



## **Air Quality Permitting Response to Public Comments**

**October 3, 2016**

**Permit to Construct No. P-2016.0041 Project 61744**

**Yellowstone Plastics, Inc.  
Idaho Falls, Idaho**

**Facility ID No. 019-00041**

Prepared by:  
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AIR QUALITY DIVISION

**Final**

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## BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct the Yellowstone Plastics, Inc. from August 23 through September 22, 2016, in accordance with IDAPA 58.01.01.209.01.c. 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 proposed 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 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:

Permit Conditions 2.19 and 2.20 are missing from DEQ's draft permit. These permit conditions are necessary to ensure that the RTO achieves expected pollutant reductions.

In addition, these two conditions replace four permit conditions from the previous Tier II permit (Permit Conditions 3.3, 3.8, 3.9, and 3.10) which required ongoing monitoring of HAPs and VOCs to demonstrate compliance with emission thresholds. It is clear that Permit Conditions 2.19 and 2.20 are a critical component to this permit to construct and therefore must be included in the final permit.

### Response 1:

Permit Conditions 2.19 and 2.20 as referenced were not included in the proposed permit, and these references have been removed.

The conditions referenced were considered in a draft version of the permit before emissions of toxic air pollutants (TAP) resulting from natural gas combustion in the RTO had been determined. Supplemental information on all equipment fuel input capacities (including the RTO) was provided on August 12, 2016, such that facility-wide TAP emissions from fuel combustion could be determined and preconstruction compliance with IDAPA 58.01.01.210 (Demonstration of Preconstruction with Toxic Standards) demonstrated. Performance testing was no longer necessary to verify TAP emission rates resulting from fuel combustion in the RTO.

In evaluating whether a performance test should be required, DEQ also considers the design and operation of the control device, the frequency and reliability of monitoring indicators, the quantity of emissions, and the margin of compliance with emission standards or air quality standards.<sup>1</sup> With regard to these factors, monitoring of RTO operating temperature (Permit Conditions 2.6, 2.7, and 2.13), monitoring of ink and solvent usage (Permit Conditions 2.9, 2.10, 2.15, and 2.16), and monitoring of ink and solvent material formulations and emissions (Permit Conditions 2.12 and 2.18) were considered adequate to ensure ongoing compliance with applicable TAP EL and avoidance of VOC and HAP major source thresholds.

When complying with ink and solvent usage limits (Permit Conditions 2.9, 2.10, 2.15 and 2.16) and using the formulations as presented in the application, tracking of TAP, HAP, and VOC emissions was considered unnecessary. However, upon further review it was recognized that because the permit allows flexibility in changing ink and solvent formulations, a scenario exists under which HAP or VOC major source thresholds

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<sup>1</sup> Guidance for Requiring Source Tests in Air Permits, Doc ID AQ-IG-P001, rev. 1, Idaho DEQ, April 16, 2007.

could possibly be exceeded, particularly if switching to inks or solvents with a higher HAP or VOC content. As a result, the VOC and HAP limits from the Tier II permit have been preserved and incorporated into the Ink and Solvent Material Formulations Monitoring requirement (Permit Condition 2.18) to ensure ongoing compliance and avoidance of exceeding these thresholds.

**Comment 2:**

The draft permit imposes usage limits of 14,250 lbs/week and 21,750 lbs/week for ink and solvent, respectively. Projected over an entire year, these values equate to 741,000 lbs of ink and 1,131,000 lbs of solvent. We are concerned that these values are not utilized in the VOC calculations performed by DEQ (Appendix A of SOB). Instead, DEQ used lesser values of 730,630 lbs of projected ink use and 1,119,050 lbs of projected solvent use. When calculating potential VOC emissions, DEQ must utilize permissible totals, not projected estimates, which the facility is allowed to emit in order to avoid discrepancies and ensure VOC emission estimates are accurate. It is unclear which values for ink and solvent usage were used for the HAPs and TAPs calculations, however if this same issue exists for those calculations than they must be updated as well.

**Response 2:**

Usage limits have been updated (Permit Conditions 2.9 and 2.10) to match values used in the emission inventories.

**Comment 3:**

In Table 3 of the Statement of Basis DEQ multiplies the 24-hour average emission rates by seven (7) to calculate emissions on a pounds per week basis. However, the units on the final product (lbs/week) are incorrect as DEQ did not account for the 24 hours within a day. Thus, to calculate emissions as lbs/week DEQ must multiply values in the 3<sup>rd</sup> column of Table 3 by 24.

**Response 3:**

Table 3 in the Statement of Basis has been revised to clarify the approach used in supporting a weekly ink and solvent usage monitoring frequency.

**Appendix**

**Public comments submitted for**

**Permit to Construct No. P-2016.0041 Project 61744**



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9/22/2016

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**RE: Proposed air quality permit to construct for Yellowstone Plastics, Idaho Falls**

Dear Ms. Drier and Mr. Lewis;

Thank you for the opportunity to comment on DEQ's proposed air quality permit to construct (PTC) for Yellowstone Plastics in Idaho Falls.

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 and preserving Idaho's air quality.

Our comments are described in detail following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or [ahopkins@idahoconservation.org](mailto:ahopkins@idahoconservation.org) if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Sincerely,

A handwritten signature in black ink that reads "Austin Hopkins".

Austin Hopkins  
Conservation Assistant

*RE: Idaho Conservation League comments on the proposed air quality permit to construct for Yellowstone Plastics, Idaho Falls*

### Permit Conditions 2.19 and 2.20

Permit Conditions 2.19 and 2.20 are missing from DEQ's draft permit. These conditions are described in the SOB as follows:

*Permit Conditions 2.19 and 2.20 require an initial performance test to demonstrate the RTO performs under "worst-case normal" conditions and within manufacturer's specified operating parameters, and achieves the destruction removal efficiency used in estimating facility-wide VOC, TAP, and HAP emissions. Records of RTO operating temperature shall be provided to verify compliance with relevant permit conditions during testing (Permit Condition 2.6 through 2.8).*

These permit conditions are necessary to ensure that the RTO achieves expected pollutant reductions. In addition, these two conditions replace four permit conditions from the previous Tier II permit (permit conditions 3.3, 3.8, 3.9, and 3.10) which required ongoing monitoring of HAPs and VOCs to demonstrate compliance with emission thresholds. It is clear that permit conditions 2.19 and 2.20 are a critical component to this permit to construct and therefore must be included in the final permit.

### Projected Ink and Solvent Usage

The draft permit imposes usage limits of 14,250 lbs/week and 21,750 lbs/week for ink and solvent, respectively. Projected over an entire year, these values equate to 741,000 lbs of ink and 1,131,000 lbs of solvent. We are concerned that these values are not utilized in the VOC calculations performed by DEQ (Appendix A of SOB). Instead, DEQ used lesser values of 730,630 lbs of projected ink use and 1,119,050 lbs of projected solvent use. When calculating potential VOC emissions, DEQ must utilize permissible totals, not projected estimates, which the facility is allowed to emit in order to avoid discrepancies and ensure VOC emission estimates are accurate. It is unclear which values for ink and solvent usage were used for the HAPs and TAPs calculations, however if this same issue exists for those calculations than they must be updated as well.

### Error in Table 3 of SOB

In Table 3 of the Statement of Basis DEQ multiplies the 24-hour average emission rates by seven (7) to calculate emissions on a pounds per week basis. However the units on the final product (lbs/week) are incorrect as DEQ did not account for the 24 hours within a day. Thus, to calculate emissions as lbs/week DEQ must multiply values in the 3<sup>rd</sup> column of Table 3 by 24.

*RE: Idaho Conservation League comments on the proposed air quality permit to construct for Yellowstone Plastics, Idaho Falls*