



Air Quality Permitting Response to Public Comments

August 24, 2018

Tier I Operating Permit No. T1-2017.0052

Project No. 61940

**IFG Lewiston, LLC
Lewiston, Idaho**

Facility ID No. 069-00003

Prepared by:
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AIR QUALITY DIVISION

Final

Table of Contents

BACKGROUND	3
PUBLIC COMMENTS AND RESPONSES	3
APPENDIX	6

BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the draft Tier I operating permit for IFG Lewiston, LLC from May 21, 2018 through June 20, 2018, in accordance with IDAPA 58.01.01.364. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section. All comments submitted in response to DEQ's proposed action are included in the appendix of this document.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the draft permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the draft permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: <http://adminrules.idaho.gov/rules/current/58/0101.pdf>.

Comment 1: Emission Factors – Lumber Dry Kilns

VOCs

We request DEQ change IFG, Lewiston's permit such that the permit restricts this facility to processing only Hemlock, Hem-fir.

Page 9 of the Statement of Basis (SOB) states that the Kiln Vents' Potential to Emit (PTE) VOC is 249.1 T/yr. This PTE is based on the 1.06 T/yr VOC emission factor (EF) for Hemlock, Hemfir, as identified in Appendix A of the SOB. However, the VOC EF for Hemlock, Hem-fir is the lowest VOC EF of the wood species that were considered in the SOB. In other words, the Draft Permit assumes that IFG, Lewiston will process only Hemlock, Hem-fir. Accordingly, we request DEQ modify the Draft Permit, so that it reflects this assumption, by adding a permit condition restricting IFG, Lewiston to Hemlock, Hem-fir.

Restricting the wood species in IFG, Lewiston's permit is critical given the facility would breach the PSD major facility threshold (250 T/yr), if the VOC EF were increased by only one hundredth T/yr (0.01 T/yr). If DEQ does not grant our request, we further request DEQ explain the basis of its decision. In addition, we request DEQ explain the scientific and regulatory basis for using 1.06 T/yr as the VOC EF, rather than 1.09 T/yr, as was used in IFG's Lewiston's active permit.

Particulate Matter

The PTE calculations for particulate matter are inconsistent because instead of assuming IFG, Lewiston will only process Hemlock, Hem-fir (as is the case for the PTE calculation for VOC), the SOB assumes IFG, Lewiston will process 50% Hemlock and 50% Douglas-fir. We request DEQ restrict IFG, Lewiston to processing Hemlock, Hem-fir and re-calculate the PTE particulate matter accordingly.

As the draft permit stands, the PTE for PM10 and PM2.5 is based on averaging the particulate matter EFs for Coastal Hemlock and Douglas-fir. This is inconsistent with the PTE calculation of VOC, which assumed only Hemlock would be processed, as explained above. We request DEQ re-calculate the PTE for PM10 and PM2.5 based on EFs of 0.051 lb/mbf and 0.048 lb/mbf, respectively. If DEQ does not grant this request, we further request DEQ calculate PTE based on a consistent understanding of the wood species IFG, Lewiston is permitted to process.

Response 1: *VOCs*

The commenter has requested DEQ restrict IFG Lewiston's species of lumber being processed. In the underlying Permit to Construct (PTC), P-2011.0135, issued September 15, 2016, Permit Conditions 2.3 through 2.8 provides requirements and methodology for IFG to use in calculating kiln VOC emissions based on the species of lumber being processed in the previous 12 month period to demonstrate compliance with the PTC Permit Condition 2.2.1. These Permit Conditions have all been incorporated into IFG Lewiston's Title V renewal permit in Permit Conditions 4.1, and 4.3 through 4.8.

The emission factor IFG Lewiston used in the Statement of Basis (SOB) of P-2011.0135, issued September 15, 2016, to calculate the kiln VOC emissions was 1.06 pounds per thousand board feet (lb/mbf). This was also included in the SOB EI for this Tier I permit. The *EPA Region 10 HAP and VOC Emission Factors for Lumber Drying, December 2012* established a White Fir dry kiln EF of 1.09 lb/mbf and a Western Hemlock EF of 0.662 lb/mbf for temperatures greater than 200° Fahrenheit. The facility quantified Hem-fir lumber they process at 7% Western Hemlock and 93% White Fir. Using this data, a weighted average emission factor was calculated as follows: the sum of 1) the product of 93% and 1.09 lb/mbf and 2) the product of 7% and 0.662 lb/mbf, resulting in 1.06 lb/mbf. Using this emission factor, IFG Lewiston demonstrated compliance with VOC emissions limit in Permit Condition 4.1 of P-2011.0135, issued September 15, 2016, and showed they were under the PSD major threshold of 250 tons per year (T/yr).

IFG Lewiston's EF, being based on 2012 EPA EF's, does use a conservative approach to kiln VOC calculations. This is because EPA's calculation methodology used 90th percentile or maximum values (when three or more test values were available and the maximum test value when less than three test values were available). In 2013, the Oregon DEQ (ODEQ) compiled average emission factors from the same data used by EPA. ODEQ's EF's for White Fir and Western Hemlock for temperatures greater than 200°Fahrenheit were 0.99 lb/mbf and 0.53 lb/mbf, respectively. The weighted average from ODEQ's data is 0.96 lb/mbf, which is notably less than IFG Lewiston's emission factor, 1.06 lb/mbf.

Furthermore, Permit Condition 4.7 of this Tier 1 permit allows for the use of a DEQ approved alternative EF. Using a weighted average of the 2012 EPA EF's of 0.662 lb/mbf for Western Hemlock and 1.09 lb/mbf for White Fir was deemed an acceptable approach to VOC calculations and approved by DEQ. DEQ will recommend to the facility that it incorporates this into their underlying PTC.

Particulate Matter

The particulate matter emission factors used by IFG Lewiston were the average of two dry kiln source tests which were performed by the same testing firm for two separate species, Douglas Fir and Coastal Hemlock. The commenter has requested recalculation of IFG Lewiston's kiln PM and PM_{2.5} using an EF of 0.051 lb/mbf, and 0.48 lb/mbf, which align with the Coastal Hemlock source test. Because IFG Lewiston's product speciation is dynamic, and in lieu of other credible speciated data, using the mathematical average of the two source test's PM, PM₁₀, and PM_{2.5} emission factors was deemed acceptable by DEQ in the SOB of P-2011.0135 issued September 15, 2016 permit (this was originally established in the SOB of P-2011.0135 issued March 18, 2014).

Comment 2: *Emission Inventory – BHI*

We request DEQ explain the discrepancy between the PM₁₀ and PM_{2.5} PTE for the BHI (Shavings Baghouse) in the 2018 SOB and the 2014 SOB. The PTE for this emission unit changed slightly, and it does not appear that DEQ provided an explanation for this change.

Response 2: *Emission Inventory – BH1*

The SOB for this Tier 1 Permit renewal package incorporated the data from the SOB of the underlying PTC, P-2011.0135 issued September 15, 2016. The SOB from IFG's previous Tier 1 Permit, T1-2012.0038 issued March 26, 2014, incorporated data from the SOB of the underlying PTC, P-2011.0135, issued March 18, 2014.

The application for IFG Lewiston's March 26, 2014 PTC modification indicated that both planer chips and planer shavings *could* be routed to baghouse BH1. This included an estimated maximum of 51,230 T/yr of shavings and 28,200 T/yr of chips, rounded to a total of 80,000 T/yr of material routed to BH1. Using ODEQ AQ-EF02 EF of 0.040 lb/T, BH1 was estimated to have a maximum PM₁₀ emission of 1.60 T/yr. This data is consistent with the SOB for T1-2012.0038 issued March 18, 2014. Based on ODEQ AQ-EF03, PM_{2.5} emissions were calculated as 67% of PM₁₀.

Later, for the PTC modification in 2016, the facility determined it would not route planer chips to BH1, which was reflected in the EI submitted with the application for the September 15, 2016 PTC permit modification. Using the same EF's and throughput reduction down to 51,320 T/yr of shavings to BH1, the facility recalculated BH1 emissions. The result was 1.025 T/yr of PM₁₀ (PM_{2.5} was again calculated at 67% of PM₁₀). This data, from the SOB of PTC P-2011.0035, issued September 15, 2016, has been incorporated into IFG Lewiston's T1 permit renewal SOB EI.

Appendix

Public Comments Submitted for

Tier I Operating Permit

T1-2017.0052 Project 61940



IDAHO
CONSERVATION
LEAGUE

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Submitted via email to: tanya.chin@deq.idaho.gov and rakael.pope@deq.idaho.gov

June 20, 2018

RE: Draft Tier I Permit Renewal for IFG, Lewiston

Dear Ms. Chin:

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's human health and environment.

Attached, please find my comments on behalf of the Idaho Conservation League regarding the draft Tier I permit for IFG, Lewiston.

Please do not hesitate to contact me at (208) 265-9565 or mnykiel@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Thank you for your time and consideration.

Sincerely,

Matthew Nykiel
Conservation Associate

ICL Comments

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