Department of Ecology

Statement of Basis

Source Information:

Air Operating Permit (AOP) No.:	000085-0
Source Name:	Simpson Tacoma Kraft L.L.C.
County:	Pierce
Issued Date:	December 12, 2011
Effective Date:	December 12, 2011
Expiration Date:	December 12, 2016
AFS Plant ID Number:	600-592-181

Permitting Authority Information:

Preparer:	Robert Carruthers, P.E.
Ecology Program/Region:	Industrial Section
Address:	300 Desmond Drive P.O. Box 47600 Olympia, WA 98504-7600
Phone:	(360) 407-6954
Fax:	(360) 407-6102

kv

Table of Contents

LIST OF ABBREVIATIONS AND ACRONYMS

Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CAM	Compliance assurance monitoring
CEMS	Continuous emission monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COMS	Continuous opacity monitoring system
CO2	Carbon dioxide
dscf	Dry standard cubic feet
Ecology	Washington State Department of Ecology
EPA	United Stated Environmental Protection Agency
EU	Emission unit
gr/dscf	Grains/dry standard cubic foot (7,000 grains = 1 pound)
HAP	Hazardous air pollutant
hr	Hour
IEU	Insignificant emission unit
lb	Pound
MACT	Maximum Achievable Control Technology
mm	One million
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Parts 61 and 63)
NOC	Notice of Construction
NOx	Oxides of nitrogen
NSPS	New source performance standards
O2	Oxygen
PM	Particulate matter
PM10	Particulate matter with an aerodynamic diameter $\leq$ 10 microns
ppmdv	Parts per million, on a dry volume basis
PSD	Prevention of significant deterioration
PTE	Potential to emit
SCR	Selective catalytic reduction
SO2	Sulfur dioxide
SOx	Oxides of sulfur
tpy	Tons per year
VOC	Volatile organic compound
WAC	Washington Administrative Code

INTRODUCTION

This document, the statement of basis or support document, summarizes the legal and factual basis for the permit conditions in the air quality operating permit issued by the Washington State Department of Ecology to the source. Unlike the air quality operating permit, this document is not legally enforceable. This statement of basis summarizes the emitting processes at the facility, air emissions, permitting and compliance history, the statutory or regulatory provisions that relate to the facility, and the steps taken to provide opportunities for public review of the permit. The permittee is obligated to follow the terms of the permit. Any errors or omissions in the summaries provided here do not excuse the permittee from the requirements of the permit.

The format and content of this support document has changed over time to reflect the evolving thought about what constitutes an effective support document. EPA audited Ecology's Title V Permitting in 2006. As a result of this audit, Ecology is currently developing a revamped support document format. The support document for this particular permit renewal effort follows the draft format for the statement of basis outline available at the time of this permit renewal effort.

PERMIT AUTHORITY

Title V of the Federal Clean Air Act Amendments required all states to develop a renewable operating permit program for industrial and commercial sources of air pollution. The Washington State Clean Air Act (RCW 70.94 Revised Code of Washington) was amended in 1991 and 1993 to provide the Department of Ecology and Local Air Agencies with the necessary authority to implement a state-wide operating permit program. The law requires all sources emitting one hundred tons or more per year of a criteria pollutant, ten tons of a hazardous air pollutant, or twenty-five tons in the cumulative of hazardous air pollutants, to obtain an operating permit. Criteria pollutants include sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, and volatile organic compounds.

Chapter 173-401 of the Washington Administrative Code (WAC), which specified the requirements of Washington State's Operating Permit Regulation became effective November 4, 1993. United States Environmental Protection Agency (EPA) granted Washington's program interim approval December 9, 1994. Final approval of Washington's program was granted on August 13, 2001. The current version of the regulation was filed on September 16, 2002.

FACILITY INFORMATION

Company History and Information:

Simpson Tacoma Kraft Company, LLC

Ownership:

Simpson Tacoma Kraft, LLC.
917 East 11th Street
Tacoma, WA 98421-3039

Responsible Official:

John Conkle – Vice President and General Manager
801 Portland Avenue
Tacoma, WA 98421

Contacts:

Jim Montgomery – Environmental Manager
801 Portland Avenue
Tacoma, WA 98421
(253) 596-0266

Location:

801 Portland Avenue
Tacoma, WA 98421

AFS/ORIS Code:

600-592-181

Attainment Classification:

Wapato Hills-Puyallup River Valley area is "in attainment" for all regulated pollutants. However, EPA recently strengthened the national air quality health standards for PM2.5. Air monitoring data shows that the Wapato Hills-Puyallup River Valley area persistently exceeded the standard during 2004-2006. EPA has accepted Ecology's recommendation to designate the Wapato Hills-Puyallup River Valley area nonattainment for PM2.5.

Basis for Title V applicability:

The facility, by definition, is a major source.
Source Industrial Classification – 2621
NCAICS – 322121

SOURCE DESCRIPTION

Process description:

General Facility

Simpson operates an integrated pulp and paper mill on approximately 60 acres adjacent to the mouth of the Puyallup River on Commencement Bay in Tacoma, Washington. The mill operates under standard industrial classification (SIC) code 26, pulping and paper making. Its products include market pulp; natural and bleached Kraft paper used for linerboard, bags, sacks, and similar food and industrial grade packaging; and other paper products. Its fiber sources consist of softwood and hardwood chips, as well as recyclable materials. The mill also produces electricity from the cogeneration steam turbine. The mill operates 24 hours per day, 355 or more days per year. The layout of the facility is presented in Appendix A.

Chip Handling

The chip handling area includes unloading, transfer systems, chip storage piles, screening of wood chips, chip storage silos, control rooms, and testing facilities. Trucks and barges are unloaded and the wood chips are transferred by conveyor systems to the storage pile. Chips reclaimed from the storage pile are fed to the unscreened storage silos. Chips are fed to the screening system from the unscreened storage silos. The screening process separates the chips by size removing oversized chips and fines. The screened chips are transferred to the screened storage silos.

Biomass Handling

The cogeneration turbine uses steam produced in the mill boilers to produce electricity that is then supplied into the grid. Part of the steam produced at the mill is supplied from the Power Boiler No.7. Predominantly biomass fuel is burned in Power Boiler No. 7. The biomass is supplied by truck deliveries to the on-site biomass storage. The biomass material is fed from the storage pile to the Power Boiler No. 7 for combustion, producing steam for the mill processes and cogeneration turbine.

Pulping, Washing and Bleaching

The pulping, washing, and bleaching systems produce unbleached and bleached pulp from two continuous Kamyr digesters. In the pulping process, chips from the screened storage silos are steamed and fed into the digesters. In the digesters, white liquor (a solution of caustic, sodium carbonate, and sodium sulfide) from the white liquor storage tank is absorbed by the chips. The digesters use steam to heat the cooking liquor to cook the chips. The pulp is then discharged to tanks that feed the pulp to the washer line. The washer line extracts the cooking liquor and washes the pulp. The extracted liquid (dissolved wood lignin) called black liquor is pumped to the weak liquor storage tanks. The washed pulp is sent to the high density storage tanks. Pulp is sent from the high density storage tanks to either the bleaching system or to the paper machines.

In the bleaching system, the pulp is bleached in stages using caustic, hydrogen peroxide, oxygen, and chlorine dioxide in a series of towers and washers.

The white liquor used as the pulping chemical is prepared on site in a closed loop system. Dissolved salts from the burning of the black liquor in the Recovery Boiler create a solution of sodium carbonate and sodium sulfide called green liquor. The green liquor is clarified and reacted with lime (calcium oxide) to produce the white liquor. The by-product of the reaction is calcium carbonate which is heated in the kilns, producing lime used to produce white liquor.

Bleaching Chemical Production and Chlorine Dioxide Generation

The chlorine dioxide generation process produces chlorine dioxide, a bleaching agent used in the pulp bleaching process. Sulfuric acid, methanol, and sodium chlorate solution react in the chlorine dioxide generator to create chlorine dioxide. The chlorine dioxide is cooled and stored for use at the bleach plant. The salt cake byproduct from the chlorine dioxide generator is filtered and used as chemical makeup into the weak black liquor.

Chemical Recovery and Steam Generation

The power and recovery systems recover the chemicals used in the pulping process and produce energy in the form of steam for the Mill processes and cogeneration turbine. The steam production system is composed of the No. 4 Recovery Boiler and Power Boilers No.6 and No.7. The No.4 Recovery Boiler burns black liquor to produce steam and to recover pulping chemicals. Power Boiler No.6 fires natural gas or fuel oil to produce steam. Power Boiler No.7 fires biomass, natural gas, and oil, or a combination thereof to produce steam.

Simpson operates a steam turbine electrical generator driven by steam produced from the #4 Recovery Boiler and #7 Power Boiler. This allows the facility to cogenerate and distribute electric power to the grid. The power house steam turbine generator is equipped with a condenser. The non-contact cooling water passes through the Cogeneration Cooling Tower. The Cogeneration Cooling Tower emission unit has the two (2) Cooling Tower Exhausts.

The chemical recovery process is responsible for recovering chemicals needed for the kraft pulping process. The recovery process starts by evaporating water from the weak black liquor obtained from the pulp washer. The weak black liquor is pumped into three sets of evaporators. The evaporators consist of multiple stages which concentrate the liquor to approximately 50% black liquor solids. The liquor is further concentrated to approximately 68% black liquor solids in the concentrator. To replace sulfur and sodium that has been lost throughout the recovery loop, salt cake, a by-product from the production of chlorine dioxide, is added to the weak black liquor. The black liquor and salt cake solution is then combusted in Recovery Boiler No. 4. The organic portion of the black liquor is burned producing heat. Inorganics from the solution are collected at the bottom of the furnace as a molten mass (smelt) and fall into either of two smelt dissolving

tanks. In the smelt dissolving tanks, smelt is mixed with weak wash from the recausticizing process to produce green liquor. Green liquor is clarified and is then reacted with calcium oxide in the slaker to produce white liquor. To ensure a complete reaction of the green liquor and the calcium oxide, the solution is agitated in a series of mixing tanks called causticizers. The suspended solids remaining in the white liquor are separated from the liquor in a pressure filter. The resulting clarified white liquor is stored for reuse in the digesters. The separated solids or lime mud (calcium carbonate) is sent to the lime mud washing. Lime mud is filtered in the mud pressure filter or clarifiers, producing weak wash and washed mud. Weak wash is stored and later used in the smelt dissolving tanks to produce green liquor. The washed mud is filtered to remove water and then fed to the lime kilns where it is converted to calcium oxide. The calcium oxide (lime) is then stored in silos for use in the slaker.

OCC Pulp System

The OCC system uses Old Cardboard Containers (OCC) to produce pulp used by the paper machines to produce paper and board upgrades. The OCC raw material is delivered to the mill by truck. The OCC process uses a pulping system to break the fibers apart from the raw material with water and then a series of cleaners and washers to prepare the pulp for reuse. The OCC process produces the clean pulp for the paper machines and waste material that is treated in the mill waste treatment system.

Paper Making Processes

The mill uses two paper machines to produce paper and board grades. The paper machines use unbleached pulp from the pulping process, bleached pulp from the bleaching process, and OCC pulp from the OCC system. The paper machines use steam and chemicals to produces the paper and board grades. The paper machines also create waste water that is treated in the mill waste treatment system.

Waste Water Treatment

The wastewater treatment plant processes the effluent from the Mill before being discharged into Commencement Bay. The wastewater enters the primary clarifier settling the suspended solids from the wastewater. The primary effluent is pumped to a UNOX (activated sludge) treatment system that biodegrades the waste materials before discharging to secondary clarifiers. Final settling of solids occurs in the secondary clarifiers before the final effluent flows to the outfall diffuser.

A schematic showing the physical layout of the various emission units and process which make up the Simpson mill are provided in Appendix A.

Summary of Emissions (tpy)

Pollutants	Maximum Allowable Emissions (tpy)	2008 Actual Emission (tpy)
PM	**460**	**435**
PM_{10}	**672**	**264**
SO_2	**759**	**467**
NO_X	**1235**	**673**
CO	**2788**	**1123**
VOC	**296**	**213**
TRS(1)	**29**	**20**
Chloroform	**12**	**9**
Hydrochloric Acid	**89**	**81**
Methanol	**178**	**70**
Total HAPs	**329**	**209**

(1) TRS includes hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

Federal Air Quality Requirements: Applicability for MACT, NSPS, NESHAP, or CAM

NESHAP Applicable: MACT Subparts S, MM
NSPS: Subparts BB and Db
CAM: See CAM Section for Applicability & Requirements

State Air Quality Requirements: Applicability for BACT, PSD, LAER, or Acid Rain

PSD Applicable: Power Boiler No. 7
LAER Applicable: Not Applicable
BACT Applicable: Recovery Boiler No. 4, Power Boiler No. 7

Compliance/Enforcement history and remedies:

On February 24, 2010, the Ecology issued NOV #7407 for the reported exceedance of the Power Boiler No.7 short-term NOx emission limit of 0.20 lb/MMBtu 30-day rolling average.

In a letter dated March 25, 2010, Simpson requested that ecology revise the PSD Permit NOx limits for the Power Boiler No. 7. The letter states that the 0.20 lb/MMBtu limit was established based on the usage of proper combustion control and previously-approved overfire air improvement (OFA) to the power boiler, but the assumptions about the degree of NOx reduction from OFA were wrong. Simpson submitted the cogeneration project permit application before OFA was operational; it has since become operational and has not provided the NOx reductions predicted by the engineering firm that designed it.

As a result, Simpson was unable to maintain continuous compliance with the 0.20 lb/MMBtu NOx limit while also meeting the short-term CO limit. The letter describes Simpson's efforts to reduce NOx emissions and provided justifications for proposed new Nox limits of 0.30 lb/MMBtu based on the heat input value of the fuel on a 30-day rolling average and 782 tons per year.

On June 10, 2010, the Ecology and Simpson entered into Agreed Order 7688 to resolve the above noncompliance issues. Until the NOx limit is revised, this order constitutes Ecology's enforcement response to NOV #7407 and potential subsequent NOx limit exceedances from Power Boiler No. 7.

Overview of Permit Changes, Significant Regulatory Changes, and Significant Compliance Demonstration Procedures

Permit Renewal Changes

The following permit conditions have been modified or included as part of the 2010 permit renewal process:

A.1. Further clarification has been added to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

B.1. Further clarification has been added to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

B.4. Clarification has been added for how surrogate monitoring parameters can be adjusted over time.

C.3. Further clarification has been to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

D.1.b and D.1.c. The applicable requirements set forth in the underlying Order No. 5157-AQ07 have been added to the permit.

E.1, E.2.b,c,d, E.3, E.5. The applicable requirements set forth in the underlying Order PSD-06-02 have been added to the permit.

Condition P has been added to incorporate the applicable reporting requirements of the Greenhouse Gas Regulation 173-441-WAC which became effective January 2, 2011.

Facility-Wide General Requirements Condition 11. This is a condition added to all Industrial Section Permits as they are renewed and acknowledges the concept of credible evidence.

Determinations of Compliance

Compliance determinations made in this Permit signify that Simpson considers the facility currently in compliance with the stated applicable requirement and that it anticipates that this unit will, in the future, remain in compliance with the applicable requirement.

Due to unavoidable conditions, including startups, shutdowns, and malfunctions, Simpson has experienced measured exceedances of certain applicable requirements cited in this application. Simpson has reported these exceedances as required. Simpson does not consider these exceedances indicative of noncompliance, and where applicable, considers the sources in compliance with the applicable requirement.

Compliance with numerical limits is evaluated by comparing actual emissions, rounded to the same number of significant digits as the numeric limit specified by rule, to the numeric limit itself.

Specific Areas of Compliance

PM_{10}

Wapato Hills-Puyallup River Valley area **is** designated as an attainment area for PM_{10}**.** However, EPA recently strengthened the national air quality health standards for $PM_{2.5}$. Air monitoring data shows that the Wapato Hills-Puyallup River Valley area persistently exceeded the standard during 2004-2006. EPA has accepted Ecology's recommendation to designate the Wapato Hills-Puyallup River Valley area nonattainment for $PM_{2.5}$.

Compliance Assurance Measure (CAM)

Under 40 CFR Part 64, Simpson Tacoma Kraft is required to submit a Compliance Assurance Monitoring (CAM) Plan to the Washington Department of Ecology as part of Simpson's Title V Operating Permit Renewal Application. A CAM Plan is required for each federally-enforceable applicable standard for each emission unit that meets the following criteria:

The unit uses a control device to achieve compliance. [40 CFR 64.2(a)(2)]

The potential pre-control emissions of the applicable pollutant from the unit are at least 100% of the major source amount (normally 100 tons per year). [40 CFR 64.2(a)(3)]

The unit is not otherwise exempt from the CAM rule because federal standards such as new source performance standards (NSPS) or national emission standards for hazardous air pollutants (NESHAP) proposed after November 15, 1990, or stratospheric ozone requirements apply. [40 CFR 64.2(a)(4)]

Table D-1 lists the emission limitation or standards for applicable pollutants and CAM applicability for emission units at Simpson Tacoma Kraft. Applicable requirements that are exempt under reasons in the above paragraph are excluded, unless the limitation is related to a non-exempt limit or standard [40 CFR 64.2(a)(1) & (4)].

> 40 CFR 64.1 says, "Control device means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere."

It goes on to specify equipment such as an electrostatic precipitator (ESP) or a scrubber. However, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics to control or limit emissions are specifically exempt. For example, the Power Boiler No. 7 is required to meet an SO2 standard. Simpson achieves this standard by limiting the sulfur in the fuel, which is not considered a control device under Part 64, and therefore Simpson is not required to submit a CAM Plan for that standard as it relates to Power Boiler No. 7. Similarly, the definition of control equipment specifically excludes the use of combustion or other process design feature to control or limit emission. For pollutants (such as CO, NOX, TRS, and VOCs), where Simpson uses combustion controls or process design Table D-1 indicates that Simpson does not use control equipment to achieve the standard.

Opacity standards are different because opacity is not measured in mass rate or mass concentration, such as pounds per hour or grams per cubic meter. In fact, there is no mass specifically relating to opacity. That is, Simpson cannot emit 100 tons a year of opacity and therefore the pre-control emissions of opacity are assumed to be less than 100 tons per year. However, there is often a relationship between opacity and particulate matter emissions and in the cases of the Recovery Boiler No. 4 and Power Boiler No. 7, a continuous opacity monitoring system (COMS) is the proposed monitoring approach. Therefore, CAM plan for opacity is not required.

Most EPA emission standards adopted since 1990 are specifically exempt from requiring a CAM Plan submittal, because EPA has included all the necessary elements of the plan in the standard (e.g. 40 CFR 63 subparts S and MM).

TABLE D-1. SUMMARY OF CAM APPLICABILITY

Parameter	Limit	Control Equipment	Potential Pre-Control Emissions > 100 tons?	CAM in Rule?	CAM Plan Required?	Applicable Requirements
Recovery Boiler No. 4						
Particulate	0.10 gr/dscf @ 8% O_2	ESP	Yes	No	No	WAC 173-405-040(1)(a) for the particulate limit. WAC 173-405-040(10) for the O&M requirements
Particulate	0.044 gr/dscf @ 8% O_2	ESP	Yes	Yes	No	40 CFR 60.282(a)(1)(i); 40 CFR 63.862 (a)(1)(i)
SO_2	500 ppm @ 8% O_2, hourly average	None	Yes	No	No	WAC 173-405-040(11)(a)
SO2	150 ppm @ 8% O_2, 30-day rolling average	None	Yes	No	No	Order No. DE 01AQIS-3114
SO2	669 tons/year as 12-month rolling total	None	Yes	No	No	Order No. DE 01AQIS-3114
Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period.	ESP	NA	No	No	WAC 173-405-040(6)
Opacity (when firing black liquor)	Average 35% for more than 6 consecutive minutes in any 60 minute period	ESP	NA	No	No	40CFR 60.282(a)(1)(ii) and WAC 173-405-040(6) for the opacity limit. 40 CFR 60.284(a)(1) for COM operational parameters. 40 CFR 60.284(d), (e) for reporting requirements and excess emission allowance.
Opacity (when firing or co-firing oil)	Average 20% for more than 6 consecutive minutes in any 60 minute period except for one 6-minute Period per hour of not more than 27 %.	ESP	NA	No	No	40 CFR 60.43b(f) for the opacity limit. 40 CFR 60.48b(a) for COM requirement. 40 CFR 60.49b(h)(i) for reporting. 40 CFR 60.13 for COM operational requirements.
NOx	85 ppm @ 8 % O2, 30-day rolling avg.	None	Yes	No	No	Order NO. DE 99AQIS-94

Parameter	Limit	Control Equipment	Potential Pre-Control Emissions > 100 tons?	CAM in Rule?	CAM Plan Required?	Applicable Requirements
NOx	515 tons/year as 12-month rolling total	None	Yes	No	No	Order No. DE 01AQIS-3114
NOx	475 tons/year as 12 month rolling avg.	None	Yes	No	No	Order NO. DE 99AQIS-94
Oil Heat Input	Maintain annual oil capacity factor< 10% so that 40 CFR 60.44b NOx limit not applicable.	None	NA	NA	No	40 CFR60.44b(c) for capacity factor limit. 40 CFR 60.49b(d) for reporting requirements.
CO	400 ppm @ 8% O2, 30-day rolling average	None	Yes	No	No	Order No. DE 01AQIS-3114
CO	1672 tons/year as 12-month rolling total	None	Yes	No	No	Order No. DE 01AQIS-3114
VOC	0.50 lb/ton BLS	None	Yes	No	No	Order No. DE 01AQIS-3114
TRS	5 ppm by volume on a dry basis, corrected to 8 % O2, 12 hr average	None	Yes	No	No	40 CFR 60.283(a)(2) (10/17/00) 40 CFR 60.284 (10/17/00) Monitoring
Lime Kiln Nos. 1 and 2						
Particulate	0.13 gr/dscf @ 10% O_2	Scrubber	Yes	No	No	WAC 173-405-040(3)(a) for particulate limit. WAC 173-405-040(10) for O&M requirements.
Particulate	0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen	Scrubber	Yes	Yes	No	40 CFR 63.862(a)
SO_2	500ppm @ 10% O_2, hourly avg.	None	Yes	No	No	WAC 173-405-040(11)(a)
Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period	Scrubber	NA	No	No	WAC 173-405-040(6) for basis of opacity limit.
Smelt Dissolving Tanks						
Particulate	1.5 lbs/10,000 lbs BLS	Scrubber	Yes	No	No	WAC 173-405-040(2)
Particulate	0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired	Scrubber	Yes	Yes	No	40 CFR 63.862(a)

Parameter	Limit	Control Equipment	Potential Pre-Control Emissions > 100 tons?	CAM in Rule?	CAM Plan Required?	Applicable Requirements
Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period	Scrubber	NA	No	No	WAC 173-405-040(6)
Power Boiler No. 6						
Particulate	0.10 gr/dscf @ 7% O_2	None	Yes	No	No	WAC 173-405-040(5)(c)
Opacity	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours	None	NA	No	No	WAC 173-405-040(6)
SO_2	1000 ppm @ 7% O_2, hourly average	None	Yes	No	No	WAC 173-405-040(11)(b)
Power Boiler No. 7						
Particulate	0.01 gr/dscf @ 7% O_2	ESP	Yes	No	Yes	Order DE97AQ-I004 and WAC 173-405-040(5)(a) 40 CFR §60.43b(c)(1) for particulate. WAC 173-405-040(10) for O&M.
Opacity	10% avg. for more than 6 consecutive minutes in any 60 minute period	ESP	NA	No	No	Order DE 97AQ-I004 and for opacity limit. 40 CFR §60.43b(f) and 40 CFR §60.48b(a) for basis of CEM requirements.
NOx	0.30 lbs/MMBTU, 30 day rolling average	None	Yes	No	No	Order DE 97AQ-I004 and 40 CFR §60.44b(d) for NOx Limit. 40 CFR §60.48b(b) and 40 CFR §60.49b(i) for CEM requirements.
NOx	363 tpy annual rolling total calculated monthly	None	Yes	No	No	Order DE 97AQ-I004
SO_2 from oil	75,000 lbs steam/ hour when using $\leq$ 2% sulfur fuel oil	None	Yes	No	No	Order DE 97AQ-I004

Parameter	Limit	Control Equipment	Potential Pre-Control Emissions > 100 tons?	CAM in Rule?	CAM Plan Required?	Applicable Requirements
SO_2 from oil	175,000 lbs steam/hour when using ≤ 1% sulfur fuel oil	None	Yes	No	No	Order DE 97AQ-I004
SO_2 from oil	10% annual capacity factor from oil	None	Yes	No	No	Order DE 97AQ-I004
SO_2 from oil	111 tpy	None	Yes	No	No	Order DE 97AQ-I004
SO_2 from oil	0.5 lb/MMBTU, 30 day rolling average	None	Yes	No	No	40 CFR 60.42b(d)(1) 40 CFR 60.42b(e) 40 CFR 60.47b(a) 40 CFR 60.49b(j) 40 CFR 60.47b(b)
SO_2 from oil	1000 ppm @ 7% O_2, hourly average	None	Yes	No	No	WAC 173-405-040(11)(b)
CO	600 ppm @ 7% O_2, 30 day rolling average	None	Yes	No	No	Order DE 97AQ-I004
CO	450 tpy	None	Yes	No	No	Order DE 97AQ-I004
VOC	0.15 lbs/MMBTU	None	Yes	No	No	Order DE 97AQ-I004
Caustic Department						
Particulate	≤0.10 gr/dscf @ standard conditions	Scrubber	No	No	No	WAC 173-400-060

Standards for each emission unit for which a CAM plan is required are shown below:

TABLE D-2. REQUIREMENTS NEEDING A CAM PLAN

Unit	Parameter	Limit	Applicable Requirements
Recovery Boiler No. 4	Particulate	0.10 gr/dscf @ 8% O_2	WAC 173-405-040(1)(a) for the particulate limit. WAC 173-405-040(10) for the O&M requirements
		0.044 gr/dscf @ 8% O2	40 CFR 60.282(a)(1)(i); 40 CFR 63.862 (a)(1)(i)
Lime Kilns	Particulate	0.13 gr/dscf @ 10% O_2	WAC 173-405-040(3)(a) for particulate limit. WAC 173-405-040(10) for O&M requirements
Smelt Dissolving Tanks	Particulate	1.5 lbs/10,000 lbs BLS	WAC 173-405-040(2)
Power Boiler No. 7	Particulate	0.01 gr/dscf @ 7% O_2	Order DE97AQ-I004 and WAC 173-405-040(5)(a) 40 CFR §60.43b(c)(1) for particulate. WAC 173-405-040(10) for O&M

Recovery Boiler No. 4

TABLE D-3. RECOVERY BOILER NO. 4 MONITORING APPROACH

Applicable Requirement	Particulate
General Monitoring Approach	Continuous opacity monitoring
Indicator Range	Simpson shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under 40 CFR 63.866(a) when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.
Data Representativeness	The monitor is located according to the requirements of 40 CFR 60 Appendix B, Performance Specification 1
Verification of Operational Status	Quarterly PM source test
QA/QC	The COMS is installed and operated according to 40 CFR 60, Appendix B, Performance Specification 1 and daily calibration checks of 40 CFR 60.13
Monitoring Frequency	One cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. (40 CFR 60.13(e)(1))
Data Collection Frequency	One cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. (40 CFR 60.13(e)(1))
Averaging Period	6 minutes

Justification

This recovery boiler is subject to NSPS subpart BB and NESHAP subpart MM. Both the NSPS and the NESHAP require COMS as does Order No. DE 99AQIS-94. The NESHAP subpart MM is specifically exempt from developing a CAM Plan because the requirement already contains CAM requirements, and since the emission limits in the NESHAP, the NSPS, and the Order are the same for this recovery boiler, the CAM monitoring are the same.

Additional Comments

The facility will measure PM using Ecology Method 5 or EPA Method 5 quarterly, except that each measurement will consist of one 60-minute run.

Lime Kiln Nos. 1 and 2

TABLE D-4. LIME KILN NOS. 1 AND 2 MONITORING APPROACH

Applicable Requirement	Particulate
General Monitoring Approach	Monitor pressure drop and fluid flow continuously
Indicator Range	The operation ranges shall be determined as follows (i) During the initial performance test, must establish operating ranges for the monitoring parameters pressure drop; or (ii) Simpson may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in 40 CFR 63 subpart MM. Simpson must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained. (iii) Simpson may establish expanded or replacement operating ranges for the monitoring parameter values and established in paragraph (i) or (ii) of this section during subsequent performance tests using the test methods in 40 CFR 63.865.
Data Representativeness	The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of ±500 pascals (±2 inches of water gage pressure); and the monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate.

Applicable Requirement	Particulate
Verification of Operational Status	Quarterly PM source test
QA/QC	Confirm the meters read zero when the unit is not operating and annually calibrate pressure drop.
Monitoring Frequency	Simpson must install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c)
Data Collection Frequency	See above
Averaging Period	Hourly

Justification

These lime kilns are subject to NESHAP subpart MM. The NESHAP subpart MM emission standard is specifically exempt from developing a CAM Plan because the requirement already contains CAM requirements.

Additional Comments

The facility will measure PM using Ecology Method 5 or EPA Method 5 quarterly, except that each measurement will consist of one 60-minute run.

Table D-5 provides the monitoring approach for the Smelt Dissolving Tanks.

TABLE D-5. SMELT DISSOLVING TANKS MONITORING APPROACH

Applicable Requirement	Particulate
General Monitoring Approach	Monitor fan speed (i.e., rmp, amp) and fluid flow continuously
Indicator Range	The operation ranges shall be determined as follows (i) During the initial performance test, must establish operating ranges for the monitoring parameters fan speed; or (ii) Simpson may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in 40 CFR 63 subpart MM. Simpson must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained. (iii) Simpson may establish expanded or replacement operating ranges for the monitoring parameter values and established in paragraph (i) or (ii) of this section during subsequent performance tests using the test methods in 40 CFR 63.865.

Applicable Requirement	Particulate
Data Representativeness	The monitoring device used for the continuous measurement of the fan speed and the scrubber liquid flow rate must be certified by the manufacturer to the accurate within ±5 percent of the design rate.
Verification of Operational Status	Quarterly PM source test.
QA/QC	Confirm the meters read zero when the unit is not operating and annual calibrate pressure drop.
Monitoring Frequency	Simpson must install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the fan speed and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c).
Data Collection Frequency	See above
Averaging Period	Hourly

Justification

These smelt vents are subject to NESHAP subpart MM. The NESHAP subpart MM emission standard is specifically exempt from developing a CAM Plan because the requirement already contains CAM requirements.
Simpson received an approval from the United States Environmental Protection Agency (USEPA) Region 10 to use an alternative monitoring parameter of fan speed instead of pressure drop across the scrubber.

Additional Comments

The facility will measure PM using Ecology Method 5 or EPA Method 5 quarterly, except that each measurement will consist of one 60-minute run.

Power Boiler No. 7

Table D-6 provides the monitoring approach for the Power Boiler No. 7.

TABLE D-6. POWER BOILER NO. 7 MONITORING APPROACH

Applicable Requirement	Particulate
General Monitoring Approach	Continuous opacity monitoring
Indicator Range	Take corrective action immediately whenever audible alarm indicates 6-minute opacity average greater than 10% of or a one-hour average opacity average greater than 6%.
Data Representativeness	The monitor is located according to the requirements of 40 CFR 60 Appendix B, Performance Specification 1.
Verification of Operational Status	Quarterly PM source test.

Applicable Requirement	Particulate
QA/QC	The COMS is installed and operated according to 40 CFR 60, Appendix B, Performance Specification 1 and daily calibration checks of 40 CFR 60.13.
Monitoring Frequency	One cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. (40 CFR 60.13(e)(1)).
Data Collection Frequency	One cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. (40 CFR 60.13(e)(1))
Averaging Period	6 minutes and hourly

Justification

This power boiler is subject to NSPS subpart Db, Order DE97AQ-I004, and NOC Order No. 4153-AQ07. The regulation and permits require the installation and operation of a COMS. Therefore, COMS is deemed to satisfy the general design and performance criteria of Part 64. The Order limits the opacity to less than 10% for a 6-minute average as measured by DOE Test Method 9B. Hence the requirement to take corrective action whenever the monitor indicates a 6-minute average greater than 10% opacity.
Simpson selected 6% hourly opacity as the action level because it represents the lowest level of opacity that the COMS can reasonably accurately measure and the opacity for each test conducted has been below 6%.

Additional Comments

Simpson will measure PM using Ecology Method 5 or EPA Method 5 quarterly, except that each measurement will consist of one 60 minute run.

MACT I

On April 15, 1998, EPA issued National Emission Standards for Hazardous Air Pollutants (NESHAPS) for the pulp and paper industry, specifically 40 CFR § 63, Subpart S. These standards have been commonly referred to as the "Cluster Rules" or "MACT I." The compliance date for the regulations was April 16, 2001. MACT I rules regulate hazardous air pollutant emissions (as methanol) from five key areas of the Mill. All of the systems must meet the "existing source" requirements of the MACT I rules:

- Bleaching System
- Low-Volume, High-Concentrate (LVHC) Non-Condensable Gas (NCG) system;
- Pulping Process Condensates
- High-Volume, Low-Concentrate (HVLC) system

Bleaching System

The bleach plant is equipped with a vent collection and treatment system. Vents are collected from the chlorine dioxide plant and from bleaching stages using chlorinated compounds. The vents are transported in a closed vent system, and treated in the bleach plant scrubber. The continuous compliance of the pollution control is demonstrated through monitoring of scrubber process parameters.

Low-Volume, High-Concentrate Non-Condensable Gas system

The kraft pulp mill is equipped with a Low-Volume, High-Concentration (LVHC) Non-Condensable Gas (NCG) system. Digester and evaporator systems vents are collected in a closed LVHC vent collection system. The collected LVHC gases are routed the lime kilns for incineration. The continuous compliance of the LVHC system is demonstrated by recording the time the gas is incinerated, and the time the bypass to the atmosphere is in use.

Pulping Process Condensates

The kraft pulp mill uses hardpiping of the pulping condensates. The collected kraft pulping condensates are transferred in a closed piping system to the Unox reactor for treatment. The continuous compliance of the control of pulping condensates is demonstrated by continuous monitoring of Unox reactor process parameters.

High-Volume, Low-Concentrate system

The kraft pulp mill has a High-Volume, Low-Concentration (HVLC) non-condensible gas system for the screening and washing of unbleached kraft pulp. Vent gases are collected in a closed HVLC vent collection system and routed to the recovery boiler for incineration. The continuous compliance of the HVLC system is demonstrated monitoring the operational status of the transport system and the time the gas is incinerated, and the time the bypass to the atmosphere is in use.

MACT II

On January 12, 2001, EPA issued National Emission Standards for Hazardous Air Pollutants (NESHAPS) for the pulp and paper industry, specifically 40 CFR § 63, Subpart MM – National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills. After a 60-day delay in the effective date, the rules became effective on March 13, 2001, with a compliance date of March 13, 2004.

These standards have been commonly referred to as "MACT II." MACT II rules regulate metals (particulate matter surrogate) emissions from five significant emission units and their respective control devices at the Mill. All of the units must meet the "existing source" MACT II requirements:

- Lime Kiln No. 1 and No. 2
- Recovery Boiler No. 4
- Smelt Dissolving Tanks

Lime Kiln No. 1 and No. 2

The mill operates two lime kilns. For each kiln, the flue gases are transported with an induced draft fan and associated ducting to a wet scrubber. The cleaned gas is discharged to the atmosphere through a stack. The continuous compliance of the pollution controls is demonstrated through continuous monitoring of operating parameters for each scrubber.

Recovery Boiler No.4

The mill operates one recovery boiler. The recovery boiler flue gas is transported by the recovery boiler induced draft fan and associated ducting to the electrostatic precipitator. The cleaned flue gas is discharged through the recovery boiler main stack. The continuous compliance of the pollution control is demonstrated through the use of a continuous opacity monitoring system COMS.

Smelt Dissolving Tanks

The recovery boiler has two dissolving tanks, the east and the west tank. Each dissolving tank vent has a scrubbers and discharges through a stack. The continuous compliance of the pollution control is demonstrated through continuous monitoring of operating parameters for each scrubber.

Industrial Boiler MACT Standard

On May 16, 2011 EPA used the Administrative Procedure ACT (APA) to stay the most recent Boiler MACT standards to gain time to respond to industry petitions that sought an immediate and indefinite stay of the rules' May 20 effective date. The stay was set forth in the federal register (76 FR 28662) on May 18, 2011. The stay will be in place until either EPA completes its reconsideration of the rules or pending litigation over the rules is resolved.

The Boiler MACT standards have been in flux as interested parties contest the proposed standards and as EPA attempts to reach resolution. EPA published the proposed 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters on June 4, 2010. EPA reissued "Power Boiler" MACT standards in Federal Register Vol.76, No. 54 dated Monday, March 21, 2011. These Boiler MACT standards were to be effective as of May 20, 2011. Affected sources such as Simpson would have needed to comply with the standards by March 21, 2014. Power Boilers No. 7 and No. 6 were subject to the rule as it had been proposed. Condition O has been built into the permit as a place holder to incorporate whatever eventual standards emerge. Simpson is a major source and emits or has the potential to emit 10 or more tones per year of any single hazardous air pollutant (HAP) or 25 tpy or more of any combination of HAPs. Further information will be incorporated into the permit as it becomes known principally through the notification requirement specified by 40 CFR 63.7545.

Green House Gases (GHG)

For sources with a Title V permit, addressing GHG emissions became effective January 2, 2011. Simpson triggered both EPA's Tailoring Rule and Washington State's WAC 173-441 regulation implementing GHG requirements because GHG emissions from the Kraft mill operations are above 25,000 metric tons per year. In Federal Register Vol. 76 No. 54 published Monday, March21, 2011, EPA subsequently proposed deferring for a period of three (3) years the application of the Prevention of Significant Deterioration (PSD) and Title V permitting requirements to biogenic carbon dioxide (CO2) emissions from bioenergy and other biogenic stationary sources. This deferral action is taken as part of the process of granting the Petition for Reconsideration filed by the National Alliance of Forest Owners (NAFO) on August 3, 2010, related to the PSD and Title V Greenhouse Gas Tailoring Rule.

The applicable requirements of WAC 173-441, a state-only-enforceable requirement, have been incorporated into the 2011 renewal permit. The omission of these requirements from the draft permit that went to public comment was an oversight on Ecology's part attributed to the expectation that permit renewal would have occurred before there were applicable GHG requirements. When the initial application was submitted by Simpson the GHG requirements were not yet applicable. Simpson resubmitted an amended renewal application on May 11, 2011 which addressed applicable GHG requirements. Ecology's primary focus during this permit renewal was on revamping the Support Document content to reflect comments received from EPA resulting from an audit of the state's Title V permitting program. The omission of the GHG requirements was noted by a commenter during public comment and the permit has been modified accordingly.

REGULATORY ORDERS AND PERMITS

The permittee is subject to a PSD permit and several regulatory orders. The only PSD permit issued to this facility and effective is PSD-06-02 for cogeneration project. Regulatory Orders in effect at Simpson include:

- NOC Order No. 4153-AQ07
- Order DE 3255-AQ06
- Order No. 1916-AQ05,
- Order No. DE 01AQIS-3114,
- Order No. DE 99AQIS-94,
- Amendment 1 to Order No. DE 97AQ-I004,
- Amendment of Order No. DE 97AQ-I004,
- Order No. DE 97AQ-I004,
- Agreed Order No. DE 95-AQI006,
- Order No. 6161,
- Order No. 5157-AQ07, and
- Agreed Order 7688

Brief descriptions of the significant permitting activities are listed below.

Installation of Turbine Generator and Cooling Tower, PSD Permit, Approval Issued May 22, 2007

Simpson received a PSD permit from the WDOE on May 22, 2007 for the installation of a steam turbine generator driven by steam produced from the existing Recovery Boiler No. 4 and Power Boiler No. 7; referred to as the Cogeneration (Cogen) Project. This project allows the facility to cogenerate and distribute electric power to the mill and to the grid. As part of this project, No. 7 Power Boiler was to be modified to increase its maximum continuous rated capacity from 300,000 lb/hr to 340,000 lb/hr steam, and produce higher pressure and temperature steam. The proposed modifications for the boiler included adding tube area to the superheat section, the installation of larger forced-draft and induced-draft fan motors, wood fuel feed system improvements, and improvement of the ash handling, electrostatic precipitator, and other ancillary systems.

Installation of Over-fired Air (OFA) System, Approval Issued April 21, 2006

WDOE issued Notice of Construction Order No. 3255-AQ06 for the installation of an improved overfire air (OFA) system on Power Boiler No. 7 on April 21, 2006. Simpson Tacoma Kraft completed construction of the OFA project in October 2006. The OFA system was installed to allow Simpson to utilize more biomass and decrease the usage of fossil fuels in the Power Boiler No. 7 while still meeting the existing emission limits. An OFA system improves the distribution of combustion air in the furnace, allowing Simpson Tacoma Kraft to burn high moisture biomass without needing additional fossil fuel to increase the furnace temperature for complete combustion.

Installation of Steam Line to Commencement Bay Sawmill, Dec 2005-May 2006 Correspondence and Requirements

Simpson proposed to installed a steam pipeline from Power Boiler No. 7 to the adjacent Commencement Bay sawmill to provide steam to the sawmill. The WDOE, in an applicabilility determination dated October 27, 2005, concluded that the steam pipe project was not subject to PSD review because the project would not increase the design capacity or the potential to emit of any affected unit. Simpson installed the steam pipeline in early 2006.

Facility Changes

The following changes and additions to emissions points were made in the mill since the previous air operating permit (AOP) application:

Changes between submittal of the application in December 2002 and issuance of the AOP in July 2005. These changes are incorporated in the current permit.

- Shutdown of Recovery Boiler No. 3 and Smelt Dissolving Tank No. 3
- Shutdown of Black Liquor Oxidation, conversion of tanks to black liquor storage
- Shutdown of Washer Lines No. 2 and 3 (except for one pulp decker that has been converted for pulp transfer use)
- Installation of high volume low concentration (HVLC) system

Changes since issuance of the AOP in July 2005

- Installation of Steam Line to Commencement Bay Sawmill (Ecology Order CBOP Steam Line, Dec 2005-May 2006 Correspondence and Requirements)
- Installation of Over-fired Air (OFA) System (Ecology Order DE 3255-AQ06, April 21, 2006)
- Installation of Turbine Generator (Cogen PSD-06-02, May 22, 2007, NOC Order No. 4153-AQ07, May 23, 2007)
- Installation of Cogeneration Cooling Tower (Cogen PSD-06-02, May 22, 2007, NOC Order No. 4153-AQ07, May 23, 2007)

Compliance/Enforcement history and remedies:

On October 10, 2010 Ecology issued Order No. 5157-AQ07 limiting the ash content of reprocessed fuel oil burned occasionally in Power Boiler #6. Source testing was also increased to monitor particulate emissions. The order was issued in response to elevated particulate emissions which were attributed to changed reprocessed fuel oil characteristics.

On February 24, 2010, the Ecology issued NOV #7407 for the reported exceedance of the Power Boiler No.7 short-term NOx emission limit of 0.20 lb/MMBtu 30-day rolling average. In a letter dated March 25, 2010, Simpson requested that Ecology revise the PSD Permit NOx limits for the Power Boiler No. 7. The letter states that the 0.20 lb/MMBtu limit was established based on the usage of proper combustion control and previously-approved overfire air improvement (OFA) to the power boiler. The assumption about the degree of NOx reduction from OFA was wrong. Simpson submitted the cogeneration project permit application before OFA was operational; it has since become operational and has not provided the NOx reductions predicted by the engineering firm that designed it.

As a result, Simpson was unable to maintain continuous compliance with the 0.20 lb/MMBtu NOx limit while also meeting the short-term CO limit. The letter describes Simpson's efforts to reduce NOx emissions and provides justifications for proposed new Nox limits of 0.30 lb/MMBtu based on the heat input value of the fuel on a 30-day rolling average and 782 tons per year

On June 10, 2010, Ecology and Simpson entered into Agreed Order 7688 to resolve the above noncompliance issues. Until the NOx limit is revised, this order constitutes Ecology's enforcement response to NOV 7407 and potential subsequent NOx limit exceedances from Power Boiler No. 7.

There are no other outstanding enforcement actions nor have there been any other enforcement actions during the previous permit term.

EMISSION UNIT DESCRIPTION

The following table proves the emission units, descriptions, and control equipment.

TABLE 3-1. EMISSION UNITS

Emission Unit	Emission Inventory ID. No.	Segment No.	Emission Point	Emission Point Description	Air Pollution Control Equipment
Kraft Pulping			LVHC	LVHC Noncondensible Gas Venting	The noncondensible gases from the Kamyr digester and evaporator areas are piped into the low volume, high concentration noncondensible gas system for incineration in lime kilns.
			HVLC	HVLC Noncondensible Gas Venting	The noncondensible gases from the pulp screening and washing are piped into the high volume, low concentration noncondensible gas system for incineration in recovery boiler.
Bleach Plant			BPSE	Bleach Plant Scrubber Exhaust	The bleach plant and chlorine dioxide plant vents, with the exception of the vent from the extraction stage tower, are collected and treated in the bleach plant scrubber, which uses an alkaline scrubbing solution prior to discharge.
			BPET	Second Stage/Extraction Tower Vent	None
Black Liquor Recovery			SLST	Strong Black Liquor Storage Tanks (5)	None
Recovery Boiler No. 4	10	01	RB4MS	Recovery Boiler No. 4 Electrostatic Precipitator Exhaust	Electrostatic precipitator
Smelt Dissolving Tanks	12	01, 02	SDT4TE	Smelt Dissolving Tank No. 4 East	Wet scrubber
			SDT4TW	Smelt Dissolving Tank No.4 West	Wet scrubber
Caustic			CASC	Caustic Department Slaker and	In the Caustic Department, all tanks and process

Emission Unit	Emission Inventory ID. No.	Segment No.	Emission Point	Emission Point Description	Air Pollution Control Equipment
Department				Causticizer Vent	vessels are open to the atmosphere except the slaker. Where the boiling action might create particulate emissions; this source is equipped with a scrubbing system.
			CACZ1	Caustic Department Causticizer Vent No. 1	
			CACZ2	Caustic Department Causticizer Vent No. 2	
			CALO	Caustic Department Lime Mud Oxidation Exhaust	
Lime Kiln No. 1	14	01, 02, 03	LK1MS	Lime Kiln No. 1 Main Stack	Wet scrubber
Lime Kiln No. 2	15	01, 02, 03	LK2MS	Lime Kiln No. 2 Main Stack	Wet scrubber
Power Boiler No. 6	24	01, 02	PB6MS	Power Boiler No. 6 Main Stack	None
Power Boiler No. 7	25	01, 02	PB7MS1	Power Boiler No. 7 Main Stack No. 1	Two parallel electrostatic precipitators
			PB7MS2	Power Boiler No. 7 Main Stack No. 2	
Cogeneration Cooling Tower			CTWR	Cogeneration Cooling Tower Exhausts	None

State-only vs. Federally Enforceable Requirements

The few permit conditions which are state-only and not federally enforceable requirements are identified as state-only within the permit itself. No further explanation is provided here on the assumption that the permit condition is self explanatory.

Emission Limit Discussion

Monitoring and Gap Filling

Ecology has preferentially relied on direct source testing as the most robust and accurate method of determining compliance and, through frequency of testing, assuring compliance. Source testing is resource and time intensive. More frequent monitoring requires the use of some sort of indirect surrogate parameter. The frequency of direct source testing has been stipulated through Orders, which are included in Appendix F of this permit. Ecology has attempted to reconcile frequency of monitoring with accuracy of monitoring by relying on both direct periodic source testing and more frequent indirect monitoring using surrogate parameters. Acknowledging the surrogate monitoring parameters as compliance indicators but not necessarily compliance determinants addresses the qualitative concerns regarding surrogate monitoring parameters. Where surrogate monitoring parameters have been employed, the Permit has been structured such that noncompliance with the surrogate limitation requires corrective action. Failure to take corrective action and bring the surrogate parameter within bounds constitutes noncompliance with the need to follow good operation and maintenance as required by WAC 173-405-040(10). The Permit thus combines periodic direct source testing which definitively determines compliance with surrogate monitoring requirements indicating compliance to achieve an overall monitoring program intended to meet the Title V requirement of monitoring sufficient to assure compliance.

The frequency of both direct source testing and the application of surrogate parameters intended to indirectly infer compliance with the underlying applicable requirement is based on best professional judgment of the historical probability of exceeding the imposed limitation and the potential magnitude of an exceedance. Historical testing results for all parameters monitored are not included because this data is already on file available for public review.

Emission units such as the lime kilns and smelt tanks have wet scrubbers as emission control equipment or as part of the emission control equipment train. The requirement to monitor and maintain scrubber flow at certain set points was, prior to the advent of Title V Permits, initially imposed as an indicator of proper operation and maintenance regarding opacity and particulate emission minimization. Particulate source testing and visual observations of opacity indicate that the surrogate scrubbing parameters stipulated can be used as indicators of compliance with the opacity and particulate emission limits. These surrogate parameters are maintained within the ranges established during the initial performance testing.

For some units, such as recovery furnaces, opacity is proposed as a compliance indicator for particulate emissions. At this time, Ecology does not know of a definitive relationship between

opacity and particulate emissions for all emission units such that opacity could be used as a predictive emissions parameter. Nonetheless, there is a relationship such that the opacity levels selected, the opacity limits themselves, are believed to adequately function as surrogate indicators which infer compliance with the underlying applicable requirement.

Incorporated into the Permit for the Lime Kilns No.1 and No. 2, Recovery Boiler No. 4, and Smelt Dissolver Tanks is an allowance for a reduction in source testing frequency which may be allowed if particulate emission control meets certain criteria. Ecology has introduced this allowance as an incentive to encourage improved emission control. The first criterion, which must be met to allow consideration of source testing frequency reduction, is a proven history of performance. This requires a source to achieve six consecutive months of monthly source testing results that are not greater than 75% of the particulate emission limit. To maintain the reduction in testing frequency no subsequent testing results can be greater than the 75% threshold. If a test result is greater, the testing frequency reverts to a monthly basis until the next six consecutive monthly period of improved performance has occurred.

Simply meeting the 75% threshold is not the only criteria for gaining a reduction in source testing frequency. Subjective criteria are also evaluated and ultimately best professional engineering judgment is exercised. Primary factors also considered include historical emission trends and degree of confidence in maintaining emission limit compliance between source testing events. For example, a unit from which particulate emissions have been historically increasing would probably not gain the source testing frequency allowance. It possibly could be argued that such a unit was already trending toward noncompliance with WAC 173-405-040(10) which requires operation and maintenance of a facility and emission that operated only periodically probably would not be granted a reduction in monitoring frequency because of possible problems developing from its “mothballed” status. A reduction in testing frequency would also be dependent on the strength of surrogate information available indicating limit compliance between testing events, if a surrogate parameter was deemed control equipment in a manner consistent with good air pollution control practices. Also a unit adequate for compliance indication when coupled with monthly testing but not adequate as a stand-alone compliance indicator, a reduction in testing frequency would not be granted despite achieving the 75% emission allowance threshold.

Where the respective Order is the basis of authority for the required source testing and establishes the frequency of source testing, the mechanism for achieving a reduction in source testing frequency is modification of the underlying Order. The current wording in the Title V permit allowing the consideration of such a reduction is designed as a placeholder such that modification of the underlying Order will not require opening the Title V permit for modification. A 30-day public comment period will still occur associated with modification of the Order.

Representative Source Tests

Simpson’s source tests represent compliance with the standard because the source test results are considered representative of the source emissions for the following reasons:

Source tests are 'blind' in nature. The only communication between the testers and operators is to verify that parameters meet or exceed the previous month's average operating conditions. Boiler operators are not given long lead times by the source testers, in order that they may "tune-up" their boiler.

Source tests are conducted at or above the previous month's average operating parameters. Source tests are designed to utilize operating conditions that best emulate past plant operating parameters in order to show continuous compliance. To accomplish this, source tests are conducted at or above the previous month's average operating standards in terms of both production rates and unit operating configurations. It is assumed that the greater the operating parameters, the greater the mass emissions. Thus, if the operating parameters exceed the previous month's averages and still meet standards, the overall assessment is that the source test was representative and the system was in continuous compliance.

Additional surrogate monitoring parameters. In addition to direct source testing conducted periodically, which definitely determines compliance, Ecology has proposed minimum operating conditions in numerous air pollution control equipment as a surrogate monitoring requirements intended to indicate compliance to achieve an overall monitoring program that meets the Title V requirement of monitoring sufficient to assure compliance.

Comments on Specific Permit Conditions

Conditions A.1, B.1, and C.3 were expanded to identify the PM bubble allowance described in Condition A.9a.

Conditions B.2 and B.6 were modified by eliminating the allowance for a chemical stoichiometric TRS and SO2 determination. Simpson has incorporated CEMs for continuous SO2 and TRS monitoring. Appendix D has been removed as this appendix detailed the stoichiometric analytical method.

EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for new and existing combustion sources used in the chemical recovery processes at kraft, soda, sulfite, and stand-alone semi-chemical pulp mills. Hazardous air pollutants (HAP) that are regulated by this final rule include gaseous organic HAP and HAP metals. This rule promulgates PM emission limits as a surrogate for HAP metals emission limits for these sources, as well as separate organic HAP emission limits.

The PM emission limits specified by this rule as a surrogate for HAP metals emission limits are as follows.

Recovery Furnace	0.044gr / dscf at 8 percent oxygen
Smelt Dissolving Tank	0.20 lb / TBLS (ton of block liquor solids fired)
Lime Kiln	0.064 gr / dscf at 10 percent oxygen

Condition B.4 Lime kilns 1 & 2. Simpson submitted the following initial performance test (IPT) results as required by 40 CFR 63.864 on August 31, 2004 for lime kilns 1 and 2. The

surrogate setpoints are designed as ongoing compliance indicators. 40 CFR 63.862 establishes a HAP limit of 0.064 gr/dscf @10% O2.

Lime Kiln 1			
Date	Test Result	Scrubber dp (" H2O)	Scrubber recirc rate (gpm)
7/27/04	.0491	19	273
7/27/04	.0451	20	272
7/27/04	.0666	17	273
Average	.0536	19	273
Lime Kiln 2			
Date	Test Result	Scrubber dp (" H2O)	Scrubber recirc rate (gpm)
8/9/04	.0536	29	259
8/9/04	.0512	29	255
8/9/04	.0543	28	243
		28	245
		29	251
		28	257
		29	258

Condition C.3 Smelt Tanks 4E and 4W.

EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for new and existing combustion sources used in the chemical recovery processes at kraft, soda, sulfite, and stand-alone semi-chemical pulp mills. Hazardous air pollutants (HAP) that are regulated by this final rule include gaseous organic HAP and HAP metals. This rule promulgates PM emission limits as a surrogate for HAP metals emission limits for these sources, as well as separate organic HAP emission limits.

The PM emission limits specified by this rule as a surrogate for HAP metals emission limits are as follows.

Recovery Furnace	0.044gr / dscf at 8 percent oxygen
Smelt Dissolving Tank	0.20 lb / TBLS (ton of block liquor solids fired)
Lime Kiln	0.064 gr / dscf at 10 percent oxygen

Simpson conducted the following initial performance test (IPT) results as required by 40 CFR 63.864 in October, 2004. The surrogate setpoints are designed as ongoing compliance indicators. EPA, by letter dated Dec. 16, 2004, approved Simpson's request to monitor scrubber fan amperage rather than scrubber differential pressure. The request was made because Simpson uses a low-energy scrubber (Ducon UW-4 scrubber) rather than a venture scrubber. Fan amperage better correlates with scrubber performance in such cases.

Date	Test Result lb/ton	E Scrubber gpm	W Scrubber gpm	E amps	W amps
10/11/04	.2044	35	35	80	67
10/12/04	.2739	34.8	35	84.7	65.9
10/14/04	.2580	35	35	76	67

Note that the IPT results exceed the limit. In such cases a bubble compliance alternative is allowed by 40 CFR 63.862(a)(ii). The bubble alternative allowance is included in the permit through Condition C.3a. IPT results showed the bubbled emissions were 0.619 lb/ton BLS compared to the limit of 1.272 lb/BLS when using the bubble emissions approach.

The "bubble compliance alternative" gives mills the flexibility to set mill determined PM emissions limits for each existing source in the chemical recovery area, as long as the total emissions from all the existing sources are less than or equal to the total of the promulgated emissions rates for each existing source.

The "bubble compliance alternative" does not apply to new sources, or to stand-by sources. New sources are those that begin construction or reconstruction after April 15, 1998. Stand-by sources are those that operate less than 6,300 hours (262.5 days) during any calendar year. New and stand-by sources are required to meet the individual emission limits set for those sources. Stand-by sources cannot be included as part of the bubble. Also, the PM emission limit for sources subject to New Source Performance Standards (NSPS) must be at least as stringent as the NSPS PM limit.

On August 18, 2010 Simpson repeated the smelt dissolving tank (SDT) scrubber performance test to provide the documentation for the operating parameter limits. The results of the test are summarized in the following table.

	Run 1 10:30-13:32		Run 2 14:01-17:04	
	East	West	East	West
Total BLS flow, Klb/hr	155.0	155.0	152.5	152.5
Scrubber Flow, gpm	35.0	35.0	35.1	34.9
Fan Amps, amps	71.9	80.5	71.2	81.2
PM, lb/ton BLS	0.081	0.070	0.088	0.081

The 62 amp minimum limit for the scrubber fan motor power draw has been established based on engineering evaluation of the Ducon scrubbers. The fans have 100 horsepower electrical motors with a full load draw of 113 amps. The no load is 30 amps for the motor alone and approximately 50 amps for the motor, belt drive and rotating assemblies combined. Simpson selected the intermediate point of 62 amps to verify that the scrubber fan is in the working range. During the August 18th test the recorded amps were 70-83 amps so the minimum condition was satisfied. The design of the scrubbing system does not permit actually testing at the 62 amp limit without reducing the scrubber flow well below its minimum.

Conditions D.1.b and D.1.c were added to reflect the PM monitoring and ash limitation established in Order No. 5157-AQ07.

Conditions E.3, E.4a, E5, and E6 were modified to reflect the content of Order No. 4153-AQ07 and PSD No. 06-02. Order No. 4153 includes new superseding conditions for several parameters formally addressed in Order No. 97AQ-I004.

Surrogate IPT data for F.1 Causticizer Slaker Vent
Specific monitoring requirements have been left unspecified given the units historical ability to comply with the emission limit without the assistance of emission control equipment. Baseline testing of particulate emissions without the scrubber operating shows particulate emissions averaging 0.013 gr/dscf which is an order of magnitude below the 0.10 particulate limit set forth in WAC 173-400-060. Ecology considers good operation and maintenance to consist of operation of the scrubber. The historical emissions testing results from the initial AOP timeframe in gr/dscf are as follows:

	Scrubber On		Scrubber Off
Run 1	0.01	Run 4	0.0201
Run 2	0.0318	Run 5	0.0075
Run 3	0.0103	Run 6	0.0109

Surrogate IPT data for M.6 Bleach Plant Scrubber Vent

The surrogate results summary below reflect two different IPT test events. The weak wash IPT results were reported on October 2, 2001. The white liquor IPT results were reported on October 7, 2003. Either combination assures compliance with the underlying applicable HAP standards set forth in 40 CFR Part 63.445(c).

	Chlorinated HAP (limit is ≤ .002 lb/ODTP	
	Cl2	ClO2
Fan operation: on		
ORP ≤-668 mv with weak wash and scrubber flow ≥42 gpm	ND	0.02
ORP ≤-361 mv with white liquor and scrubber flow ≥77 gpm	ND	ND
(all above values as 3-hr average)		

Surrogate IPT data for L.3 Pulping Process Condensates

Simpson has chosen the allowed treatment option of reducing or destroying total HAPs by at least 92 % of more by weight per 40 CFR 63.446(e)(3). The IPT results submitted October 2, 2001 showed this standard was met by collecting the required amount of condensate streams and introducing them into the UNOX treatment system. Simpson requested to monitor UNOX aerator amperage as a surrogate performance parameter. This request was approved by EPA sometime in the fall of 2004.

Comments on General Conditions

General Condition 8

Permit condition 8 is the generic opacity limitation from WAC 173-405-040(6), which addresses kraft mills. Permit conditions 9 and 12 work together to assure compliance with Condition 8 by requiring, first, that facility equipment be maintained and operated "in a manner consistent with good air pollution control practice" and, second, that the permittee record and promptly respond to complaints received or possible noncompliance noticed by facility staff. Ecology believes that this is a practical and effective way to assure compliance because the emission units covered by this condition do not have control devices that can be monitored and they have a very low risk of producing visible emissions except during process upsets. The mill is staffed around the clock and appropriate staff are trained to notice and report unusual conditions, such as those associated with upsets. It is a violation of the permit to fail to take corrective action when an instance of possible noncompliance has been reported and found to be valid. Ecology believes that imposing additional monitoring such as a weekly visual inspection would have little value in identifying noncompliance and would, by presence, possibly convey a false sense of compliance.

General Condition 10

All fuel combustion units assure compliance when firing natural gas and fuel oil based on the following calculations:

a. Sulfur Content Limit When Firing Fuel Oil

F_d = 9,190 dscf/MMBtu for residual oil. ("F" factor from 40 CFR, Part 60, App. A, Method 19)

$$C_d = \frac{(0.02\,lb\,S / lb\,oil)(2\,lb\,SO_2 / lb\,S)(385\,dscf\,SO_2 / 64\,lb\,SO_2)}{(18{,}750\,Btu / lb\,oil)(9{,}190\,dscf\ /\ MMBtu)}$$

or, $$C_d = 0.00140\frac{dscf\ SO_2}{dscf\ \ flue\ gas} = 1{,}400\ ppmvd\ SO_2$$

Corrected to 7% O2:

$$(1{,}400\ ppmvd\ SO_2) \times \frac{20.9 - 7.0}{20.9} = 930\ ppmvd\ SO_2\ at\ 7\%\ O_2$$

Therefore, the sulfur content limit of 2% in the fuel oil assures compliance with 1000 ppmvd corrected to 7% O_2 as required by WAC 173-405-040(11)(b). No ongoing compliance demonstration measures are required.

b. Sulfur Content Limit When Firing Natural Gas

- 0.6 lb/MMcf of natural gas. (Taken from Table 1.4-1, 1.4-2, & 1.4-3 of AP-42, for natural gas combustion in a large industrial boiler.)
- $pV = mRT$

where,

p = 14.7 psia (2166.8 lbf/ft^2)
R = 24.1 ft-lbf/lbm-°R
m = 64 lbm
T = 538°R

then, $V = 385$

Sulfur dioxide emissions in parts per million:

$$0.6\frac{lb\,SO_2}{MMcf}\times\frac{1\,MMcf}{1{,}035\,MMBtu}\times\frac{1\,MMBtu}{8710\,dscf}\times\frac{385\,dscf\;SO_2}{64\,lb\,SO_2}=4\times10^{-7}\frac{dscf\;SO_2}{dscf\;\;flue\,gas}=0.4\text{ ppmv }SO_2$$

According to the calculations, the sulfur dioxide emissions are less than the limit of 1000 ppmvd. No ongoing compliance demonstration measures are required.

For sources other than fuel combustion, Ecology has not imposed monitoring for units unlikely to have a reasonable potential of exceeding SO_2 emission limits. Surrogate monitoring for intervals between direct SO_2 testing was not imposed because in practice mills do not adjust operating parameters to minimize SO_2 emissions. There are no control devices or control strategies to allow this. Instead, SO_2 emissions are largely a function of equipment and process design. The nature of the Kraft process is optimized by system stability and continuity. Ecology has no basis to believe that process parameters fluctuate to a degree that results in SO_2 emissions approaching the 1000 ppm limit and thus warranting surrogate monitoring.

General Condition 11

Condition 11 in the Facility-Wide General Requirements Section was previously reserved for future use. Condition 11 has now been used to include a credible evidence requirement. This was done at the request of local air authorities

Significant Permit Renewal Changes

The following permit conditions have been modified or included as part of the 2010 permit renewal process:

A.1. Further clarification has been to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

B.1. Further clarification has been to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

B.4. Clarification has been added for how surrogate monitoring parameters can be adjusted over time.

C.3. Further clarification has been to the basis of authority for the elements of this condition. The allowance for an existing bubble cap on particulate has also been set forth.

D.1.b and D.1.c. The applicable requirements set forth in the underlying Order No. 5157-AQ07 have been added to the permit.

E.1, E.2.b,c,d, E.3, E.5. The applicable requirements set forth in the underlying Order PSD-06-02 have been added to the permit.

P. Green House Gas Reporting Requirements have been added.

Facility-Wide General Requirements Condition 11. This is a condition added to all Industrial Section Permits as they are renewed and acknowledges the concept of credible evidence.

Streamlining: Streamlining is not applicable to the Simpson mill because no streamlining has been done or proposed.

OPERATIONAL FLEXIBILITY

The mill has requested maximum operational flexibility from the Department of Ecology. Operational flexibility includes production rate flexibility, fuel and raw materials substitution, and other common process changes. The mill also requested that monitoring, record keeping, and reporting costs be kept to a level that is most cost effective, while still meeting all compliance demonstration and regulatory requirements.

PERMIT SHIELD

The Simpson Mill requested that a permit shield be granted for the renewal permit issued to the mill.

This proposed Title V Air Operating Permit contains permit shield language pursuant to WAC 173-401-640(1) and 40 CFR Part 70.6(f).

INSIGNIFICANT EMISSION UNITS

The facility-wide general requirements apply to the whole facility, including insignificant emission units and activities (IEUs), as required by the operating permit rule. The rule states, however, that IEUs are not subject to monitoring requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them. [WAC 173-401-530(2)(c)]. The Washington SIP does not impose any specific monitoring-related requirements for the facility-wide requirements for IEUs at this source. The permit, therefore, does not require any testing, monitoring, reporting, or recordkeeping for insignificant emission units or activities.

The Table below summarizes the emission units identified by the Permittee in their Title V renewal application as meeting the criteria for insignificant emission units as defined by WAC 173-401-530. Ecology concurs that the units identified below meet the insignificant emission unit criteria.

Inventory No.	Emission Unit Description	Criteria
1	Biomass Pile	WAC 173-401-530(1)(d)
2	Sanitary Sewer Main Pump Station	WAC 173-401-532(120)
3	Sump Pump, Surface Water	WAC 173-401-532(120)
4	Power Boiler No. 7 Precip. Ash Pile	WAC 173-401-530(1)(d)
5	Power Boiler No. 7 Grate Ash Pile	WAC 173-401-530(1)(d)
6	Steam Relief Valve	WAC 173-401-532(87)
7	Slaker Grits	WAC 173-401-530(1)(d)
8	Oil Tank Vent	WAC 173-401-533(2)(t)
9	Oil Tank Vent	WAC 173-401-533(2)(t)
10	Oil Tank Vent	WAC 173-401-533(2)(t)
11	Fire Water Pump House Diesel Engine Exhaust	WAC 173-401-532(52)
11A	Building for Item 11—Vent in Door	WAC 173-401-532(9)
11B	Diesel Fuel Tank Vent, < 2000-Gallon Tank	WAC 173-401-533(c)
12	Fire Water Tank Vent	WAC 173-401-532(52)
13	Green Liquor Storage Tank Vent	WAC 173-401-532(93)
14	Oil Pumphouse Steam Relief Vent	WAC 173-401-532(87)
15	Lime Mud Dust Pile	WAC 173-401-532(d)
16	Slaker Grits	WAC 173-401-532(140)
17	Lime Mud Dust Pile	WAC 173-401-530(1)(d)
18	Lime Mud Dust Pile	WAC 173-401-530(1)(d)
19	Dirt Pile	WAC 173-401-530(1)(d)
20	Lime Mud on Ground	WAC 173-401-530(1)(d)
21	Fresh Lime Unloading Station	WAC 173-401-530(1)(d)
22	Old Slaker South	Abandoned
23	Old Slaker North	Abandoned
24	Lime Silo	Abandoned
25	Dust Collection Vent	Abandoned
26	Milk of Lime Tank Vent	Abandoned

Inventory No.	Emission Unit Description	Criteria
26A	Milk of Lime Tank Vent	Abandoned
27	NCG Bypass When System Down	Normally Closed
28	Lime Kiln Scrubber Liquid Clarifier South	WAC 173-401-532(103)
29	Clarifier Center	WAC 173-401-532(103)
30	Clarifier North	WAC 173-401-532(103)
31	West Green Liquor Clarifier	WAC 173-401-532(103)
32	East Green Liquor Clarifier	WAC 173-401-532(103)
33	Green Liquor Tank	WAC 173-401-532(103)
34	Bathroom Vent	WAC 173-401-532(48)
35	Lime Mud Tank	WAC 173-401-532(101)
36	Mud Mix Tank	WAC 173-401-532(101)
37	Sulfamic Acid Tank	WAC 173-401-533(2)(s)
38	Sewer Sump No. 3	WAC 173-401-532(120)
39	Roof Vents, Kiln Control Room	WAC 173-401-532(9)
45	Core Washer Discharge	WAC 173-401-532(104)
46	Air to MCC Room	WAC 173-401-532(46)
47	50% Caustic Soda Tank	WAC 173-401-533(2)(s)
48	Caustic Bldg. Room Vent	WAC 173-401-532(9)
49	Caustic Room Vent	WAC 173-401-532(9)
50	Lime Kiln Operator's Air Makeup for Control Room	WAC 173-401-532(9)
51	Sewer Sump	WAC 173-401-532(120)
52	Air Makeup for Oil Pumphouse	WAC 173-401-532(9)
53	Vents on Wall of Oil Pumphouse	WAC 173-401-532(9)
54	Lime Kiln No. 2 Auxiliary Drive Motor	WAC 173-401-533(2)(f)
55	Lime Kiln No. 1 Auxiliary Drive Motor	WAC 173-401-533(2)(f)
58	Caustic Sewer Main Discharge	WAC 173-401-532(120)
59	Caustic Sump Ground Level	WAC 173-401-532(120)
60	White Liquor Tank	WAC 173-401-532(103)
61	Spill Surge Tank	Abandoned
62	Clarifier No. 6 Caustic Sewer	WAC 173-401-532(103)
63	Green Liquor Surge Tank	WAC 173-401-532(103)
64	Green Liquor, Tank No. 8	WAC 173-401-532(103)

Inventory No.	Emission Unit Description	Criteria
65	White Liquor Tank	WAC 173-401-532(103)
66	Polymer Makeup Tank	WAC 173-401-533(2)(s)
67	Lime Kiln No. 1 Mud Filter Vacuum Pump Discharge	WAC 173-401-532(102)
68	Lime Kiln No. 1 Filter Filtrate Tank	WAC 173-401-532(99)
69	Acid Cleaning Tank, Lime Kiln No. 1 Filter	WAC 173-401-533(2)(s)
70	Recausticizing Bldg. Opening	WAC 173-401-532(9)
71	South Lime Mud Tank	WAC 173-401-532(99)
72	North Lime Mud Tank	WAC 173-401-532(99)
73	East Lime Mud Tank	WAC 173-401-532(99)
74	Cooling Water Tank, Open Top	WAC 173-401-532(96)
75	Cooling Water Tank, Open Top	WAC 173-401-532(96)
76	Mud Filter, Lime Kiln No. 2, No Hood	WAC 173-401-532(102)
77	Lime Kiln No. 2 Mud Filter Room Vents On Side of Bldg.	WAC 173-401-532(91)
78	Lime Kiln No. 2 Scrubber Liquid Tank	WAC 173-401-532(103)
79	Lime Kiln No. 2 Filter Vacuum Pump Discharge	WAC 173-401-532(102)
80	Sewer Sump	WAC 173-401-532(117)
81	Water Sump	WAC 173-401-532(96)
82	Air Supply for Lime Kiln No. 2 MCC	WAC 173-401-532(9)
83	MCC Room Vent	WAC 173-401-532(9)
84	Lab Lime Grinding Room Vent	WAC 173-401-532(51)
85	Lime Mud, Pile (Kiln No. 1) Storage	WAC 173-401-530(1)(d)
86	Lime Mud Storage Pile (on Concrete)	WAC 173-401-530(1)(d)
87	Sewer Sump, Ground Level	WAC 173-401-532(117)
88	Lime Kiln No. 1 Scrubber Recirc. Tank (Peabody Sump)	WAC 173-401-532(103)
89	MCC Room Vent R7E	WAC 173-401-532(9)
90	Abandoned Stack	Abandoned
91	Old Lime Kiln No. 1 Mud Filter (Spare)	WAC 173-401-532(102)
92	New Lime Kiln No. 1 Mud Filter Vents (2)	WAC 173-401-532(102)
93	Dregs Washer	WAC 173-401-532(104)
94	Sewer Sump, Open	WAC 173-401-532(117)
95	NCG Line Rupture Disk	WAC 173-401-532(87)
96	Vent for Old Lime Kiln No. 1 Mud Filter Vacuum Pump	WAC 173-401-532(102)

Inventory No.	Emission Unit Description	Criteria
97	Air Supply to (Fan) MCC	WAC 173-401-532(9)
98	Vent for MCC Room	WAC 173-401-532(9)
98A	Vent for Lime Kiln No. 1 Centrifugal Mud Dryers (Not Operational)	Abandoned
99	Roof Vents	WAC 173-401-532(9)
100	NCG Line Rupture Disk	WAC 173-401-532(87)
100A	Dregs Mixer Tank	WAC 173-401-532(104)
100B	MCC Above Lime Kiln Control Room (East)	WAC 173-401-532(9)
100C	MCC Above Lime Kiln Control Room (West)	WAC 173-401-532(9)
100D	Lime Kiln No. 2 Hot Line Belt	WAC 173-401-532(105)
100E	Lime Kiln No. 1 Hot Lime Belt	WAC 173-401-532(105)
101	Air Makeup for MCC “R7” Room	WAC 173-401-532(9)
102	Boil Out Tank, Nos. 1 and 2 Line Evaporators.	WAC 173-401-533(2)(s)
105	Abandoned NCG Stack	Abandoned
106	Evap. Bldg. Access Door	WAC 173-401-532(9)
107	Evap. Bldg. Vents	WAC 173-401-532(9)
108	Multiple Openings East Side of 1 and 2 Evap. Bldg., Power Boiler Bldg.	WAC 173-401-532(9)
109	Multiple Openings West Side of 1 and 2 Evap. Bower Boiler No. 6 Bldg.	WAC 173-401-532(9)
110	NCG Rupture Disk	WAC 173-401-532(87)
112	Power Boiler No. 1 Shut Down	Abandoned
113	HF Power Boiler No. 2 Shut Down	Abandoned
114	R5E MCC, Air Makeup	WAC 173-401-532(9)
115	Evap. Soap Skimmer Tank	WAC 173-401-532(4)
116	Brine Dissolving Tank	WAC 173-401-533(2)(s)
117	Brine Measuring Tank	WAC 173-401-533(2)(s)
118	Experimental Cooking Digester	WAC 173-401-533(3)(a)
119	MCC R5B Vent	WAC 173-401-532(9)
123	H_2SO_4 Tank	WAC 173-401-533(2)(s)
124	NaOH Tank	WAC 173-401-533(2)(s)
125	Power Boiler No. 3	Abandoned
126	Power Boiler No. 4	Abandoned
127	Power Boiler No. 5	Abandoned
128	Bailey Air Outlet (Control for Power Boiler Nos. 6 and 7)	WAC 173-401-532(9)

Inventory No.	Emission Unit Description	Criteria
129	Sodium Sulfite Tank No. 5	WAC 173-401-533(2)(s)
130	Sodium Sulfite Tank No. 6	WAC 173-401-533(2)(s)
131	Auxiliary Power System, Exhaust Vent (Gas Engine)	WAC 173-401-533(2)(f)
132	Sodium Sulfite Mix Tank	WAC 173-401-533(2)(s)
133	Caustic Tank West	WAC 173-401-533(2)(s)
134	Caustic Tank East	WAC 173-401-533(2)(s)
135	NALCO 720 St Installed Tanks	WAC 173-401-532(4)
136	NALCO 182 Installed Tanks	WAC 173-401-532(4)
137	Used Oil Tank Portable	WAC 173-401-532(42)
138	Demineralized Water Tank	WAC 173-401-532(96)
139	H_2SO_4 Tank West	WAC 173-401-533(2)(s)
140	H_2SO_4 Tank East	WAC 173-401-533(2)(s)
141	Boiler Water Condensate Flash Vent	WAC 173-401-532(87)
142	65 Deaeration Tank Vents	WAC 173-401-532(87)
143	65 Vents	WAC 173-401-532(87)
144	Old Power Boiler Nos. 3, 4, 5 Stack, 425 Steam Relief	WAC 173-401-532(87)
145	Steam Flash Tank Vent	WAC 173-401-532(87)
146	5 Deaeration Tank Vent	WAC 173-401-532(87)
147	Steam Vent Roof	WAC 173-401-532(87)
148	Ash Pile Bunker	WAC 173-401-530(d)
149	Opening to Bldg., Ground Level	WAC 173-401-532(9)
150	Bathroom Vent	WAC 173-401-532(48)
151	Room Vent	WAC 173-401-532(9)
152	Boiler Water Test Station Lab	WAC 173-401-532(51)
153	Office Vent, Window	WAC 173-401-532(9)
154	Office Vent, Window	WAC 173-401-532(9)
155	Office Vent, Window	WAC 173-401-532(9)
156	Old Control Room No. 6	WAC 173-401-532(9)
157	Old Vents	WAC 173-401-532(9)
158	Steam Relief Vent	WAC 173-401-532(87)
159	Steam Relief Vent	WAC 173-401-532(87)
160	Steam Relief Vent	WAC 173-401-532(87)

Inventory No.	Emission Unit Description	Criteria
161	Steam Relief Vent	WAC 173-401-532(87)
162	Bldg. Roof Vent	WAC 173-401-532(9)
163	Steam Relief Vent	WAC 173-401-532(87)
164	Steam Relief Vent	WAC 173-401-532(87)
165	Steam Relief Vent	WAC 173-401-532(87)
166	Door, Opening to Bldg.	WAC 173-401-532(9)
167	Steam Relief Vents, Old Shut Down Power Boiler Nos. 1 through 5	WAC 173-401-532(87)
168	Bldg. Roof Vents	WAC 173-401-532(9)
169	Steam Vent Relief (Feed to Evaps)	WAC 173-401-532(87)
170	Old Evap. Control Room Doors (2)	WAC 173-401-532(9)
171	Power Boiler No. 7 Precip., Air Heater, Multiclone Ash Pile (Wetted)	WAC 173-401-530(1)(d)
172	Steam Relief Valve Stack	WAC 173-401-532(87)
173	Power Boiler No. 7 Rapper Room Vent Fan	WAC 173-401-532(9)
174	Power Boiler No. 7 Precip. Rapper Room Air Fan	WAC 173-401-532(9)
175	Power Boiler No. 7 Rapper Room Door	WAC 173-401-532(9)
176	Power Boiler No. 7 Precip Rapper Room Vent	WAC 173-401-532(9)
179	Steam Relief Valve, Power Boiler No. 7	WAC 173-401-532(87)
179A	Power Boiler No. 7 Steam Relief Valve on Roof	WAC 173-401-532(87)
180	Power Boiler No. 7 Bldg. Vents, East Side	WAC 173-401-532(9)
181	Relief Valve Power Boiler No. 7 Forced Turbine Steam Relief	WAC 173-401-532(87)
182	Power Boiler No. 7 Grate Ash Pile Discharge to Ground	WAC 173-401-530(1)(d)
183	Liquid Sulfur Tank, Microsol	WAC 173-401-533(2)(s)
184	Air Inlet for MCC	Inlet
185	No. 7 DB Pent House Room Vents	WAC 173-401-532(9)
186	Bldg. Vent	WAC 173-401-532(9)
187	Return H.F. Belt, Power Boiler No. 7	WAC 173-401-530(d)
188	Restroom Vent, Power Boiler No. 7	WAC 173-401-532(48)
189	Restroom Vent, Power Boiler No. 7	WAC 173-401-532(48)
190	Restroom Power Boiler No. 7, Floor 1	WAC 173-401-532(48)
191	Vent from Power Boiler No. 7 CEM	WAC 173-401-532(8)
192	Grate Ash Trough Power Boiler No. 7	WAC 173-401-530(1)(d)
193	Power Boiler No. 7 Blow Steam Blowdown	WAC 173-401-532(87)

Inventory No.	Emission Unit Description	Criteria
195	Turbine Oil Tank	WAC 173-401-532(3)
196	Used Oil Tank	WAC 173-401-532(3)
197	Steam Relief to Ground	WAC 173-401-532(87)
198	MCC Door Vent	WAC 173-401-532(9)
201	3CE Spout Water Collection Tank	WAC 173-401-532(96)
202	3CE Storage Locker Room, Wall Vent	WAC 173-401-532(9)
203	3CE Restroom Window Vent	WAC 173-401-532(48)
204	3CE Chemical Ash Tank (3CE Floor 3)	WAC 173-401-532(6)
205	Salt Cake Feed Line	Abandoned
206	Salt Cake Cyclone Tank Vent	Abandoned
207	Salt Cake Storage Day Tank	Abandoned
209	Salt Cake Mix Tank	WAC 173-401-532(91)
211	3CE Spout Cooling Water Head Tank	WAC 173-401-532(96)
212	3CE Main Steam Relief Exhaust Muffler	WAC 173-401-532(87)
213	3CE Steam Relief Valves	WAC 173-401-532(87)
215	3CE Air Power Rappers, Precip Cell 1 and 2 Mill Air	WAC 173-401-532(9)
216	3CE Fresh Air Makeup to Rapper Room	WAC 173-401-532(9)
217	3CE Steam Turbine for Third Cell	WAC 173-401-532(87)
219	3CE Cell 3 Rapper Room	WAC 173-401-532(9)
220	3CE Cell 3 Air Blower for Electric Section	WAC 173-401-532(9)
223	Abandoned Salt Cake Suction	Abandoned
227	Diesel Electric Emergency Generator	WAC 173-401-533(2)(f)
228	CE No. 4 Bldg. Window Vent, Ground, About 6th & 9th floor	WAC 173-401-532(9)
229	4CE Bldg. Vent	WAC 173-401-532(9)
230	4CE Blower for Recirculation Air of MCC	WAC 173-401-532(9)
231	4CE Blowdown Tank	WAC 173-401-532(96)
232	4CE Forced Draft Fan Steam	WAC 173-401-532(87)
233	4CE Salt Cake Black Liquor Mix Tank Vents to West Smelt Vent	WAC 173-401-532(91)
235	Micro Sulfur Liquid, Tank Vent	WAC 173-401-532(4)
237	4CE, Floor 2 MCC for Precips.	WAC 173-401-532(9)
238	4CE Steam Blowdown Box Floor 3	WAC 173-401-532(96)
239	4CE NALCO Tote Bin 328 Floor 3	WAC 173-401-532(42)

Inventory No.	Emission Unit Description	Criteria
240	4CE Salt Cake Bin plus Feed System	WAC 173-401-532(91)
241	4CE Steam	WAC 173-401-532(89)
242	4CE Plus 3CE Air Makeup for Control Room	WAC 173-401-532(9)
243	Salt Mix Tank, 4CE	WAC 173-401-532(91)
245	4CE Laminar Air Heater (LAH) Air Inlet (two)	Inlet
246	4CE Smelt Tank Cooling Water Tank	WAC 173-401-532(96)
247	4CE Air Seal Fan to Prec. Isolation Gate	Inlet
248	4CE MCC Room Air Makeup System	WAC 173-401-532(9)
249	4CE Room, Open Door Ventilation	WAC 173-401-532(9)
250	3CE Scrubber Blowdown to Process Sewer	WAC 173-401-532(96)
251	4CE ID Fan Steam Turbine Steam Leak	WAC 173-401-532(89)
252	4CE Elevator Air Makeup Fan	WAC 173-401-532(9)
253	3CE Scrubber Turbine Fan Steam Leak	WAC 173-401-532(89)
254A	CE No. 4 Steam Inlet Vent, Not Blowing	Inlet
255A	CE No. 3 CEM (H_2S) Vent	WAC 173-401-532(8)
256	4CE Precip Rapper Room 4th Floor	WAC 173-401-532(9)
257	4CE CEM (TR 5) Exhaust	WAC 173-401-532(8)
258	H_2SO_4 for pH Control of Mill Effluent	WAC 173-401-533(2)(s)
261	Evp. Line No. 4 Condensate (Boilout) Tank	WAC 173-401-532(96)
262	CE No. 4 Precip. Emergency Salt Cake Dump Tube	WAC 173-401-532(91)
264	CE No. 4 CEM Exhaust	WAC 173-401-532(8)
267	Microsol Tank	WAC 173-401-532(95)
270	Foul Condensate 2” Pipe Discharge to Trench Sewer	WAC 173-401-532(120)
272	Dewatered Sludge Pile	WAC 173-401-530(1)(d)
273	Primary Clarifier	WAC 173-401-530(1)(d)
275	Primary Clarifier Sulfuric Acid Tank	WAC 173-401-533(2)(s)
276	Mix Tank, Primary Sludge plus Secondary Biomass	WAC 173-401-532(114)
277	Conditioning Tank, Feeds Screw Presses	WAC 173-401-532(114)
278	West Screw Press (FKC) Discharge	WAC 173-401-532(114)
279	East Screw Press (FKC) Discharge	WAC 173-401-532(114)
280	West Rotary Sludge Thickener for Primary Sludge	WAC 173-401-532(114)
281	East Rotary Sludge Thickener	WAC 173-401-532(114)

Inventory No.	Emission Unit Description	Criteria
282	Primary Effluent Transfer Bldg. Vent Fan	WAC 173-401-532(9)
283	Primary Effluent Transfer Bldg. Vents	WAC 173-401-532(9)
284	Primary Effluent H_2SO_4 Tank	WAC 173-401-533(2)(s)
285	DWB (Dewater Bldg.) Vent Fan	WAC 173-401-532(9)
286	DWB Polymer Tanks	WAC 173-401-533(2)(s)
287	DWB FKC Transfer Belt Open	WAC 173-401-532(114)
288	DWB Control Room Vent Fan (Positive Air)	WAC 173-401-532(9)
289	DWB Restroom Vent Fan	WAC 173-401-532(48)
290	DWB Vacuum Pump Receiver Tank	WAC 173-401-532(114)
278A	DWB FKC Head Box	WAC 173-401-532(114)
279A	DWB FKC Head Box to Screw Press	WAC 173-401-532(114)
291	DWB Vent Fan for Head Box FKC East and West	WAC 173-401-532(114)
292	DWB Opening for Vent	WAC 173-401-532(9)
293	Biomass Oversize Reject Pile Mechanism	WAC 173-401-530(1)(d)
294	HF Metal Reject System	N/A.
295	HF plus Sludge Covered Belt	WAC 173-401-532(114)
296	HF Belt, Open, Weather Covering	WAC 173-401-530(1)(d)
297	DWB Vent	WAC 173-401-532(9)
298	DWB Hydraulic Oil Tank	WAC 173-401-532(3)
299	DWB Fines Day Tank Vent	WAC 173-401-532(6)
300	Diesel Tank	WAC 173-401-533(2)(t)
301	PET (Primary Effluent Transfer) Diesel Electric Backup Exhaust	WAC 173-401-533(2)(f)
302	Diesel Electric Bldg. Vents	WAC 173-401-532(9)
303	DWB Second Floor Bldg. Vents	WAC 173-401-532(9)
304	DWB MCC Bldg. Vent	WAC 173-401-532(9)
305	DWB Fines Cyclone (Feeds HF Belt)	WAC 173-401-532(112)
306	DWB FKC Steam Relief Valve	WAC 173-401-532(87)
307	HF Reclaimer Control Room Vent	WAC 173-401-532(9)
308	HF Pile	WAC 173-401-530(1)(d)
309	HF Truck Lift Control Room, West Wall	WAC 173-401-532(9)
310	Air Makeup for MCC	WAC 173-401-532(9)
313	Abandoned Screens	Abandoned

Inventory No.	Emission Unit Description	Criteria
315	Air Make up for MCC	WAC 173-401-532(9)
316	Air Makeup for Pulp Mill MCC East of Process Lab	WAC 173-401-532(9)
317	No. 3 Washer Line Foam Tank Vent	WAC 173-401-532(93)
319	Pulp Machine (PM) Weir Shower Head Box Vents	Abandoned
320	West Pulp Machine Wire Pickup Vent	WAC 173-401-532(106)
321	Pulp Machine Vent over Weir and Couch Areas	WAC 173-401-532(106)
322	PM Vent over Machine No. 2 2nd Press Area	WAC 173-401-532(106)
323	PM Room Vent	WAC 173-401-532(9)
324	PM Head Box's Vents	WAC 173-401-532(106)
RV	PM Ceiling Roof Vent	WAC 173-401-532(9)
325	Air Makeup for Old Bleach Plant Control Room	WAC 173-401-532(9)
326	PM No. 2 Press Area and Pre-Dry Hood Vents	WAC 173-401-532(107)
327	PM No. 1 Press Area and Pre-Dry Hood Vents	WAC 173-401-532(107)
328	Washline No. 4 Feed Box, External Air Pickup	Inlet
329	Washer Line No. 4 Hood Vent (Closed)	Normally Closed
330	PM No. 2 Dryer Exhaust Vent	WAC 173-401-532(107)
331	Washer Line No. 4, Normally Closed, Fan Discharge	Normally Closed
332	Washer Line No. 4 Discharge Area, External Air Pickup	Inlet
333	PM Heat Exchanger for Ceiling Moisture Ventilation over Layby Area	WAC 173-401-532(107)
334	PM No. 1 Heat Exchanger	WAC 173-401-532(107)
335	PM No. 1 Dryer Exhaust Vent	WAC 173-401-532(107)
336	PM Heat Exchanger	WAC 173-401-532(107)
337-449	Unused Numbers	N.A.
450	Weak Black Liquor No. 12 Storage Tank	WAC 173-401-532(93)
451	Weak Black Liquor No. 11 Storage Tank	WAC 173-401-532(93)
452	Weak Black Liquor No. 10 Storage Tank	WAC 173-401-532(93)
453	Weak Black Liquor No. 9 Storage Tank	WAC 173-401-532(93)
454	Oxidized Weak Black Liquor No. 8 Storage Tank	WAC 173-401-532(93)
455	Warm Water Tank	WAC 173-401-532(96)
456	High-Density No. 12 Tank Stock Storage	WAC 173-401-532(98)
457	White Water Overflow to Sewer	WAC 173-401-532(94)
458	HD No. 1 (High Density) Stock Storage	WAC 173-401-532(98)

Inventory No.	Emission Unit Description	Criteria
461	Hot Water Tank	WAC 173-401-532(96)
462	White Liquor no. 2 Tank	WAC 173-401-532(103)
463	White Liquor No. 1 Tank	WAC 173-401-532(103)
464	MCC Room Vent	WAC 173-401-532(9)
465	Batch Dig Liq Heater Vent Stack	Abandoned
466	Batch Digester (BD) Steam Relief	WAC 173-401-532(87)
467	Fresh Air Makeup for Electric & Instrument Shop & Kamyr Control Room	WAC 173-401-532(9)
468	Batch Dig. Bldg. Wall Windows that can Open	WAC 173-401-532(9)
469	PM Vacuum Pump Exhaust	WAC 173-401-532(107)
470	PM Vacuum Pump Exhaust	WAC 173-401-532(107)
471	PM Nos. 1 and 2 Wire	WAC 173-401-532(106)
472	PM Restroom Vent Fan	WAC 173-401-532(48)
473	PM Grader Room Vents	WAC 173-401-532(9)
474	PM Oil Tanks	WAC 173-401-533(2)(t)
475	PM Used Oil Pickup Tray and Used Oil Drum	WAC 173-401-532(42)
476	PM MCC 440 Volts	WAC 173-401-532(9)
477	PM Nos. 1 and 2 Air Makeup Total of Four	WAC 173-401-532(106)
478	Steam Chest Leak By	WAC 173-401-532(89)
479	PM Wall Window Vent East	WAC 173-401-532(9)
480	PM Computer Room Air Cond.	WAC 173-401-532(46)
481	PM Operators Room Air Makeup From Roof of Control Room	WAC 173-401-532(9)
482	2-Inch Vent Pipe for Bleach Plant Acid and Alk. Sewer	WAC 173-401-532(120)
483	Paper Stock Head Box Tank	WAC 173-401-532(106)
484	Old Control Room, 2 and 3 Washers	WAC 173-401-532(9)
473A	PM Vent Fan	WAC 173-401-532(107)
485	Cowan Screen No. 3	WAC 173-401-532(98)
486	Cowan Screen No. 4	WAC 173-401-532(98)
487	Non-operative Screen	WAC 173-401-532(98)
488	Cowan Screen No. 8	WAC 173-401-532(98)
489	Cowan Screen No. 9	WAC 173-401-532(98)
490	Cowan Screen No. 10	WAC 173-401-532(98)

Inventory No.	Emission Unit Description	Criteria
491	Abandoned Screens	Abandoned
492	Weak Black Liquor 1 Filter with Vent	WAC 173-401-532(93)
493	See Number 492—2 Filter	WAC 173-401-532(93)
494	See Number 492—3 Filter	WAC 173-401-532(93)
495	Floor Drain to Dump Tank	WAC 173-401-532(120)
496	Floor Drain to Spill Tank	WAC 173-401-532(120)
497	Floor Drain to Blend Chest	WAC 173-401-532(120)
499	Air Makeup for Old Bleach Plant Control Room	Inlet
500	Used Oil Tank	WAC 173-401-533(2)(t)
501	Industrial Oil Tanks	WAC 173-401-533(2)(t)
502	Screw for Pulp Off 4th Stage to Blend Chest	WAC 173-401-532(98)
504	Hydrosieve for Reject from Ref Reject Belt	WAC 173-401-532(94)
505	Defoamer Tank on Top or No. 2 Hd	WAC 173-401-532(4)
516	White Liquor Storage Tank for Batch Dig.	WAC 173-401-532(103)
519	Batch Digester Restroom Vent	WAC 173-401-532(48)
520	Batch Digester Control Room Air Makeup	WAC 173-401-532(9)
521	Kamyr No. 1 Chip Cyclone	WAC 173-401-532(92)
522	Kamyr No. 2 Chip Cyclone	WAC 173-401-532(92)
523	Washer Line No. 1 Foam Tank	WAC 173-401-532(93)
526	NCG Vaporsphere, with Vent in Case of Rupture	WAC 173-401-532(87)
532	Washer Line No. 3 Foam Tank	WAC 173-401-532(93)
533	Wash Line No. 2 Filtrate Tanks (three)	WAC 173-401-532(93)
534	High-Density (HD) No. 3 Stock Storage	WAC 173-401-532(98)
535	HD No. 4 Stock Storage	WAC 173-401-532(98)
536	HD No. 5 Stock Storage	WAC 173-401-532(98)
537	Washer Line No. 4 Brown Stock Washer Filtrate Tank Vent	WAC 173-401-532(93)
538	Defoamer Tank	WAC 173-401-532(93)
539	HD No. 5 Sump Tank	WAC 173-401-532(98)
540	8% Caustic Storage Tanks	WAC 173-401-533(2)(s)
541	8% Caustic Storage Tank	WAC 173-401-533(2)(s)
542	50% Caustic Tank	WAC 173-401-533(2)(s)
543	Pitch Dispersant Tank	WAC 173-401-533(2)(s)

Inventory No.	Emission Unit Description	Criteria
544	Defoamer Tank SW	WAC 173-401-533(2)(s)
545	Defoamer Tank NW	WAC 173-401-533(2)(s)
546	Defoamer Tank N	WAC 173-401-533(2)(s)
547	Defoamer Tank Center	WAC 173-401-533(2)(s)
548	Defoamer Tank S	WAC 173-401-533(2)(s)
549	Hydrogen Peroxide Tank	WAC 173-401-532(100)
553	Kamyr Nitric Acid Makeup Tank	WAC 173-401-533(2)(s)
554	Kamyr No. 2 Chip Bin Vents	WAC 173-401-532(92)
555	Kamyr No. 2 Chip Bin Wall Vents	WAC 173-401-532(92)
556	Kamyr No. 1 Chip Bin	WAC 173-401-532(92)
557	Roof Vents	WAC 173-401-532(9)
557A	Kamyr No. 1 Chip Bin Wall Vent (WV)	WAC 173-401-532(92)
558	Steam Vent for Batch Digester	WAC 173-401-532(87)
559	Steam Relief Valves	WAC 173-401-532(87)
560	Restroom, Kamyr Door Vent	WAC 173-401-532(48)
561	Kamyr: White Liq. Calibration Tank	WAC 173-401-532(103)
562	Air Makeup to Kamyr Control Room	Inlet
563	Kamyr Steam Vessel Emergency Relief Stack	WAC 173-401-532(87)
564	Single Air Makeup for Two Kamyr MCC Rooms	Inlet
565	Kamyr Sump, Ground Level	WAC 173-401-532(120)
566	Kamyr Condensate from Heater	WAC 173-401-532(96)
568	Machine Chest (Stock from HD No. 3 Pulp Mach. Room)	WAC 173-401-532(98)
569	Refined Rejects Tank	WAC 173-401-532(98)
570	Unrefined Rejects Tank	WAC 173-401-532(98)
571	Washer Line No. 1 Filtrate Tanks	WAC 173-401-532(93)
572	Washer Line No. 3 Filtrate Tanks	WAC 173-401-532(93)
573	BSW Knot Tank	WAC 173-401-532(93)
574	Line Tile No. 1 Chest (with Decker Chest)	WAC 173-401-532(98)
575	MCC Black Clawson Paper Screens Floor	WAC 173-401-532(9)
576	Hydrosieve Effluent Tank	WAC 173-401-532(94)
577	Reject Dump Chest	WAC 173-401-532(94)
578	White Water Chest	WAC 173-401-532(94)

Inventory No.	Emission Unit Description	Criteria
579	Secondary Knotter Accept Tank	WAC 173-401-532(93)
581	Hydrosieve Effluent Tank	WAC 173-401-532(94)
582	Sample Blow Pot on the Side of Each Batch Digester	WAC 173-401-532(51)
583	Sample Blow Pot on the Side of Blow Tank No. 1	WAC 173-401-532(51)
584	Chip Hopper Above Batch Digesters	WAC 173-401-532(92)
585	Sample Blow Pot for Kamyr Nos. 1 and 2	WAC 173-401-532(51)
586	Weak Black Liquor Filter Vent	WAC 173-401-532(93)
588	Hot Water Tank Vent	WAC 173-401-532(96)
591	Batch Digester Chip Bin Belt	WAC 173-401-530(1)(d)
592	Air Intake for Batch Digester Control Room	Inlet
593	Bleach Plant (BP) Restroom	WAC 173-401-532(48)
594	BP Lab Hood Vent	WAC 173-401-532(51)
595	Air Makeup for BP Control Room	Inlet
597	BSW No. 4 Tertiary Screen Feed Tank (N) and Tertiary Rejects (S) Tank	WAC 173-401-532(93)
598	BSW No. 4 Primary Screen Feed Tank	WAC 173-401-532(93)
599 or 537	BSW No. 4 Filtrate Tank	WAC 173-401-532(93)
600	HD No. 6 Unbleached Pulp to BP	WAC 173-401-532(98)
601	No. D Bleached Pulp from Bleach Plant No. 7	WAC 173-401-532(98)
609	Kemi Nords ClO_2 Generator	WAC 173-401-532(87)
610	BSW No. 4 Roof Vent, Fans	WAC 173-401-532(9)
611	BP Roof Vents, Fans	WAC 173-401-532(9)
614	MCC Door Vents BSW No. 4 Floor Level	WAC 173-401-532(9)
615	BP and BSW No. 4 MCC	WAC 173-401-532(9)
634	Chlorate Tanks (Two)	WAC 173-401-533(2)(s)
635	(ClO_2) H_2SO_4 Tank Vent	WAC 173-401-533(2)(s)
636	100% Methanol Tank	WAC 173-401-530(1)(a)
639	50% Caustic Storage Tanks	WAC 173-401-533(2)(s)
642	ClO_2 Keminord Bld. 4th Floor Vent Fans	WAC 173-401-532(9)
643	Air Makeup for Keminord MCC Ground Level	Inlet
645	Air Compressor for Cl_2 Car Air Pad	Inlet
646	SO_2 Storage Tank	WAC 173-401-533(2)(s)
648	PM No. 13 Wire Vacuum Pump Discharge Stock	WAC 173-401-532(106)

Inventory No.	Emission Unit Description	Criteria
649	PM No. 13 Stock Chest	WAC 173-401-532(98)
650	PM No. 13 Oliver Seal Pit	WAC 173-401-532(106)
651,652	Conc. Alum. Tank East/West	WAC 173-401-533(2)(s)
653,654	Wet Strength Tank East/West	WAC 173-401-533(2)(s)
655	PM No. 13 Broke Chest	WAC 173-401-532(98)
656	TiO_2 Storage Tank PM	WAC 173-401-533(2)(s)
657	Thick TiO_2 Tank	WAC 173-401-533(2)(s)
658	Conc H_2SO_4 Storage Tank	WAC 173-401-533(2)(s)
659	Restroom Vent in Ceiling	WAC 173-401-532(48)
660	Primary White Water Chest	WAC 173-401-532(94)
661	Calgon Hydraid Open Top Makeup Tank	WAC 173-401-533(2)(s)
662	Hercules Microform Makeup Tank	WAC 173-401-533(2)(s)
663	PM No. 2 Secondary Raw Stock Chest	WAC 173-401-532(94)
664	Recycle Stock Chest	WAC 173-401-532(98)
665	PM No. 13 Raw Stock Chest	WAC 173-401-532(98)
666	PM No. 13 Primary Machine Chest	WAC 173-401-532(98)
667	PM No. 14 Broke Stock Chest	WAC 173-401-532(98)
668	PM South Raw Stock Chest	WAC 173-401-532(98)
669,669A	Liq Alum Tank PM North/South	WAC 173-401-533(2)(s)
670,671	Wet Strength Tank South/North	WAC 173-401-533(2)(s)
672	Primary 3rd Stage Accepts Tank	WAC 173-401-532(98)
673	PM No. 14 Sec. Machine Chest	WAC 173-401-532(98)
674	PM MCC GL Vent East	WAC 173-401-532(9)
675	PM No. 14 Vacuum Pumps	WAC 173-401-532(107)
676	PM No. 13 Vacuum Pumps	WAC 173-401-532(107)
677	PM No. 13 Stock Chest	WAC 173-401-532(98)
678	PM No. 13 Seal Pit to Wire Pit	WAC 173-401-532(106)
679	PM No. 13 Air Makeup for Cooling Vacuum Pump Area	Inlet
680	PM MCC Vent South	WAC 173-401-532(9)
681	PM No. 14 Bell Liner Vacuum Pumps	WAC 173-401-532(106)
682	No. 14 PM MCC Air Vent N	WAC 173-401-532(9)
683	Steam Relief Valve No. 14 PM	WAC 173-401-532(87)

Inventory No.	Emission Unit Description	Criteria
684	PM No. 14 Air Makeup	Inlet
685	PM No. 14 Size Press Starch Tank	WAC 173-401-533(2)(s)
686	Air Makeup for PM No. 14	Inlet
687	14 PM No. 14 Size Press Svc Tank N	WAC 173-401-533(2)(s)
688	North Tile Starch No. 14 Storage Tank	WAC 173-401-532(6)
689	South Tile Starch No. 14 Storage Tank	WAC 173-401-532(6)
690	Size Press Svc Tank	WAC 173-401-533(2)(s)
691	PM No. 14 MCC Forced Air Makeup, South Vent in Wall	WAC 173-401-532(9)
692	Hydraulic Oil Reservoir	WAC 173-401-533(2)(t)
693	Used Oil Portable Tanks	WAC 173-401-533(2)(t)
694	PM No. 13 Repulper	WAC 173-401-532(98)
695	PM No. 14 Repulper	WAC 173-401-532(98)
696	Air Makeup for PM No. 13	Inlet
697	East/West Starch Slurry Tanks	WAC 173-401-533(2)(s)
698	Starch Cook Tanks	WAC 173-401-533(2)(s)
699	PM MCC with Vents	WAC 173-401-532(9)
700	PM Office Vent N	WAC 173-401-532(46)
701	Sand Blaster PM	WAC 173-401-532(55)
702	Welding Booth No Hood	WAC 173-401-532(33)
703	No. 13 Repulp Chest	WAC 173-401-532(98)
704	Vent for PM No. 13 Chest at GL	WAC 173-401-532(98)
705	No. 14 Round Chest	WAC 173-401-532(98)
706	PM No. 14 Sec Decker Cyl and Vat	WAC 173-401-532(98)
707	PM No. 14 Pri Decker Cyl and Vat	WAC 173-401-532(98)
708	Wet End Control Booth	WAC 173-401-532(9)
709	Lab with South Air Vent	WAC 173-401-532(9)
710	PM Dilute H_2SO_4 Tank	WAC 173-401-533(2)(s)
711	Fan for Air Cooling No. 14 PM	Inlet
712	White Tank Dil H_2SO_4	WAC 173-401-533(2)(s)
713	Blue Tank	WAC 173-401-533(2)(s)
714	Control Room Upper Level	WAC 173-401-532(9)
715	Restroom PM Vent	WAC 173-401-532(48)

Inventory No.	Emission Unit Description	Criteria
716	Microform Tank	WAC 173-401-533(2)(s)
717	PM No. 13 Control Booth	WAC 173-401-532(9)
718	PM No. 14, New Control Room	WAC 173-401-532(9)
719	Size Storage Tank N/S	WAC 173-401-533(2)(s)
720	Color Makeup Tanks	WAC 173-401-533(2)(s)
721	Dilute Size Storage Tanks UL	WAC 173-401-533(2)(s)
722/722A	UL White Tanks (2)	WAC 173-401-533(2)(s)
723	PM No. 13 Save All Cylinder & Vat	WAC 173-401-532(98)
724	Tank Gray	WAC 173-401-533(2)(s)
725	Caustic Tank	WAC 173-401-533(2)(s)
726	Color System Storage Tanks Nos. 2 and 3	WAC 173-401-533(2)(s)
727/727A	Color System No. 13 Left/Right	WAC 173-401-533(2)(s)
728	Calendar Tank N/S	WAC 173-401-533(2)(s)
729	Control Booth (PM) Vent	WAC 173-401-532(9)
732	PM Air Makeup for Machine Floor Above Grinder Room	Inlet
733	PM Roof Vent Powered ABC	WAC 173-401-532(9)
734	Air Makeup for PM Machine Room Drying End. Above Handling and Shipping	Inlet
735	Portable Vent Fan, Shipping Roof	WAC 173-401-532(9)
736	Paper Machine Clay & Filler Tank 1 through 4	WAC 173-401-533(2)(s)
737	Paper Machine Shower, Restroom Locker	WAC 173-401-532(48)
738	Paper Machine Oil House	WAC 173-401-532(3)
739	Paper Machine Air Compressor	WAC 173-401-532(88)
740	Paper Machine Type D Roto Clone	WAC 173-401-532(88)
741	Paper Machine MCC 7G	WAC 173-401-532(9)
742	Double Line Kraft (DLK) Recycle Plant Screen Feed Tank	WAC 173-401-532(98)
743	Shipping Dep. Paper Machine Offices	WAC 173-401-532(9)
744	Paper Machine, Machine Level Restroom Vent	WAC 173-401-532(48)
745	Paper Machine Office, Vent	WAC 173-401-532(46)
746	DLK Bowel and Vibrating Screen	WAC 173-401-532(98)
747	Engineer Offices and Paper Machine Offices and Restrooms	WAC 173-401-532(46)
749	Paper Machine Quality Offices and Paper Lab Testing Offices	WAC 173-401-532(46)

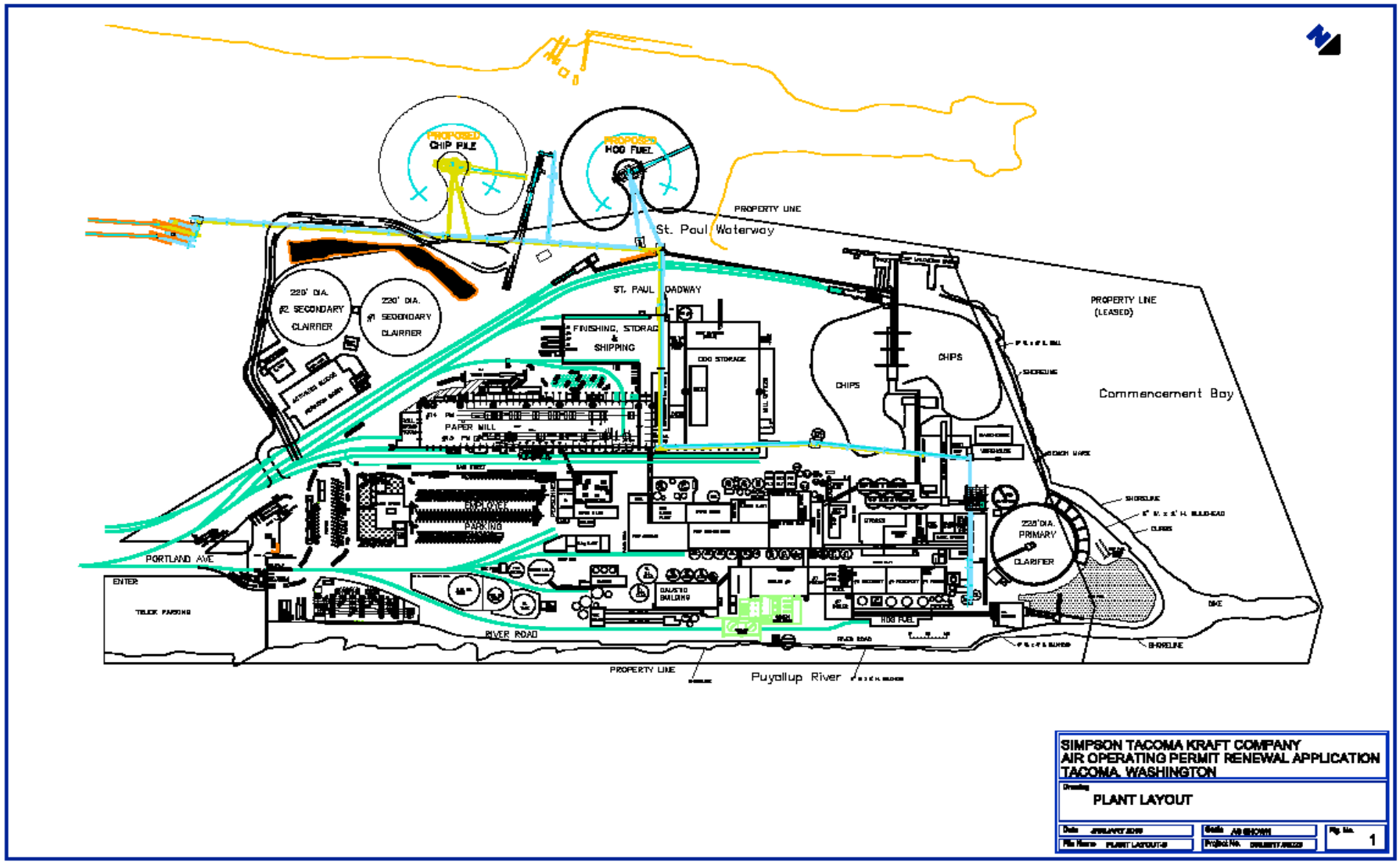
Inventory No.	Emission Unit Description	Criteria
750	Purchasing Offices and Restrooms	WAC 173-401-532(46)
751	Propane Storage Tank	WAC 173-401-532(87)
752	Black Liquor Spill Collection Tank	WAC 173-401-532(93)
753	Turpentine Storage Tank	
755	Parts Cleaners (Total of Eight)	WAC 173-401-532(33)
756	BP Chiller Bldg. Vents, East Side	WAC 173-401-532(9)
757	Personnel Office Restrooms with Vents	WAC 173-401-532(48)
758	Men's Locker Room and Restroom with Vents (Below Personnel)	WAC 173-401-532(48)
759	Women's Locker Room and Restroom with Vents	WAC 173-401-532(48)
760	Restroom Near Effluent Monitoring Lab	WAC 173-401-532(48)
761	Administration Bldg. Restroom, Lower Level	WAC 173-401-532(48)
762	New Pulp Testing Lab	WAC 173-401-532(51)
763	Water Lab Hood Vent	WAC 173-401-532(51)
764	Water Lab Sink Power Vent	WAC 173-401-532(51)
765	Old Pulp Testing Lab, Window Vents	WAC 173-401-532(51)
766	AOX Lab Hood Vent (Power)	WAC 173-401-532(51)
767	NCG Relief Stack in Case of Diaphragm Failure	Normally Closed
768	Air Fresh Supply Makeup Fan for Instrument and Electric Shop	Inlet
769	Restroom Vent	WAC 173-401-532(48)
770	Weld Shop Roof Vent Fan	WAC 173-401-532(33)
771	Carpenter Shop Roof Vent Fan	WAC 173-401-532(33)
772	Pipe Shop, Pulp Mill Welding Booth, Vent Fans	WAC 173-401-532(33)
773	Machine Shop Area, Women's Restroom Vent	WAC 173-401-532(48)
774	Men's Locker, Shower, Restroom	WAC 173-401-532(48)
775	Machine Shop Welding Booth, Power Vent	WAC 173-401-532(33)
776	Paint Shop Vent Fan	WAC 173-401-532(33)
777	Car Shop Two Vent Fans	WAC 173-401-532(33)
778	Effluent Lift Pump Bldg. Wall Vent	WAC 173-401-532(9)
779	Chip Screen Control Room Vent	WAC 173-401-532(46)
780	Chip Screen Room Door/Wall Vent	WAC 173-401-532(9)
781	Diesel Fuel Storage Tank Above Ground	WAC 173-401-533(2)(t)
782	Hydraulic Oil Tank West	WAC 173-401-533(2)(t)

Inventory No.	Emission Unit Description	Criteria
783	Unox Effluent Line Vents	WAC 173-401-532(120)
784	Unox Reactor Vents (See NCASI Study)	WAC 173-401-532(120)
785	Gasoline Tank 4000 Gallons	WAC 173-401-533(2)(c)
786/781	Diesel Tanks 4000 Gallons	WAC 173-401-533(2)(c)
787	PM No. 13 Water Shower for Vacuum System	WAC 173-401-532(106)
788	Chip Test Station Outside Air Supply	Inlet
789	Chip Test Station Chip Dry (Oven, Two Each)	WAC 173-401-532(51)
790	South Rail Dump Room Vent	WAC 173-401-532(9)
791	South Rail Dump Restroom Vent	WAC 173-401-532(48)
792	Old Chip Test Station Vent Fan	WAC 173-401-532(51)
793	West Truck Dump Restroom Vent	WAC 173-401-532(48)
794	Chip Pile MCC Room Vent	WAC 173-401-532(9)
795	Primary Clarifier	WAC 173-401-530(1)(d)
796	No Unit Assigned	
797	Warehouse, Two Door Vents	WAC 173-401-532(9)
798	Chip Pile	WAC 173-401-530(1)(d)
799	Oil Barge Unloading Room Window Vent	WAC 173-401-532(9)
800	Chip Barge Unloading Barge Stair Vent	WAC 173-401-532(9)
801	Main Trailer Conference Room Restroom Vent	WAC 173-401-532(48)
802	Accounting Office Restroom, Lower Level	WAC 173-401-532(48)
803	Credit Union Restroom, Vent	WAC 173-401-532(48)
804	Learning Center Air Makeup	WAC 173-401-532(46)
805	Water Meter House Vent	WAC 173-401-532(9)
806	Natural Gas Meter House Vent	WAC 173-401-532(9)
807	North Secondary Clarifier	WAC 173-401-530(1)(d)
808	South Secondary Clarifier	WAC 173-401-530(1)(d)
809	Cryogenic Oxygen Bldg. Vents	WAC 173-401-532(9)
810	UNOX Control Room & MCC Bldg. Vents	WAC 173-401-532(9)
811	UNOX Recycle Pump Bldg. Vents	WAC 173-401-532(9)
812	UNOX Recycle Pump Bldg. Power Vent Fan	WAC 173-401-532(9)
814	“A” Gate Air Makeup System	Inlet
802A	Accounting Bldg. Wall Vents in Roof	WAC 173-401-532(46)

Inventory No.	Emission Unit Description	Criteria
815	Sanitary Treatment Chemical Storeroom Vent	WAC 173-401-532(46)
816	Secondary Effluent Line Vent	WAC 173-401-532(120)
817	Secondary Treatment/Dewatering Diesel Emergency Generator	WAC 173-401-533(2)(f)
818	Fire Water Diesel Pump	WAC 173-401-533(2)(f)
900	OCC Pulper Hood	WAC 173-401-532(98)
901	OCC Pulper Trash Well	WAC 173-401-532(98)
902	OCC Pulper Purge Screen	WAC 173-401-532(98)
903	OCC Whitewater Heat Exchanger Vent	WAC 173-401-532(94)
904	OCC Chest Vent Fan	WAC 173-401-532(98)
905	OCC Primary Forward Cleaner Sumps (3)	WAC 173-401-532(94) WAC 173-401-532(110)
906	OCC Secondary Forward Cleaner Sump	WAC 173-401-532(94) WAC 173-401-532(110)
907	OCC Tertiary Forward Cleaner Sump	WAC 173-401-532(94) WAC 173-401-532(110)
908	OCC Primary No. 1 Reverse Cleaner Sumps (4)	WAC 173-401-532(94) WAC 173-401-532(110)
909	OCC Primary No. 2 Reverse Cleaner Sumps (4)	WAC 173-401-532(94) WAC 173-401-532(110)
910	OCC Dissolved Air Flotation (DAF) Clarifier	WAC 173-401-530(1)(d)
911	OCC DAF Clarifier Polymer Tank	WAC 173-401-532(117)
912	OCC Decker Hood	WAC 173-401-532(110)
913	OCC Decker Shower Filter	WAC 173-401-532(110)
914	OCC High Density Storage Chest	WAC 173-401-532(98)
915	OCC H.D. Dilution Tank	WAC 173-401-532(98)
916	OCC Grits Tank	WAC 173-401-532(110)
917	OCC Sand Separator	WAC 173-401-532(110)
918	OCC Sand Separator Dumpster	WAC 173-401-532(110)
919	OCC Rejects Sorter	WAC 173-401-532(98) WAC 173-401-532(110)
920	OCC Rejects Distribution Belt	WAC 173-401-532(98) WAC 173-401-532(110)
921	OCC Rejects Screw Conveyor	WAC 173-401-532(98) WAC 173-401-532(110)

Inventory No.	Emission Unit Description	Criteria
922	OCC Rejects Dumpster	WAC 173-401-532(98) WAC 173-401-532(110)
923	OCC Rejects Sump	WAC 173-401-532(98) WAC 173-401-532(110)
924	OCC Pulper Sump	WAC 173-401-532(98)
925	OCC Screen Feed Chest Sump	WAC 173-401-532(98)
926	OCC High Density Chest Sump	WAC 173-401-532(98)
927	OCC Process Area “U” Drain	WAC 173-401-532(94)
928	Woodmill Clarifier	Abandoned
929	No. 2 Washer hood exhaust No. 1 / vibratory knotter	Abandoned
930	No. 2 Washer hood exhaust No. 2	Abandoned
931	No. 2 Washer hood exhaust No. 3	Abandoned
932	No. 3 Washer hood exhaust No. 1	Abandoned
933	No. 3 Washer No. 3 hood exhaust No. 2	Abandoned
934	Washer No. 3 hood exhaust	Abandoned
935	Washer Line No. 3 decker	Abandoned
936	Washer Line No. 4 secondary knotter	Abandoned
937	Knot tank knotter	Abandoned
938	Weak black liquor oxidizer tank, converted to weak black liquor tank	WAC 173-401-532(93)
939	HVLC system pressure / vacuum breakers	Normally closed
940	HVLC rupture disc vents	Normally closed
941	CBOP steam line - reliefs and vents	Normally closed
942	Turbine generator project - steam vents	Normally closed
943	Turbine generator project 337,420 ADUBT/yr Kraft Pulp - pressure relief valves	Normally closed
944	Cogeneration Turbine generator building vents	WAC 173-401-532(9)
945	Cooling Tower water sump	WAC 173-401-532(94)
946	Weak Wash Pressure Filter	WAC 173-401-532(99)
947	White Liquor Pressure Filter	WAC 173-401-532(103)
948	UNOX Oxygen Plant Water Cooling Tower	WAC 173-401-532(121)
949	Pulp Storage Tank Transfer Decker	WAC 173-401-532(98)

APPENDIX A: SIMPSON TACOMA KRAFT FACILITY SITE MAP



PUBLIC PARTICIPATION

The 30-day public comment period for the renewal of Title V Permit No. 000369-7 for the Simpson facility ended April 11, 2011. Comments were received via e-mail dated March 27, 2011 from Mr. William Green. The comments are presented below along with Ecology's response.

The 45-day EPA comment period ended August 12th, 2011. No formal comments were received from EPA.

Public Comments Received:

Commenter: Mr. William Green (greenrchn@gmail.com)

Comment 1: Revise the Simpson Draft AOP renewal to include all applicable requirements. Missing are applicable requirements resulting from the *Tailoring Rule* as implemented by 40 C.F.R. 70. This rule became effective January 2, 2011.

The Draft Simpson AOP renewal fails to address the *Clean Air Act* (CAA) Title V applicable requirement regarding greenhouse gases (GHG) emissions imposed by EPA in the *Tailoring Rule* (75 Fed. Reg. 31514, June 3, 2010) and implemented by 40 C.F.R. 70. For sources with a Title V permit, addressing GHG emissions became effective January 2, 2011. *Id.*

> ". . .Sources with title V permits must address GHG requirements when they apply for, **renew**, or revise their permits. These requirements will include any GHG applicable requirements (e.g., GHG BACT requirements from a PSD process) and associated monitoring, recordkeeping and reporting. When a permit application is otherwise required, they will also need to identify GHG emissions and other information in that application to the extent required under 40 CFR 70.5(c) and 71.5(c), including information necessary to determine applicable requirements. . ."
> (75 Fed. Reg. 31523, June 3, 2010) (emphasis is mine)

Because this is a renewal of an existing CAA Title V permit that will be issued after the date the federal GHG requirements became effective (i.e. after January 2, 2011), this AOP renewal must also address GHG requirements. According to 40 C.F.R. 70.7 (a)(1) "A permit, permit modification, or renewal may be issued only if all of the following conditions have been met:. . .(iv) The conditions of the permit provide for compliance with all applicable requirements . . ." . [40 C.F.R. 70.7 (a)(1)] Green house gases are now pollutants subject to regulation under the CAA and therefore must be included, as appropriate, in this permit renewal.

Ecology Response: The GHG provisions that are applicable to the Simpson facility have been incorporated into the permit. The initial omission was an oversight attributed to the expectation that permit renewal would have occurred before there were applicable GHG requirements.

Comment 2: Provide the public with a complete AOP renewal application including all relevant information Ecology-Industrial Section (Ecology) used to create all applicable requirements as specified by 40 C.F.R. 70.7 (h)(2). ['EPA has determined that the phrase "materials available to the permitting authority that are relevant to the permit decision,"40 C.F.R. § 70.7(h)(2), means the information that the permitting

authority has deemed to be relevant by using it in the permitting process.' *Sierra Club v. Johnson*, 436 F.3d 1269, 1284 (11th Cir. 2006)]

The Simpson permit renewal application does not comply with the requirements in 40 C.F.R. 70.5 (c) and WAC 173-401-510 (1). Missing is all information needed to evaluate applicability of the new federal GHG requirement and WAC 173-441. [". . .an application may not omit information needed to determine the applicability of, or to impose, any applicable requirement,. . ." 40 C.F.R. 70.5 (c); WAC 173-401-500 (1)] Simpson is required to provide Ecology and the public with sufficient information in its application to identify its GHG emissions and to determine any resulting applicable requirements.

Ecology Response: A discussion of the GHG applicability criteria has been added to the Support Document. Simpson submitted an amended AOP renewal application on May 11, 2011 which addressed GHG requirements.

Comment 3: Revise this draft AOP revision to include all requirements in WAC 173-441 and the *Tailoring Rule* that will become applicable during the term of the Simpson AOP.

Ecology Response: Applicable GHG requirements have been incorporated into the AOP per the applicability criteria added to the Support Document.

Comment 4: Simpson has a duty to supplement and correct its application to address any new applicable requirements pursuant to 40 C.F.R. 70.5 (b) and WAC 173-401-500 (6). [". . .an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. . ." 40 C.F.R. 70.5 (b); WAC 173-401-500 (6)] Based on a March 23, 2011 email from Ecology-Industrial Section, Simpson submitted its renewal application during January 2010. This renewal application contained no information regarding GHGs. Between the 2010 submittal date and March 10, 2011, the date the Draft Simpson AOP became available for public review, Simpson failed to supplement its application with information on greenhouse gas (GHG) applicable-requirements, including information necessary to determine applicable requirements "that bec[a]me applicable to the source after the date it filed a complete application but prior to release of a draft permit". Simpson thus breached its duty to supplement and correct its application in accordance with 40 C.F.R. 70.5 (b) and WAC 173-401-500 (6).

Ecology Response: Simpson has submitted additional information necessary to address the GHG requirements. The history of this submittal is discussed in the Support Document.

Comment 5: Simpson forfeited its application shield granted under 40 C.F.R. 70.7 (b) and WAC 173-401-705 (2) beginning on January 2, 2011 when it breached its duty to supplement and correct its renewal application to address federal GHG requirements, and beginning on January 1, 2011 when it breached its duty to supplement and correct its renewal application to address state requirements in WAC 173-441. [*See* 40 C.F.R. 70.7 (c); WAC 173-401-620(2)(j)] Loss of its application shield means Simpson has been operating absent a valid AOP under federal law since January 2, 2011 and under state law since January 1, 2011. Because Simpson did not comply with federal and state requirements to operate with a valid AOP, Ecology-Industrial Section is obligated to take some form of enforcement action. For its part, Simpson is

obligated to certify the period of time Simpson operated absent a valid AOP in Simpson's semi-annual report [40 C.F.R. 70.6 (a)(3); WAC 173-401-615(3)(a)], and in Simpson's annual compliance report [40 C.F.R. 70.5 (c)(9); WAC 173-401-630 (5)].

Ecology Response: The initial omission of applicable GHG requirements was an oversight on the part of both Ecology and Simpson. This deficiency has now been addressed. The permit renewal effort focused on revamping the Support Document format and beefing up the documentation of historical surrogate parameter performance testing.

Comment 6: Revise the Simpson *Statement of Basis* [required by 40 C.F.R. 70.7 (a)(5) and WAC 173-401-700 (8)] to include the factual and legal basis for greenhouse gas applicable requirements developed in accordance with both the *Tailoring Rule* and WAC 173-441, or the factual and legal basis for determining green house gas emission requirements are not applicable.

Ecology Response: A discussion of the GHG applicability criteria has been added to the Support Document.