasoline plants;
- Gasoline dispensing facilities;
- Surface coaters;
- Open top vapor degreasers;
- Conveyorized degreasers;
- Cutback asphalt paving;
- Cold cleaners;
- Dry cleaners;
- Graphic arts systems;
- Surface coating of miscellaneous metal parts and products;
- Surface coating of flatwood paneling; and
- Aerospace assembly and component coating operations

Because Spokane County is not currently a nonattainment area for ozone, the shield can be granted because the rule does not apply.

STAFF REVIEWER'S SIGNATURES

PREPARED BY: _____
Joe Southwell

DATE: _____

This Statement of Basis and the Operating Permit to which it applies have been reviewed by:

_____, P.E.
April Westby, P.E.

DATE: _____

Scott Windsor, Control Officer

DATE: _____