Statement of Basis

Permit to Construct No. P-2007.0060
Project ID 62155

Cutting Edge Logs, LLC
Boise, Idaho

Facility ID 001-00208

Final

February 12, 2019
Rakael Pope
Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR	Air Quality Control Region
Btu	British thermal units
CAA	Clean Air Act
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutants
hr/yr	hours per consecutive 12 calendar month period
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
lb/qtr	pound per quarter
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O_2	oxygen
PC	permit condition
PM	particulate matter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
PW	process weight rate
Rules	*Rules for the Control of Air Pollution in Idaho*
scf	standard cubic feet
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO_2	sulfur dioxide
SO_x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
TAP	toxic air pollutants
VOC	volatile organic compounds
yd^3	cubic yards

FACILITY INFORMATION

Description

The Cutting Edge Logs, LLC facility is a lumber mill that produces wall logs, beams, and poles which are mainly used for the construction of log homes sold by the parent company Lodge Log and Timber. The facility operates two log processors and two lathes with associated cyclones and chip bins. This statement of basis

Permitting History

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

August 15, 2007	P-2007.0060, Initial permit for Treasure Valley Forest Products Yamhill lumber mill facility. Permit status A, but will become S upon issuance of this permit.

Application Scope

This PTC is a permit transfer through a permit revision and is a revision of an existing PTC to remove equipment that has been dismantled or sold.

The applicant has proposed to:

- Revise the operating permit by removing equipment that has been dismantled and/or sold including a wood fired boiler, drying kiln, debarker/sorter with a screen, sawmill, sawmill dust bin, and two sawmill chip bins.
- Change ownership of the facility.

Application Chronology

December 21, 2018	DEQ received an application.
December 27, 2018	DEQ received an application fee.
January 2, 2019	DEQ determined that the application was complete.
January 10, 2019	DEQ made available the draft permit and statement of basis for peer and regional office review.
January 17, 2019	DEQ made available the draft permit and statement of basis for applicant review.
February 8, 2019	DEQ received the permit processing fee.
February 12, 2019	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION

Source ID No.	Sources	Control Equipment	Emission Point ID No.
1	Green Lathe: Max Capacity: 10,264 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	Green Lathe Cyclone	GCYCL Stack
2	Processor A: Max Capacity: 1,026 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	Processor A Cyclone	ACYCL Stack
3	Processor B: Max Capacity: 153 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	Processor B Cyclone	BCYCL Stack
4	Pole Lathe: Max Capacity: 998 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	Pole Lathe Cyclone	PCYCL Stack
5	Green Lathe Cyclone and Bin Max Capacity: 10,264 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	None	GBIN
6	Processor A Cyclone and Bin Max Capacity: 1,026 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	None	ABIN
7	Processor B Cyclone and Bin Max Capacity: 153 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	None	BBIN
8	Pole Lathe Cyclone and Bin Max Capacity: 998 tons dry wood/yr Actual Operation: 2080 hr/yr Max Operation Capacity: 8760 hr/yr	None	PBIN

Emissions Inventories

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

The following table presents the pre-project potential to emit for all criteria pollutants from all emissions units at the facility as submitted by the Applicant and verified by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 2 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]
Wood-fired boiler	0.10	0.3	.0125	.0039	.25	.8	0.3	0.9	.0085	.0265
Dryer Kiln	0.02	.005							6.88	1.65
Sawmill	1.58	1.64								
Debarker	1.86	1.94								
Debarker Screen	0.15	0.16								
Green Lathe	2.47	2.57								
Processor A	0.25	0.26								
Processor B	0.04	0.04								
Pole Lathe	0.24	0.25								
Green Lathe Cyclone	0.005	0.05								
Processor A Cyclone	0.0005	0.0005								
Processor B Cyclone	0.00007	0.00007								
Pole Lathe Cyclone	0.0005	0.0005								
Sawmill Sawdust	0.0008	0.0009								
Sawmill Wood Chip 1	0.002	.002								
Sawmill Wood Chip 2	0.002	.002								
Sawdust Pile	0.83	.87								
Pre-Project Totals	**7.55**	**8.09**	**0.01**	**0.00**	**0.25**	**0.80**	**0.30**	**0.90**	**6.89**	**1.68**

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

Post Project Potential to Emit

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for criteria pollutants from all remaining emissions units at the facility as determined by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]	lb/hr[(a)]	T/yr[(b)]
Green Lathe	2.47	2.57								
Processor A	0.25	0.26								
Processor B	0.04	0.04								
Pole Lathe	0.24	0.25								
Green Lathe Cyclone	0.005	0.05								
Processor A Cyclone	0.0005	0.0005								
Processor B Cyclone	0.00007	0.00007								
Pole Lathe Cyclone	0.0005	0.0005								
Post Project Totals	**3.01**	**3.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

a) Controlled average emission rate in pounds per hour is a daily average, based on the proposed daily operating schedule and daily limits.
b) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.

Table 4 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Pre-Project Potential to Emit	7.55	8.09	0.01	0.00	0.25	0.80	0.30	0.90	6.89	1.68
Post Project Potential to Emit	3.01	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes in Potential to Emit	**-4.54**	**-4.92**	**-0.01**	**0.00**	**-0.25**	**-0.80**	**-0.30**	**-0.90**	**-6.89**	**-1.68**

Non-Carcinogenic TAP Emissions

There were no non-carcinogenic TAP emission estimates as a result of this project because, with removal of the boiler, kiln, saw, and debarker/sorter all remaining emissions were particulate matter.

Carcinogenic TAP Emissions

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Post Project HAP Emissions

Previously, the only sources of HAP emission at this facility were a wood fired boiler and a drying kiln, which have both been dismantled and/or removed as a result of this project.

Ambient Air Quality Impact Analyses

As presented in the Emission Inventory in Appendix A, the estimated emission rates of PM_{10}, and $PM_{2.5}$ from this project were below applicable screening emission levels (EL) and published DEQ modeling thresholds established in IDAPA 58.01.01.585-586 and in the State of Idaho Air Quality Modeling Guideline[1]. Refer to the Emissions Inventories section for additional information concerning the emission inventories.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Ada County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone and maintenance for PM_{10} and CO. Refer to 40 CFR 81.313 for additional information.

Ada County is also designated as maintenance for PM_{10} and CO. However this facility is not identified in 40 CFR 52.670(d), Subpart N so there are no specific requirements from the Maintenance Plan of the State Implementation Plan (SIP) incorporated into this permit.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For HAPs (Hazardous Air Pollutants) Only:

A = Use when any one HAP has permitted emissions > 10 T/yr or if the aggregate of all HAPS (Total HAPs) has permitted emissions > 25 T/yr.

SM80 = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits > 8 T/yr of a single HAP or ≥ 20 T/yr of Total HAPs.

SM = Use if a synthetic minor (uncontrolled HAPs emissions are > 10 T/yr or if the aggregate of all

[1] Criteria pollutant thresholds in Table 2, State of Idaho Guideline for Performing Air Quality Impact Analyses, Doc ID AQ-011, September 2013.

uncontrolled HAPs (Total HAPs) emissions are > 25 T/yr and permitted emissions fall below applicable major source thresholds) and the permit sets limits < 8 T/yr of a single HAP and/or < 20 T/yr of Total HAPs.

B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 10 and 25 T/yr HAP major source thresholds.

UNK = Class is unknown.

For All Other Pollutants:

A = Use when permitted emissions of a pollutant are > 100 T/yr.

SM80 = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are ≥ 80 T/yr.

SM = Use if a synthetic minor for the applicable pollutant (uncontrolled emissions are > 100 T/yr and permitted emissions fall below 100 T/yr) and permitted emissions of the pollutant are < 80 T/yr.

B = Use when the potential to emit (i.e. uncontrolled emissions and permitted emissions) are below the 100 T/yr major source threshold.

UNK = Class is unknown.

Table 5 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	8.09	3.17	**100**	B
PM_{10}	8.09	3.17	**100**	B
$PM_{2.5}$	8.09	3.17	**100**	B
SO_2	0	0	**100**	B
NO_X	0.80	0	**100**	B
CO	0.90	0	**100**	B
VOC	1.68	0	**100**	B
HAP (single)	0.03	0	**10**	B
Total HAPs	0.03	0	**25**	B

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 ..... Permit to Construct Required

The permittee has requested that a revised PTC be issued to the facility for the facility name change, change of facility ownership and removal of emission sources from the permit that have been dismantled or sold by the facility. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 ..... Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625 ..... Visible Emissions

The sources of PM emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 2.4 and 2.9.

Fugitive Emissions (IDAPA 58.01.01.650-651)

IDAPA 58.01.01.650 & 651 ..... Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. This requirement is assured by Permit Conditions 2.5 and 2.8.

Particulate Matter – Process Weight Limitations (IDAPA 58.01.01.700)

IDAPA 58.01.01.702 ..... Particulate Matter – Existing Equipment Process Weight Limitations

IDAPA 58.01.01.700 through 703 set PM emission limits for process equipment based on when the piece of equipment commenced operation and the piece of equipment's process weight (PW) in pounds per hour (lb/hr). IDAPA 58.01.01.701 and IDAPA 58.01.01.702 establish PM emission limits for equipment that commenced operation on or after October 1, 1979, and for equipment operating prior to October 1, 1979, respectively.

For equipment that commenced operation on or after October 1, 1979, the PM allowable emission rate (E) is based on one of the following equations:

IDAPA 58.01.01.701.01.a: If PW is < 9,250 lb/hr; $E = 0.045 (PW)^{0.60}$

IDAPA 58.01.01.701.01.b: If PW is ≥ 9,250 lb/hr; $E = 1.10 (PW)^{0.25}$

For the existing log processing facility emissions units proposed to be used as a result of this project with a proposed throughput of 6.39 T/hr, E is calculated as follows:

Proposed throughput = 6.39 T/hr x 2,000 lb/1 T = 12,780 lb/hr

Therefore, E is calculated as:

$E = 1.10 \times PW^{0.25} = 1.10 \times (12{,}780)^{0.25} = 11.7$ lb-PM/hr

As presented previously in the Emissions Inventories Section of this evaluation the post project PTE for this facility is 3.17 lb-PM_{10}/hr. Assuming PM is 50% PM_{10} means that PM emissions will be 6.34 lb-PM/hr (3.17 lb-PM_{10}/hr ÷ 0.5 lb-PM_{10}/lb-PM). Therefore, compliance with this requirement has been demonstrated.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 ..... Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility is not a designated facility as defined in 40 CFR 52.21(b)(1)(i)(a), and does not have facility-wide emissions of any criteria pollutant that exceed 250 T/yr.

NSPS Applicability (40 CFR 60)

The facility is not subject to any NSPS requirements 40 CFR Part 60.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT/GACT Applicability (40 CFR 63)

The facility does not manufacture wood furniture (Subpart JJ) or plywood or composite wood products (Subpart DDDD); it does not engage in surface coating of wood building products (Subpart QQQQ); and is does not have a wood preservation operation ((Subpart QQQQQQ). Therefore, the facility is not subject to any MACT standards in 40 CFR Part 63 with this permitting action.

Permit Conditions Review

This section describes the permit conditions for this initial permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Revised Permit Condition 1.1 through 1.3 and Table 1.1
These revised permit conditions provide the scope of this permitting project, describe how modified conditions are identified, and indicate which PTC this will replace. Table 1.1 Regulated sources has been updated to remove the boiler, kiln, sawmill, debarker/sorter, and equipment associated with these emission units.

Existing Permit Conditions 2.1 through 2.9

Section 2. Wood-Fired Boiler, Drying Kiln, and Associated Handling, of the previous permit, referenced emission limits, operation requirements, and monitoring/recordkeeping requirements for the kiln and boiler, which are no longer emission units at this facility. This entire section has been removed and all remaining permit conditions have been renumbered, accordingly.

Existing Permit Condition 3.1

Treasure Valley Forest Products Yamhill facility is installing a sawmill that will process 12 million board feet per year. The milled lumber is then conveyed to the Debarker/Sorter and Debarker/sorter Screen where the residues are distributed to bins.
The Yamhill facility operates two log processors and two lathes that emit only particulate matter from the processors and associated cyclones and chip bins.
The green lathe roughly sizes green logs that have previously been debarked prior to drying. Wood residue from the lathing process is drawn through a cyclone and collected in adjacent bins.
Processor A and B are used to shave dry logs. Wood residue from the processing is drawn through a cyclone and collected in adjacent bins.
The Pole Lathe is used to size dried logs. Wood residue from the processing is drawn through a cyclone and collected in adjacent bins.

Revised Permit Condition 2.1
Cutting Edge Logs, LLC facility operates two log processors and two lathes that emit only particulate matter from the processors and associated cyclones and chip bins. The green lathe roughly sizes green logs. Wood residue from the lathing process is drawn through a cyclone and collected in adjacent bins. Processors A and B are used to shave logs. Wood residue from the processing is drawn through a cyclone and collected in adjacent bins. The Pole Lathe is used to size logs. Wood residue from the processing is drawn through a cyclone and collected in adjacent bins. The facility produces wall logs, beams, and poles, which are mainly used for the construction of log homes. Railing, log siding, and similar products are also produced on a limited basis.

Permit Condition 2.1 has been revised to remove the reference to the sawmill and debarker/sorter processes. It has been updated to describe the current log processing operations used by the new facility owner.

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Permit Condition 2.1 has been revised to remove the reference to the sawmill and debarker/sorter processes. It has been updated to describe the current log processing operations used by the new facility owner.

Revised Permit Condition 2.2

Table 2.1 Log Processing Description

Emissions Units / Processes	Control Devices	Emission Points
Green Lathe	Green Lathe Cyclone	GCYCL Stack
Processor A	Processor A Cyclone	ACYCL Stack
Processor B	Processor B Cyclone	BCYCL Stack
Pole Lathe	Pole Lathe Cyclone	PCYCL Stack
Green Lathe Cyclone Bin	None	GBIN
Processor A Cyclone Bin	None	ABIN
Processor B Cyclone Bin	None	BBIN
Pole Lathe Cyclone Bin	None	PBIN

The Log Processing Description table of Permit Condition 2.2 was updated by removing the sawmill, the debarker/sorter, and the emission sources associated with them.

Revised Permit Condition 2.3

Emission Limits

The emissions from the log processing operation stacks shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Logging Operation Emission Limits [a]

Source Description	PM_{10} [b]	
	lb/hr [c]	T/yr [d]
Green Lathe	1.23	1.28
Processor A	0.25	0.13
Processor B	0.02	0.02
Pole Lathe	0.12	0.12

a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
c) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
d) Tons per any consecutive 12-calendar month period.

This emission limit table has been modified to show the current emission sources including the green lathe; processors A and B; and the pole lathe. Emissions are based on use of a functioning cyclone with each emission source.

Existing Permit Condition 3.4

Emissions from the cyclones, sawmill, and debarker/sorter, or any other stack, vent, or functionally equivalent opening associated with sawmill and log processing, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Revised Permit Condition 2.4

Emissions from the log processing operation stack, or any other stack, vent, or functionally equivalent opening associated with the log processing operation, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

This permit condition has been revised to remove the reference to the sawmill and debarker/sorter.

Existing Permit Condition 3.6

Throughput Limits

The total quantity of wood processed in the sawmill shall not exceed 12 million board feet per any consecutive 12-month period. The total quantity of wood processed by the debarker/sorter and Debarker/Sorter Screen shall not exceed 13 million board feet per any consecutive 12-month period.

Revised Permit Condition 2.6

Annual Wood Processed Throughput Limit

The total quantity of wood processed in facility shall not exceed 13,314 tons dry wood per any consecutive 12-month period.

This permit condition has been modified to remove the reference to the sawmill and debarker/sorter. It has been updated to 13,314 tons dry wood per any consecutive 12-month period as an annual facility wood throughput limit.

Existing Permit Condition 3.7

Sawmill and Log Processing Throughput Limit

Each month, the permittee shall monitor and record the sawmill and debarker/sorter information in units of board feet per month (bf/mo) and board feet per the most recent consecutive 12-month period (bf/yr). Records of this information shall be maintained in accordance with General Provision 7.

Revised Permit Condition 2.7

Annual Wood Processed Throughput Limit Monitoring

Each calendar month, the permittee shall monitor and record the total wood processed in the Log Processing Operation for the previous month in units of board feet per month. Annual wood processed throughput shall be determined by summing the monthly wood processed over the previous consecutive 12-month period to demonstrate compliance with the Annual Wood Processing Throughput Limits permit condition. Records of this information shall be maintained in accordance with General Provisions.

This permit condition has been revised to remove the reference to the sawmill and debarker/sorter. It has been updated to define method for monitoring and recordkeeping of wood throughput.

The General Provisions have been updated with current DEQ permit conditions. The following is a description of each.

Updated Permit Condition 3.1

The duty to comply general compliance provision requires that the permittee comply with all of the permit terms and conditions pursuant to Idaho Code §39-101.

Updated Permit Condition 3.2

The maintenance and operation general compliance provision requires that the permittee maintain and operate all treatment and control facilities at the facility in accordance with IDAPA 58.01.01.211.

Updated Permit Condition 3.3

The obligation to comply general compliance provision specifies that no permit condition is intended to relieve or exempt the permittee from compliance with applicable state and federal requirements, in accordance with IDAPA 58.01.01.212.01.

Updated Permit Condition 3.4

The inspection and entry provision requires that the permittee allow DEQ inspection and entry pursuant to Idaho Code §39-108.

Updated Permit Condition 3.5

The permit expiration construction and operation provision specifies that the permit expires if construction has not begun within two years of permit issuance or if construction has been suspended for a year in accordance with IDAPA 58.01.01.211.02.

Updated Permit Condition 3.6

The notification of construction and operation provision requires that the permittee notify DEQ of the dates of construction and operation, in accordance with IDAPA 58.01.01.211.01 and 211.03.

Updated Permit Condition 3.7

The performance testing notification of intent provision requires that the permittee notify DEQ at least 15 days prior to any performance test to provide DEQ the option to have an observer present, in accordance with IDAPA 58.01.01.157.03.

Updated Permit Condition 3.8

The performance test protocol provision requires that any performance testing be conducted in accordance with the procedures of IDAPA 58.01.01.157, and encourages the permittee to submit a protocol to DEQ for approval prior to testing.

Updated Permit Condition 3.9

The performance test report provision requires that the permittee report any performance test results to DEQ within 60 days of completion, in accordance with IDAPA 58.01.01.157.04-05.

Updated Permit Condition 3.10

The monitoring and recordkeeping provision requires that the permittee maintain sufficient records to ensure compliance with permit conditions, in accordance with IDAPA 58.01.01.211.

Updated Permit Condition 3.11

The excess emissions provision requires that the permittee follow the procedures required for excess emissions events, in accordance with IDAPA 58.01.01.130-136.

Updated Permit Condition 3.12

The certification provision requires that a responsible official certify all documents submitted to DEQ, in accordance with IDAPA 58.01.01.123.

Updated Permit Condition 3.13

The false statement provision requires that no person make false statements, representations, or certifications, in accordance with IDAPA 58.01.01.125.

Updated Permit Condition 3.14

The tampering provision requires that no person render inaccurate any required monitoring device or method, in accordance with IDAPA 58.01.01.126.

Updated Permit Condition 3.15

The transferability provision specifies that this permit to construct is transferable, in accordance with the procedures of IDAPA 58.01.01.209.06.

Updated Permit Condition 3.16

The severability provision specifies that permit conditions are severable, in accordance with IDAPA 58.01.01.211.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04 or IDAPA 58.01.01.404.04.

APPENDIX A – EMISSIONS INVENTORIES

Treasure Valley Forest Products - Lodge Logs
Facility Summary Sheet

BOILER	Wood-Fired Boiler	IDEQ, MFG.	0.3	0.3	0.76	0.039	0.94	0.0265	0.0337	0.1	0.1	0.245	0.0125	0.300	0.0085	0.0108
SAW	Sawmill	IDEQ	1.64	0.94						1.58	0.90					
KILN	Dry Kiln	IDEQ	0.005	0.0026				1.65	0.03	0.02	0.0108				6.88	0.14
DEB	Debarker	IDEQ	1.94	1.09						1.86	1.05					
DEBS	Debarker Screen	IDEQ	0.16	0.07						0.15	0.07					
	Cyclones															
GCYCL	Green Lathe	IDEQ	2.57	1.28						2.47	1.23					
ACYCL	Processor A	IDEQ	0.26	0.13						0.25	0.12					
BCYCL	Processor B	IDEQ	0.04	0.02						0.04	0.02					
PCYCL	Pole Lathe	IDEQ	0.25	0.12						0.24	0.12					
	Bins															
GBIN	Green Lathe Cyclone	IDEQ	0.005	0.002						0.005	0.002					
ABIN	Processor A Cyclone	IDEQ	0.0005	0.0002						0.0005	0.0002					
BBIN	Processor B Cyclone	IDEQ	0.00007	0.00003						0.00007	0.00003					
PBIN	Pole Lathe Cyclone	IDEQ	0.0005	0.0002						0.0005	0.0002					
SBIN	Sawmill Sawdust	IDEQ	0.0009	0.0004						0.0008	0.0004					
WBIN	Sawmill Wood Chip 1	IDEQ	0.002	0.001						0.002	0.001					
WBIN1	Sawmill Wood Chip 2	IDEQ	0.002	0.001						0.002	0.001					
PILE	Sawdust Pile	IDEQ	0.87	0.31						0.83	0.30					
	Facility Total		8.0	4.3	0.8	0.0	0.9	1.7		7.5	3.9	0.2	0.0	0.3	6.9	
	Significant Emission Rates (10%)		2.5	1.5	4.0	4.0	10.0	4.0								
	Modeling Threshold		na	1.0	1.0	1.0	no	na		na	0.2	na	0.2	14.0	na	
	Modeling Required			Yes	No	No					Yes		No	No		

Treasure Valley Forest Products - Lodge Logs

Green Lathe Cyclone

The green lathe will be used to roughly size green logs prior to drying.
Logs will normally be debarked in the Debarker/Sorter prior to being sized but debarking can occur.
Chips and other wood residues are drawn through a cyclone and collected in one of two adjacent bins.
Capacity of bins is 2800 cubic feet. Each bin (2) will be filled every 14 hours of operation.
Wood is 35% moisture
Bulk density of wood is equal to the density of dry wood (2.056 lb/bd-ft) divided by the moisture content of the wood.

Bulk density: 38 lb/cf

Maximum hourly production rate: $\frac{69}{14}\ \frac{\text{ton bone-dry wood}}{\text{hr}}$

Maximum annual production rate: $10{,}264\ \frac{\text{ton bone-dry wood}}{\text{yr}}$

Idaho DEQ Emission Factor Guide for Wood Industry (1/1997), Cyclone Exhaust, Dry and Green Chips
PM = 0.5 lb/ton bone-dry wood
PM10 = 0.25 lb/ton bone-dry wood

Potential Emissions

Green Lathe Cyclone	lb/hr	tpy
PM	2.47	2.57
PM10	1.23	1.28

Potential Emissions Calculations:
Maximum Hourly PM emissions:

$$\frac{69}{14}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.50\ \text{lb PM}}{\text{ton bone-dry wood}} = 2.47\ \text{lb/hr PM}$$

Maximum Annual PM emissions:

$$10{,}264\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.50\ \text{lb PM}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} = 2.57\ \text{tpy PM}$$

Maximum Hourly PM10 emissions:

$$\frac{69}{14}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.25\ \text{lb PM10}}{\text{ton bone-dry wood}} = 1.23\ \text{lb/hr PM10}$$

Maximum Annual PM10 emissions:

$$10{,}264\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.25\ \text{lb PM10}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} = 1.28\ \text{tpy PM10}$$

Treasure Valley Forest Products - Lodge Logs

Green Lathe Cyclone Bin

Capacity of bins is 2800 cubic feet. Each bin (2) will be filled every 14 hours of operation.
Wood is 35% moisture
Bulk density of wood is equal to the density of dry wood (2.056 lb/bd-ft) divided by the moisture content of the wood.

Bulk density: 38 lb/cf

Maximum hourly production rate: $\frac{69}{14}$ $\frac{\text{ton bone-dry wood}}{\text{hr}}$

Maximum annual production rate: 10,264 $\frac{\text{ton bone-dry wood}}{\text{yr}}$

AP-42 Section 13.2.4 (Aggregate Handling and Storage Piles)

Wind Speed	3.5	mph
Material moisture content	4.3	%
PM Particle size multiplier	0.74	
PM =	0.001	lb/ton bone-dry wood
PM10 Particle size multiplier	0.35	
PM10 =	0.001	lb/ton bone-dry wood

Division of Environmental Protection, Office of Air Quality for West Virginia, Reference Document for General Permit Number G10-B, for the construction, modification, relocation, operation, and prevention and control of air pollution from the operation of coal preparation plants and coal handling operations
Control Factor = 70% Based on full enclosure from truck

Potential Emissions

Green Lathe Cyclone Bin	lb/hr	tpy
PM	0.005	0.005
PM10	0.002	0.002

Potential Emissions Calculations:
Maximum Hourly PM emissions:

$$\frac{69}{14}\ \frac{\text{bone-dry wc}}{\text{hr}} \times \frac{0.001\ \text{lb PM}}{\text{ton bone-dry wood}} \times 70\% = 0.005\ \text{lb/hr PM}$$

Maximum Annual PM emissions:

$$10{,}264\ \frac{\text{bone-dry wc}}{\text{yr}} \times \frac{0.001\ \text{lb PM}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} \times 70\% = 0.005\ \text{tpy PM}$$

Maximum Hourly PM10 emissions:

$$\frac{69}{14}\ \frac{\text{bone-dry wc}}{\text{hr}} \times \frac{0.001\ \text{lb PM10}}{\text{ton bone-dry wood}} \times 70\% = 0.002\ \text{lb/hr PM10}$$

Maximum Annual PM10 emissions:

$$10{,}264\ \frac{\text{bone-dry wc}}{\text{yr}} \times \frac{0.001\ \text{lb PM10}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} \times 70\% = 0.002\ \text{tpy PM10}$$

Treasure Valley Forest Products - Lodge Logs

Processor A Cyclone

Processor A will be used to shave dry logs

Shavings and other wood residues are drawn through a cyclone and collected in an overhead bin.

Capacity of bin is 4800 cubic feet. Each bin will be filled every 120 hours of operation.

Wood is 15% moisture

Bulk density of wood is equal to the density of dry wood (2.056 lb/bd-ft) divided by the moisture content of the wood.

Bulk density: 29 lb/cf

Maximum hourly production rate: $\frac{59}{120}$ $\frac{\text{ton bone-dry wood}}{\text{hr}}$

Maximum annual production rate: 1,026 $\frac{\text{ton bone-dry wood}}{\text{yr}}$

Idaho DEQ Emission Factor Guide for Wood Industry (1/1997), Cyclone Exhaust, Dry and Green Chips

PM = 0.5 lb/ton bone-dry wood

PM10 = 0.25 lb/ton bone-dry wood

Potential Emissions

Processor A Cyclone	lb/hr	tpy
PM	0.25	0.26
PM10	0.12	0.13

Potential Emissions Calculations:

Maximum Hourly PM emissions:

$$\frac{59}{120}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.50\ \text{lb PM}}{\text{ton bone-dry wood}} = 0.25\ \text{lb/hr PM}$$

Maximum Annual PM emissions:

$$1{,}026\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.50\ \text{lb PM}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} = 0.26\ \text{tpy PM}$$

Maximum Hourly PM10 emissions:

$$\frac{59}{120}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.25\ \text{lb PM10}}{\text{ton bone-dry wood}} = 0.12\ \text{lb/hr PM10}$$

Maximum Annual PM10 emissions:

$$1{,}026\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.25\ \text{lb PM10}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} = 0.13\ \text{tpy PM10}$$

Treasure Valley Forest Products - Lodge Logs

Processor A Bin Cyclone

Capacity of bin is 4800 cubic feet. Each bin will be filled every 120 hours of operation (not continuously).
Wood is 15% moisture
Bulk density of wood is equal to the density of dry wood (2.056 lb/bd-ft) divided by the moisture content of the wood.
Bulk density: 29 lb/cf

Maximum hourly production rate: $\frac{59}{120}$ $\frac{\text{ton bone-dry wood}}{\text{hr}}$

Maximum annual production rate: 1,026 $\frac{\text{ton bone-dry wood}}{\text{yr}}$

AP-42 Section 13.2.4 (Aggregate Handling and Storage Piles)

Wind Speed	3.5	mph
Material moisture content	4.3	%
PM Particle size multiplier	0.74	
PM =	0.001	lb/ton bone-dry wood
PM10 Particle size multiplier	0.35	
PM10 =	0.001	lb/ton bone-dry wood

Division of Environmental Protection, Office of Air Quality for West Virginia, Reference Document for General Permit Number G10-B, for the construction, vmodification, relocation, operation, and prevention and control of air pollution from the operation of coal preparation plants and coal handling operations
Control Factor = 70% Based on full enclosure from truck

Potential Emissions

Processor A Bin Cyclone	lb/hr	tpy
PM	0.000	0.000
PM10	0.000	0.000

Potential Emissions Calculations:
Maximum Hourly PM emissions:

$$\frac{59}{120}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.001\ \text{lb PM}}{\text{ton bone-dry wood}} \times 70\% = 0.0005\ \text{lb/hr PM}$$

Maximum Annual PM emissions:

$$1{,}026\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.001\ \text{lb PM}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} \times 70\% = 0.0005\ \text{tpy PM}$$

Maximum Hourly PM10 emissions:

$$\frac{59}{120}\ \frac{\text{bone-dry w}}{\text{hr}} \times \frac{0.001\ \text{lb PM10}}{\text{ton bone-dry wood}} \times 70\% = 0.0002\ \text{lb/hr PM10}$$

Maximum Annual PM10 emissions:

$$1{,}026\ \frac{\text{bone-dry w}}{\text{yr}} \times \frac{0.001\ \text{lb PM10}}{\text{ton bone-dry wood}} \times \frac{1\ \text{ton}}{2000\ \text{lb}} \times 70\% = 0.0002\ \text{tpy PM10}$$

APPENDIX B – FACILITY DRAFT COMMENTS

The following comments were received from the facility on Month Date, Year:

No comments were received.

APPENDIX C – PROCESSING FEE

Company:	**Cutting Edge Logs, LLC**
Address:	**1625 Yamhill Road**
City:	**Boise**
State:	**ID**
Zip Code:	**83716**
Facility Contact:	**Randal Nelson**
Title:	**Chief Marketing Officer**
AIRS No.:	**001-00208**

N	Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
Y	Did this permit require engineering analysis? Y/N
N	Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory

Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO_X	0.0	0.8	-0.8
SO_2	0.0	0	0.0
CO	0.0	0.9	-0.9
PM10	0.0	4.92	-4.9
VOC	0.0	1.68	-1.7
Total:	0.0	8.3	**-8.3**
Fee Due	**$ 1,000.00**		

Comments: Permit P-2007.0060 Project 62155

Facility mailing address:
P.O. Box 170398
Boise, ID 83717