

**TECHNICAL SUPPORT DOCUMENT (TSD)**

**AND**

**STATEMENT OF BASIS**

**AIR OPERATING PERMIT**

**SIMPSON DOOR COMPANY**

**May 18, 2005**

## TABLE OF CONTENTS

1.0 DISCLAIMER	1
2.0 PROCESS DESCRIPTIONS	2
3.0 EMISSION UNIT DESCRIPTIONS	4
4.0 ACTUAL AND POTENTIAL EMISSIONS	9
5.0 REGULATORY DETERMINATIONS	10
6.0 CONSTRUCTION PERMITS	11
7.0 STATEMENT OF BASIS TABLE	13
ATTACHMENT 1: Facility Map and Figures	
ATTACHMENT 2: Emission Calculation Spread Sheet	

## **1.0 DISCLAIMER**

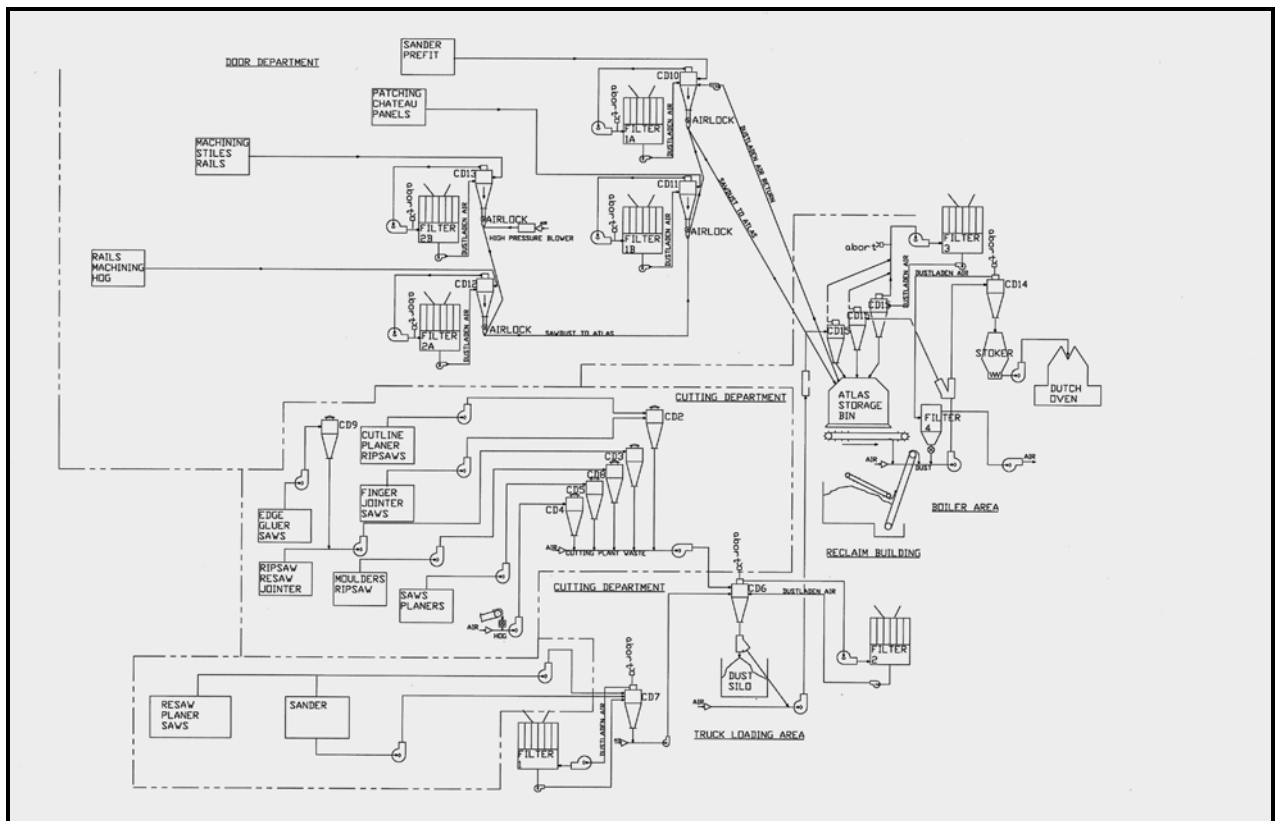
Information contained in this Technical Support Document and Statement of Basis is for purposes of background information only and is not enforceable. Applicable requirements including emission limits and monitoring, recordkeeping and reporting requirements are contained in the Air Operating Permit (AOP) for Simpson Door Company (Simpson Door).

## 2.0 PROCESS DESCRIPTIONS

### Facility Overview

Simpson Door Company (Simpson Door) is a wood door manufacturing facility located in McCleary, Washington in Grays Harbor County. The facility emits both criteria and hazardous air pollutants (HAPs), but is major for only particulate and carbon monoxide (CO). The facility manufactures wood doors and has been in existence since the early 1940s. It is approximately 42 acres in size containing vacant areas, storage, manufacturing, steam generation, and an administrative office (see facility map in Attachment 1). Originally the facility manufactured both plywood and doors. However, in 1985, plywood operations and equipment were moved to another site. There have been no significant expansions or additions of equipment to the facility since the early 1940's when a wood fired boiler was added. A process flow diagram for Simpson Door is provided in Figure 1 below.

**FIGURE 1: SIMPSON DOOR PROCESS FLOW DIAGRAM**



## **Yard**

The “Yard” refers to the portion of the facility where lumber sorting, drying, planing and slicing takes place. Operations in the Yard prepare the raw lumber to a quality suitable for making doors. The Yard operates with the goal to maintain an adequate inventory of door making materials, thereby enabling uninterrupted operation of the door making department.

Green fir & hemlock lumber is transported to the Simpson Door plant by truck and is stored in the Yard. From storage the green stock is sorted by length in preparation for drying in one of twelve lumber dry kilns. Generally, door-making lumber is dried to 8-12% moisture content. After drying, the lumber is planed and then stockpiled inside the warehouse.

Simpson Door’s twelve dry kilns are considered collectively as emissions unit #4. They are all indirect, steam heated kilns that are heated with steam from the wood fired boiler. Each kiln is approximately 16’ by 140’ by 12’ high with a capacity of 100,000 board feet per charge. Emissions from the dry kilns consist of volatile organics and water vapor driven off from the wood itself. Among the volatile organics emitted are the compounds phenol and turpentine. Turpentine and phenol are both regulated as a toxic air pollutants (TAPs) under Washington’s regulations for new air toxic sources (WAC 173-460). In addition, phenol is a regulated hazardous air pollutant (HAP) under the federal Clean Air Act.

Veneer production equipment and operations are also part of the Yard. Kiln dried wood is conditioned in steam vaults, and then in a hot water bath to re-moisturize the wood prior to slicing veneer strips. The veneer is 0.078 in thickness, 4 to 6 inches in width and 7 foot in length. After slicing, the veneer is then re-dried in a veneer dryer. The amount going through the dryer equates to 60 square feet per minute. The dryer temperature runs between 270 to 290 degrees. Emissions from the dryer are exhausted through the roof via two 12 inch diameter vents. Simpson Door’s veneer dryer is recognized as an insignificant emissions unit based on the unit’s potential to emit (see emissions).

## **Cutting**

The Cutting department processes dried lumber from the Yard into the dimensions needed for manufacturing doors. Also, short pieces of lumber are finger jointed and glued together to produce “core” material that will be used with the veneer in the production of laminated door components. A continuous edge gluer joins pieces of wood together to produce the panel blanks and other components. Finished panels are graded and stacked to be transferred to the Door Department.

The Cutting department produces large quantities of wood residuals in the form of sawdust, sander dust and various larger wood particles. All wood residuals produced at Simpson Door are used to fuel the wood fired boiler to produce steam. Wood residuals

collected and pneumatically transported either to the hog fuel bin to be used immediately as fuel, or to a temporary fuel storage building referred to as the “dust house.”

## **Door Department**

At the Door department, various parts and pieces of wood produced in the Cutting Department are carefully machined into the specific door components needed for door assembly. A variety of tenoners, molders, and shapers profile each component to correspond to its use in a specific door design. All of the various door components are then assembled together by hand. The door is then placed in a clamp where hydraulic pressure is used to join the parts tightly together for final fit. The majority of glue used in assembly of the doors is cured using radio frequency microwave technology to expedite the curing.

After assembly, all of the doors receiving glass are first glazed and then sanded, while all of the panel doors go directly to the sander. After sanding, the doors are pre-fit to height and width. Every door is then inspected by a patcher, who repairs *any* defects before the door is packaged, banded and readied for shipment.

## **3.0 EMISSION UNIT DESCRIPTIONS**

The following discussions and tables describe emission units at Simpson Door. Table 3.1 provides a summary list of emission units. Emissions units at Simpson Door are defined broadly in order to provide the maximum amount of flexibility with respect to permit revisions.

Simpson Door includes many emissions units that qualify as Insignificant Emissions Units (IEUs) under the provisions for IEUs in WAC 173-401-530. Pursuant to Title V of the Clean Air Act, Chapter 173-401 WAC exempts IEUs from Title V monitoring, record keeping and reporting requirements. Though Simpson Door is required to assure that IEUs comply with applicable air requirements, additional monitoring, record keeping and reporting obligations imposed pursuant to Title V apply do not apply to IEUs. Table 3.2 lists emissions units located at the Simpson Door that qualify as insignificant emissions units (IEUs) based either on the size of the unit or the unit’s emissions rate. In addition to these, Simpson Door has emissions units that qualify categorically as insignificant emissions units. Since “categorical” IEUs are numerous, they are not explicitly identified in either Simpson’s permit nor this TSD. Please refer to WAC 173-401-532 for a complete list of the categorically exempt IEUs.

**TABLE 3.1. EMISSION UNIT SUMMARY**

Emission Unit ID#	Description	Exhaust Point ID#	Control Equipment
EU1	Wood Fuel Boiler Biomass Dutch Oven boiler rated at 805 HP at 200 psig (approximately 30,000 lbs of steam/hr or 42 MMBtu/hr heat input rate)	#01 Boiler Stack	none
EU2	Residuals Transport Systems: Particulate emissions from all cyclones serving mill operations such as wood cutting, slicing, planing, sanding, and milling operations.	see Table 3.2 above	see Table 3.3 above
EU3	Auxiliary Package Boiler: 14.7 MMBtu/hr heat input rate 12,100 lbs/hr of steam at 200 psi.	#03 Package Boiler Stack	none
EU4	Lumber Dry Kilns: 12 steam-heated, double-track lumber dry kilns (16' x 140' x 12' ht) with approximately 100,000 board-feet per kiln charge capacity for each kiln.	vents	none

- (1) - Grandfathered in under NSR and NOC requirements.
- (2) - NOC approval no longer applies due to issuance of a later approval order.
- (3) - Approval was unconditional.
- (4) - Emissions limit established in accordance with this approval.

**TABLE 3.2. IEUs BASED ON SIZE OR INSIGNIFICANT EMISSION RATES**

IEU	Location	Capacity	Basis for IEU Designation
Veneer Dryer	Veneer cutting building	not applicable	WAC 173-401-530(4)
Product Off-Gassing	Product warehouse	not applicable	WAC 173-401-530(d)
Grinding room baghouse	Grinding room	not applicable	WAC 173-401-530(4)(e) or 532(55)
Shop table saw cyclone	Shop	not applicable	WAC 173-401-532(46)
Storage Tank	Glue-cutting	6000 gallons	WAC 173-401-533(2)(a)
Storage Tank	Glue wash water-cutting	500 gallons	WAC 173-401-533(2)(a)
Storage Tank	Glue wash water-cutting	1000 gallons	WAC 173-401-533(2)(a)
Storage Tank	Glue wash water-cutting	1000 gallons	WAC 173-401-533(2)(a)
Welding	Shop	not applicable	WAC 173-401-533(2)(i) or -532(55)
Fuel and propane storage tanks	Aux. boiler diesel	6000 gallons	WAC 173-401-533(2)(c)&(d)
Fuel and propane storage tanks	Gas tank-oil house	500 gallons	WAC 173-401-533(2)(c)&(d)
Fuel and propane storage tanks	Diesel tank-oil house	500 gallons	WAC 173-401-533(2)(c)&(d)
Fuel and propane storage tanks	Diesel tank-powerhouse generator	300 gallons	WAC 173-401-533(2)(c)&(d)
Fuel and propane storage tanks	Diesel tank-pumphouse pump	300 gallons	WAC 173-401-533(2)(c)&(d)
Fuel and propane storage tanks	Propane tank-fueling station	1000 gallons	WAC 173-401-533(2)(c)&(d)
Emergency generators and pumps	Pumphouse, diesel pump	1500 gpm	WAC 173-401-530(12)(1)(a)
Emergency generators and pumps	Powerhouse, diesel generator	250 KVA	WAC 173-401-530(12)(1)(a)

## **Hog Fuel Boiler (Emissions Unit #1)**

Simpson Door relies on a biomass boiler (EU1) to provide steam heat to the dry kilns, veneer slicer, building heat and stile laminator (heat for setting glue line). The boiler is a natural draft, Dutch oven-type boiler that was installed at the facility in the early 1940s. The original design capacity of the boiler was 1000 to 1200 hp, but has since been de-rated by the current maximum steam pressure rating of 200 psi. However the current maximum available steam production capacity is limited by the current grate area of the boiler to approximately 30,000 lbs/hr. The boiler combusts wood residuals generated on-site. On occasion, Simpson needs to supplement on-site generated fuel with purchased hog fuel. The boiler is equipped with a 236 foot high by 9 foot inside diameter concrete stack. Steam pressure, flow, water temperature and stack temperature are the only boiler performance indicators monitored with instrumentation. In addition to this, Simpson performs opacity surveys of the entire facility including the boiler.

Steam flow, pressure and water temperature are the only boiler steam production parameters monitored on EU1. Fuel feed is automatically controlled to meet steam demand based on steam pressure monitoring. Fuel moisture and heat content are not monitored as the fuel quality remains fairly constant. This is because the majority of the fuel used by Simpson Door is generated on-site and is fairly dry and consistent material. Fuel generated on-site consists of approximately 98% fir and hemlock and the remainder a mixture of various wood types. Moisture content varies from 8 to 12 percent since the fuel is generated from kiln dried materials. The average monthly fuel generated in 2004 was approximately 697 tons and the cumulative annual fuel generated was approximately 8,250 tons. The average steam production factor is 15,400 pounds of steam per ton of hog fuel combusted.

Emissions from EU1 are calculated directly from the estimated amount of hog fuel combusted by the boiler. Simpson calculates the amount of fuel combusted in the boiler by subtracting the amount of wood material used in making doors from the amount of wood material purchased. Simpson accounts for moisture content in these calculations specifically depending on the source of the fuel. For fuel generated on-site, a moisture content of 8-12% is used as this material is derived from kiln dried wood. For purchased hog fuel, a separate moisture content value is used as Simpson does not have control over the moisture content of purchased hog fuel.

Since the boiler does not include in-stack air pollution controls, the only ash captured is the ash that remains in the boiler combustion chamber. The combustion chamber is manually cleaned several times a year. Boiler ash is raked out and disposed of in special enclosed dumpsters. The dumpsters are periodically picked up by the local waste disposal company and hauled away to be land-filled.

## Residual Handling (Emission Unit #2)

Simpson's systems for collecting, transporting and storing wood residuals throughout the facility is a source of particulate air pollution, and is regulated as emission unit 2 (EU2) in Simpson's AOP. The system includes pneumatic transport ducts, cyclones, baghouses, storage bins and storage buildings. Approximately 8,250 tons of wood residuals are produced by Simpson Door annually including sawdust, sander dust, planer shavings and reject wood that is reduced in size by chipping. Moisture content of the material is fairly consistent and ranges from 8-12% moisture content. The majority of this material is combusted in Simpson's hog fuel boiler to produce steam, and a very small percentage of it is sold. The figures provided in Attachment 1 show all integral components of EU2 including material transport lines, cyclones, baghouses, storage structures and buildings. Tables 3.3 and 3.4 below identify cyclones and baghouses respectively.

**TABLE 3.3. CYCLONES**

Cyclone ID	Design CFM	Serves	Type material collected	Fate of Catch	Exhaust to
CD2(planer)	42000	Cutting	dry sawdust/shavings	CD6	Atmosphere
CD3(BEG)	15000	Cutting	dry sawdust/shavings	CD6	Atmosphere
CD4(hog)	1000	Cutting	dry Hog fuel	CD6	Atmosphere
CD5(cutline)	12000	Cutting	dry Sawdust	CD6	Atmosphere
CD6(dusthouse)	30000	Cutting	dry Sawdust/hog fuel/shavings/sanderdust	Dusthouse or Atlas	Baghouse 2
CD7(sander)	36000	Cutting	dry Sanderdust/sawdust	CD7, to CD6	Baghouse 1
CD8(Stickers)	12000	Cutting	dry Sawdust	CD6	Atmosphere
CD9(CEG)	6000	Cutting	dry Sawdust	CD3	Atmosphere
CD10(System 1A)	45000	Door	dry Sawdust/sanderdust	Atlas	Baghouse 1A
CD11(system 1B)	45000	Door	dry Sawdust	Atlas	Baghouse 1B
CD12(system 2A)	45000	Door	dry Sawdust	Atlas	Baghouse 2A
CD13(system 2B)	45000	Door	dry Sawdust/hogfuel	Atlas	Baghouse 2B
CD14(boiler baghouse)	12000	Powerhouse	dry Sawdust/hog fuel/shavings/sanderdust	Boiler	Baghouse 4
CD15(Atlas Baghouse)	30000	Cutting/Door	dry Sawdust/hog fuel/shavings/sanderdust	Atlas	Baghouse 3

**TABLE 3.4. BAGHOUSES**

Baghouse ID	Design CFM	Controls	Operating pressure drop	Fate of baghouse catch	Schedule for bag change
Baghouse 1	12000	Exhaust of CD7	.1 to 4 inches	Re-intro to CD7	2 years or as necessary
Baghouse2	12000	Exhaust of CD6, catch of CD7	.1 to 4 inches	Re-intro to CD6	2 years or as necessary
Baghouse 3	12000	Exhaust of CD15	.1 to 4 inches	Re-intro to CD15	2 years or as necessary
Baghouse 4	6000	Exhaust of CD14	.1 to 4 inches	Re-intro to CD14	1 Year of as necessary
Baghouse 1A	45000	Exhaust of CD10	.1 to 4 inches	Re-intro to CD10	2 years or as necessary
Baghouse 1B	45000	Exhaust of CD11	.1 to 4 inches	Re-intro to CD11	2 years or as necessary
Baghouse 2A	45000	Exhaust of CD12	.1 to 4 inches	Re-intro to CD12	2 years or as necessary
Baghouse 2B	45000	Exhaust of CD13	.1 to 4 inches	Re-intro to CD13	2 years or as necessary

**Auxiliary Package Boiler (Emission Unit #3)**

Simpson's package oil fired boiler is designated as emission unit #3 (EU3) in Simpson's AOP. The unit is a 1990 Johnston 350 horsepower boiler rated at 12,100 lbs/hour at 200 psi steam, and a maximum heat input rate is 14.7 MMBtu/hour. It was installed June 7, 1996, for the purpose of augmenting steam production during the winter months. It is designed to run on either natural gas or diesel. However, gas supply at the volume of gas required by the boiler is not available. Therefore, the boiler is run exclusively on low sulfur (0.05% sulfur by weight) #2 diesel. The auxiliary boiler stack height is 32 feet. It is equipped with low-NO<sub>x</sub> burners.

**Lumber Dry Kilns (Emission Unit #4)**

Simpson Door operates 12 lumber dry kilns used to dry the stock wood to the desired moisture content suitable for making doors. All of the kilns are indirect steam heated kilns.

#### 4.0 ACTUAL AND POTENTIAL EMISSIONS

Data presented in Table 4.1 below is from ORCAA's 2003 Annual Emission Inventory. ORCAA's annual emissions inventory is compiled by ORCAA staff based on actual operating data provided by each regulated source. Annual actual emissions will vary from year to year based on operational conditions at the facility. The actual emissions reflect the actual materials used and production quantities that occurred during 2003.

Data presented below in Table 4.2 reflects Simpson Door's maximum potential to emit (PTE). PTE was estimated based on the maximum capabilities of equipment and processes and other physical and regulatory limitations. Emission calculations and supporting assumptions for emission calculations are provided in Attachment 2.

**TABLE 4.1 2003 ACTUAL EMISSIONS**

Pollutant	2003 Actual Emissions (tons)	Source of Data
PM	121	ORCAA Inventory
PM <sub>10</sub>	70	
NO <sub>x</sub>	30	
SO <sub>2</sub>	2	
CO	13	
VOC	4	
Total HAPs	2.2	

1. Calculated by ORCAA based on ORCAA approved emission factors and actual operating data from SIMPSON DOOR for 2003.
2. Data not available for this pollutant.
3. PM refers to particulate matter.
4. PM<sub>10</sub> refers to particulate matter with an aerodynamic diameter less than 10 micrometers.
5. VOC refers to volatile organic compounds
6. HAPs refers to hazardous air pollutants.

**TABLE 4.2 POTENTIAL TO EMIT (PTE)**

Pollutant	PTE (tons)	Source of Data
PM	148.5	Simpson Door
PM <sub>10</sub>	87.1	
NO <sub>x</sub>	92.0	
SO <sub>2</sub>	5.2	
CO	16.0	
VOC	7.1	
Total HAPs	1.8	

1. Calculated by Simpson Door Company based on emission factors from the National Council on Air and Stream Improvement (NCASI), material composition information from material suppliers and mass balance calculations (see SIMPSON DOOR's AOP application).
2. Calculated by ORCAA based on ORCAA approved emission factors and continuous operation of the plant (see Attachment 2).
3. PM refers to particulate matter.
4. PM<sub>10</sub> refers to particulate matter with an aerodynamic diameter less than 10 micrometers.
5. VOC refers to volatile organic compounds
6. HAPs refers to hazardous air pollutants.

## **5.0 REGULATORY DETERMINATIONS**

### **5.1 National Emissions Standards for Hazardous Air Pollutants (NESHAP)**

Two NESHAP standards in 40 CFR Part 63 are relevant to wood products facilities: The Plywood and Composite Wood Products NESHAP (Plywood NESHAP); and, The Industrial/Commercial/Institutional Boilers and Process Heaters NESHAP (Boiler NESHAP). Both NESHAP were reviewed for applicability to equipment and operations at Simpson Door. The boiler NESHAP applies to industrial, commercial or institutional boilers and process heaters located at, or part of, a major source of HAP emissions. The Plywood NESHAP applies to plywood and composite wood products manufacturing facilities located at, or part of, a major source of HAP emissions.

A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. Simpson Door is a minor source with respect to HAP emissions (see above tables). Therefore, Simpson Door is not subject to either the Plywood or the Boiler NESHAP.

### **5.2 Compliance Assurance Monitoring (CAM) Rule**

The CAM rule under 40 CFR Part 64 applies to control devices on emissions units with uncontrolled emission rates greater than 100 tons per year of a any pollutant subject to an emissions limit or standard, other than generally applicable emissions limitations and standards. The hog fuel boiler (EU3) does not include a control device and it is not subject to any emissions limitations or standards other than generally applicable emissions limitations and standards. Therefore, CAM does not apply to EU3. The Residuals Handling System (EU2) is an aggregate emissions unit designation including all of the cyclones and material transport lines at Simpson Door. Though this system does include several baghouses, these are integral components of the overall system. In addition, the residuals handling system is not subject to any applicable emissions limitations or standards beyond the generally applicable emissions limitations and standards. Therefore, CAM does not apply to EU3. Neither the auxiliary boiler (EU3) nor the dry kilns (EU4) include control devices. Therefore, these units are not subject to CAM. In summary, CAM does not apply to at the Simpson Door facility in McCleary.

## SUMMARY OF REGULATORY HISTORY (CONTINUED)

### 6.0 NOTICES OF CONSTRUCTION

The following table provides a summary of conditions from Notice of Construction (NOC) Approval Orders issued to Simpson Door. The right hand column in the table indicates whether the condition is an ongoing applicable requirement and, if so, the corresponding condition # in the AOP. Records on file with ORCAA indicate that all past modifications additions and expansions at Simpson Door have complied with state, federal and local new source review requirements including Prevention of Significant Deterioration (PSD) permitting requirements.

### SUMMARY OF AIR REGULATORY HISTORY

NOC # (date)	DESCRIPTION (For information only)	NOC CONDITION #	APPLICABILITY OF NOC CONDITIONS  ASSOCIATED AOP CONDITION #
no number Approved 6/23/72	New cyclone at powerhouse New Micro-pulsair 100S-8-20 baghouse (15000 cfm) filter at Atlas Bin.	unconditional	not applicable
no number Approved 9/15/75	New cyclone to serve to cutting plant	unconditional	not applicable
no number Approved 11/19/76	Limited information in NOC application - According to NOC Form 1, project involved installation of system to collect sawdust and shavings.	unconditional	not applicable
#156	New cyclone #48 (16,000 cfm) exhausting directly to the atmosphere.	unconditional	not applicable
#159 Approved 1/21/77	Two new baghouses (Aero-Vac filters, American Sheet Metal Inc., Model # Inv-104.17). Each unit rated at 25,500 cfm.	unconditional	not applicable
#219 Approval 1/27/78	Approval of baghouse #43 and the "door treating line."	unconditional	not applicable
# 234 Approved 6/15/78	Approval of door manufacturing operations. Limited information in NOC application. Form 1 states use of "mineral spirits."	unconditional	not applicable
#260 Approved 1/9/79	Approval of baghouse #46 serving cyclones No. 30, 31 and 32 on Atlas Bin.	unconditional	not applicable
no number Approved 1/25/79	Approval of baghouse #35 serving cyclone #35 over the dust building.	unconditional	not applicable
#331 Approved 6/29/82	Replacement of cyclone #39 serving planer and fingerjoint process.	unconditional	not applicable
97NOC014 Approved	Approval of dual fuel package boiler.	#1 Completion Notice	Not an ongoing applicable requirement.

## SUMMARY OF REGULATORY HISTORY (CONTINUED)

NOC # (date)	DESCRIPTION (For information only)	NOC CONDITION #	APPLICABILITY OF NOC CONDITIONS  ASSOCIATED AOP CONDITION #
6/7/96		#2 Technical Specifications	Not an ongoing applicable requirement.
		#3 Boiler Particulate Limit	Applicable Requirement Condition 5.3c in AOP
		#4 Boiler Opacity Limit	Applicable Requirement Condition 5.3d in AOP
		#5 Boiler Fuel Standards	Applicable Requirement Condition 5.3b in AOP
		#6 NO <sub>x</sub> Limit	Applicable Requirement Condition 5.3e in AOP
		#7 CO Limit	Applicable Requirement Condition 5.3f in AOP
		#8 Operations and Maintenance Plan	Applicable Requirement Condition 5.3g in AOP
		#9 Requires reporting in accordance with Title V AOP.	Redundant Applicable Requirement Section 8 in Simpson's AOP contains reporting requirements.
		#10 Excess Emissions Reporting	Applicable Requirement Condition 8.6 in AOP
		#11 General "duty to comply" requirement.	Redundant requirement covered in the standard terms and conditions in Simpson's AOP
		02NOC256 Exempt	Installation of a new veneer slicing and drying system. ORCAA determined that the new veneer slicing and drying unit was exempt from NOC approval.

## 7.0 STATEMENT OF BASIS

The following table provides the regulatory basis for each permit condition.

**TABLE 7.1 STATEMENT OF BASIS**

<b>CONDITION</b>	<b>REGULATORY BASIS</b>
2.1 Duty to comply.	Standard Term or Condition Authority: WAC 173-401-620(2)(a)
2.2 Duty to Provide Information.	Standard Term or Condition Authority: WAC 173-401-620(2)(e)
2.3 Need to Halt or Reduce Activity Not a Defense.	Standard Term or Condition Authority: WAC 173-401-620(2)(b)
2.4 Property Rights.	Standard Term or Condition Authority: WAC 173-620(2)(d)
2.5 Annual Fees.	Standard Term or Condition Authority: ORCAA 1.6
2.6 Severability.	Standard Term or Condition Authority: WAC 173-620(2)(h)
2.7 Federally Enforceable Requirements	Standard Term or Condition Authority: WAC 173-401-625
2.8 Permit Actions.	Standard Term or Condition Authority: WAC 173-401-620(2)(c)
2.9 Permit Appeals.	Standard Term or Condition Authority: WAC 173-401-620(2)(i)
2.10 Permit Renewal and Expiration.	Standard Term or Condition Authority: WAC 173-401-705, WAC 173-401-610 and 620(2)(j)
2.11 Duty to Supplement or Correct Application.	Standard Term or Condition Authority: WAC 173-401-500(6)
2.12 Reopening for Cause.	Standard Term or Condition Authority: WAC 173-401-730
2.13 Changes Requiring Permit Revision/Off Permit Changes.	Standard Term or Condition Authority: WAC 173-401-722; WAC 173-401-724
2.14 Permit Revisions.	Standard Term or Condition Authority: WAC 173-401-720; WAC 173-401-725
2.15 Emission Trading.	Standard Term or Condition Authority: WAC 173-401-620(2)(g)
2.16 Compliance Maintenance.	Standard Term or Condition Authority: WAC 173-401-630(3)
2.17 False or Misleading Statements .	Standard Term or Condition Authority: <b>Local Only:</b> ORCAA 1.3.07; WAC 173-400-105(7)
2.18 Inspection and Entry.	Standard Term or Condition Authority: WAC 173-401-630(2)
2.19 Access for Inspection	Standard Term or Condition Authority: <b>Local Only:</b> ORCAA 1.3.01(e)
2.20 Credible Evidence	Standard Term or Condition Authority: 40 CFR 51.212; 40 CFR 52.12; 40 CFR 53.33; 40 CFR 60.11; 40 CFR 61.12
2.21 Emergency as Affirmative Defense.	Standard Term or Condition Authority: WAC 173-401-645(2)&(5); WAC 173-401-645(5)
2.22 Unavoidable Excess Emissions Excused.	Standard Term or Condition

## STATEMENT OF BASIS (CONTINUED)

CONDITION	REGULATORY BASIS
	Authority: WAC 173-400-107; ORCAA 1.9.15
3.1 New Source Review	Actions Requiring Prior Approval Authority: ORCAA 1.7
3.2 Replacement or Substantial Alteration of Existing Control Equipment	Actions Requiring Prior Approval Authority: ORCAA 1.7.19
3.3 Demolition and Asbestos Projects.	Actions Requiring Prior Approval Authority: ORCAA 1.14.05
3.4 Demolition and Renovation Projects	Actions Requiring Prior Approval Authority: 40 CFR 61.145(b)
3.5 Temporary Sources	Actions Requiring Prior Approval Authority: ORCAA 1.7
4.1 Demolition and Renovation Projects	Facility-Wide & General Applicable Requirement Authority: 40 CFR 61.145(b) Authority: ORCAA 1.14.05
4.2 Protection of Stratospheric Ozone, Servicing of Motor Vehicle Air Conditioners	Facility-Wide & General Applicable Requirement Authority: 40 CFR Part 82, Subpart F
4.3 Emissions Detrimental to Persons or Property	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(5) Authority <b>Local Only</b> : ORCAA 1.9.23
4.4 Fallout	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(2) Authority <b>Local Only</b> : ORCAA 1.9.05(e)
4.5 Odors	Facility-Wide & General Applicable Requirement Authority <b>State/Local Only</b> : WAC 173-400-040(4) Authority <b>Local Only</b> : ORCAA 1.9.11(a)
4.6 Odors	Facility-Wide & General Applicable Requirement Authority <b>Local Only</b> : ORCAA 1.9.11(c)
4.7 Fugitive Emissions Control	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(3)(a)
4.8 Fugitive Dust Control	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(8)(a) Authority <b>Local Only</b> : ORCAA 1.9.05(c)
4.9 Concealment and Masking	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(7) Authority <b>Local Only</b> : ORCAA 1.9.12
4.10 Maintenance and Repair of Air Pollution Control Equipment and Processes	Facility-Wide & General Applicable Requirement Authority: ORCAA 1.9.16
4.11 General Standards for Maximum Visual Emissions	Facility-Wide & General Applicable Requirement Authority <b>Local Only</b> : ORCAA 1.9.03 Authority: WAC 173-400-040(1)
4.12 Sulfur Dioxide	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-040(6)
4.13 General Particulate Standards for Combustion Units	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-050(1) Authority <b>Local Only</b> : ORCAA 1.9.05(a)
4.14 General Emission Standards for Process Units	Facility-Wide & General Applicable Requirement Authority: WAC 173-400-060 Authority <b>Local Only</b> : ORCAA 1.9.05(a)
5.1(a) Maintenance and Repair of EU1 Air Pollution Control Equipment and Processes	<b>Local Only</b> : ORCAA 1.9.16 WAC 173-401-600(1) & (2)

## STATEMENT OF BASIS (CONTINUED)

CONDITION	REGULATORY BASIS
5.2(a) Maintenance and Repair of EU2 Air Pollution Control Equipment and Processes	<b>Local Only:</b> ORCAA 1.9.16 WAC 173-401-600(1) & (2)
5.3a Standards of Performance for Small Industrial Steam Generating Units, Subsections 60.42c(d), (h) and (i)	40 CFR 60.42c(d),(h)&(l) (9/12/90)
5.3b EU3 Fuel Standards	96NOC014, Condition 5 (6/7/96)
5.3c EU3 Particulate Limit	96NOC014, Condition 3 (6/7/96)
5.3d EU3 Opacity Limit	96NOC014, Condition 4 (6/7/96)
5.3e EU3 NO <sub>x</sub> Limit	96NOC014, Condition 6 (6/7/96)
5.3f EU3 CO Limit	96NOC014, Condition 7 (6/7/96)
5.3g EU3 O&M Plan	96NOC014, Condition 8 (6/7/96)
5.3h Maintenance and Repair of EU3 Air Pollution Control Equipment and Processes.	<b>Local Only:</b> ORCAA 1.9.16 WAC 173-401-600(1) & (2)
6.1 Opacity Surveys	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.2 Certified Opacity Reading Required	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.3 Certified Opacity Reading Procedures	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.4 Monitoring Air Impacts Which are Detrimental or a Nuisance to Persons or Property	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.5 Fugitive Emissions and Dust Control Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.6 Sulfur Dioxide Emissions Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.7 Pollution Control Equipment Monitoring	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.8 Particulate Testing Required	Compliance Monitoring Conditions Authority: WAC 173-401-615(1)(b)
6.9 EU3 Fuel Monitoring	Compliance Monitoring Conditions WAC 173-401-615(1)(b); 40CFR 60.46c(e); 96NOC014; 40CFR 60.42c(d)
6.10 Emission Inventory Monitoring	Compliance Monitoring Conditions WAC 173-401-615(1)(b); ORCAA 1.13.02
6.11 General Source Testing Procedures and Methods	<b>Local Only:</b> ORCAA 1.3.01(j) Specific to each subpart: a) WAC 173-400-105(4); b) ORCAA 1.3.01(j)
7.1 Retention and Availability of Records.	Recordkeeping Authority: WAC 173-401-615 (2)(c)
7.2 Record of Changes.	Recordkeeping Authority: WAC 173-401-615 (2)(b)
7.3 Monitoring Records.	Recordkeeping Authority: WAC 173-401-615 (2)(a)
7.4 Record of Permit Deviations.	Recordkeeping Authority: WAC 173-401-615(3)(b)
7.5 Availability of Emissions Records	Recordkeeping Authority <b>Local Only:</b> ORCAA 1.13.02(b)
7.6 Emissions Records	Recordkeeping Authority: WAC 173-400-105(1); ORCAA 1.13.02(a)
7.7 Unlawful Reproduction or Alteration of Documents.	Recordkeeping Authority <b>Local Only:</b> ORCAA 1.3.09
7.8 Display of Orders, Certificates and Other Notices.	Recordkeeping Authority <b>Local Only:</b> ORCAA 1.3.11

## STATEMENT OF BASIS (CONTINUED)

CONDITION	REGULATORY BASIS
7.9 Record of Complaints.	Recordkeeping Authority: WAC 173-401-615(2)(a)
7.10 Record of Actions Taken to Maintain Pollution Control Equipment	Recordkeeping Authority: WAC 173-401-615(2)(a)
7.11 Paperless Records	Recordkeeping Authority: §64.9(2)(a)
7.12 MACT Applicability Records	Recordkeeping Authority: 40 CFR 63.1(b)(3); 40 CFR 63.10(b)(3)]
7.13 Material Composition Records	Recordkeeping Authority: WAC 173-401-615(2)(a)
8.1 Certification of Reports.	Reporting Authority: WAC 173-401-630(1)
8.2 Annual Compliance Certification.	Reporting Authority: WAC 173-401-630(5)
8.3 Confidential Information	Reporting Authority <b>Local Only</b> : ORCAA 1.3.03
8.4 Semi-annual Monitoring Reports.	Reporting Authority: WAC 173-401-615(3)(a)
8.5 Reporting Deviations From Permit Conditions.	Reporting Authority: WAC 173-401-615(3)(b); WAC 173-400-107(3); WAC 173-401-645
8.6 Notification of Control Equipment Malfunction	Reporting Authority: WAC 173-401-615(3); Condition #10 97NOC014
8.7 Notification of Complaints Received	Reporting Authority: WAC 173-401-615(3)
8.8 Annual Inventory Report.	Reporting Authority: WAC 173-400-105(1); ORCAA 1.13
8.9 Source Test Plans.	Reporting Authority: WAC 173-401-630(1)
8.10 Source Test Reports.	Reporting Authority: WAC 173-401-630(1)
8.11 Additional Reporting for EU3	Reporting Authority: WAC 173-401-615(3); 40CFR60.48c(d)&(e); 40CFR 60.8; 96NOC014; 40CFR 60.42c(d)
10.1 Permit Shield.	Permit Shield Authority: WAC 173-401-640(1)
10.2 Inapplicable or Exempt Requirements.	Permit Shield Authority: WAC 173-401-640
10.3 Exclusions	Permit Shield Authority: WAC 173-401-640

**ATTACHMENT 1:  
Facility Map**



**ATTACHMENT 2:  
Emission Calculations**