



Air Quality Permitting Response to Public Comments

August 4, 2017

Permit to Construct No. P-2017.0013

Project No. 61854

**P. Kay Metal Lewiston LLC
Lewiston, Idaho**

Facility ID No. 069-00071

Prepared by:
Morrie Lewis, Permit Writer 
AIR QUALITY DIVISION

Final

Table of Contents

BACKGROUND	3
PUBLIC COMMENTS AND RESPONSES.....	3
APPENDIX.....	8

BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct for P. Kay Metal Lewiston LLC from June 14, 2017 through July 14, 2017, in accordance with IDAPA 58.01.01 (Idaho Air Rules), Section 209.01.c. During this period, comments were submitted in response to DEQ's proposed action. Each comment pertaining to air quality 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 to 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 proposed 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: Comments were submitted concerning the emissions of arsenic, cadmium, formaldehyde, and carbon monoxide (Bovey, Ristau) linking these pollutants to health diseases, and emissions of lead exacerbating lead contamination issues in the area (Fletcher, Douglas).

Response 1: Estimated emissions of formaldehyde, carbon monoxide, and sulfur dioxide were attributed solely to the combustion of natural gas fuel to heat process kettles, and emission estimates for these pollutants correspond to the maximum heating capacity of the twelve kettle burners operated continuously.

Estimated emissions of lead, arsenic, and cadmium were attributed to both combustion and process emission sources, and relied upon the speciation profile for processed materials, emission reductions from baghouse control devices, and projected process throughputs. Process emissions of toxic and hazardous air pollutants (HAP and TAP) were assumed to be a weighted fraction of total particulate emissions. Because lead, arsenic, and cadmium are emitted as particulate matter (PM) at baghouse exhaust temperatures, emissions of these pollutants are effectively controlled by the control of particulate matter in the Rotary Furnace and Kettle Baghouses.

Emissions of PM from the kettles – including both process and combustion emissions – are federally regulated by New Source Performance Standards (NSPS) for Secondary Lead Smelters, and will be subject to PM and opacity emission limits (Permit Conditions 2.4 and 2.5). In addition, emission limits and ongoing monitoring and testing requirements were established to demonstrate ongoing compliance with PM and lead emission estimates and to ensure proper maintenance and operation of process and control equipment (Permit Conditions 2.3, 2.12, 2.14, 2.20-2.23, and 2.25-2.27). Production throughput was also limited to ensure compliance with the estimates relied upon in the emission calculations (Permit Condition 2.10).

Modeling analyses was performed to determine the ambient impacts of formaldehyde, arsenic, and cadmium. Maximum modeled concentrations did not exceed the increments established in Sections 585 and 586 for these pollutants (Idaho Air Rules). Lead and sulfur dioxide emissions were estimated at below regulatory concern levels. Carbon monoxide (CO) was estimated at below DEQ Level I Modeling Applicability Thresholds. Regulatory concern levels, TAP increments, and modeling thresholds were established to ensure protection of public health, and preconstruction compliance with these levels has been demonstrated to DEQ's satisfaction.

Impacts to public health, animal life, and vegetation were taken into account in the development of the Idaho Air Rules and the federal Clean Air Act. As described in the Statement of Basis for this permitting action, the applicant has met preconstruction requirements for air quality permit issuance. Additional discussion concerning the modeling analyses is included below in the Response to Comment #4.

Comment 2: Comments were submitted concerning odors, and specifically odors related to sulfur dioxide. (Ristau & Ristau)

Response 2: Odors resulting from trace sulfur compounds in natural gas combusted are not expected to result in emissions exceeding odor thresholds. Odors are limited by Idaho Air Rules for Control of Odors (IDAPA 58.01.01.775-776), and these requirements have been incorporated in Permit Conditions 2.9 and 2.15. DEQ encourages anyone with odor complaints related to this facility to direct these to one or both of the following contacts:

(323) 585-5058 P. Kay Metal Lewiston LLC
(208) 799-4370 DEQ Lewiston Regional Office

As required by the permit, all odor complaints received by P. Kay Metal Lewiston LLC are to be assessed and appropriate corrective action taken as expeditiously as practicable. All complaints received by DEQ are also investigated and appropriate response determined. Additional information regarding the regulation of odors can be found at the DEQ website: <http://www.deq.idaho.gov/air-quality/air-pollutants/odors/>.

Comment 3: A comment was submitted concerning the potential for fugitive dust created by storage, wind, transportation, and cleaning (Ristau).

Response 3: All activities proposed by the applicant having the potential to generate fugitive dust emissions will be controlled by three baghouses. In addition to baghouses dedicated to specific emission sources such as the Rotary Furnace Baghouse and the Holding Kettle Room Baghouse, the kettle room is operated under negative pressure and vented to the Fugitive Baghouse. Activities have not been proposed for operation outside of these areas.

Fugitive dust emissions are limited by Idaho Air Rules for Reasonable Control of Fugitive Dust (IDAPA 58.01.01.650-651), and these requirements have been incorporated in Permit Conditions 2.8 and 2.13. DEQ encourages anyone with fugitive dust complaints related to this facility to direct these to both of the contacts provided above in the Response to Comment #2.

As required by the permit, all potential sources of fugitive emissions are required to be inspected on a weekly basis by the permittee and corrective action taken whenever any fugitive emissions are detected.

Comment 4: A comment was submitted regarding the change in lead emissions estimated from the extruders, and that clarification was needed regarding how apparent reductions in lead were achieved based on manufacturer specifications or scientific rationale. (ICL)

Response 4: The applicant provided information demonstrating to the satisfaction of DEQ that lead emissions would not occur in the extrusion process. This is because extrusion occurs at a process temperature of 50–75% of the melting point of the lead and alloy materials, and these materials are expected to remain in solid form and result in no ambient emissions.

As a result, lead emissions were determined to be below regulatory concern, and modeling analyses was not required to demonstrate preconstruction compliance with the lead National Ambient Air Quality Standards (NAAQS).

Comment 5: A comment was submitted stating that the lead impact analyses for the proposed project showed a potential to violate NAAQS when lead emissions are at Level I Modeling Applicability Thresholds and BRC thresholds. Since lead emissions at the BRC threshold did not assure compliance with NAAQS, the commenter said that DEQ could not be certain that NAAQS compliance is assured for other criteria pollutants based on emissions below BRC levels. (ICL)

Response 5: DEQ performed a review of the submitted air impact analyses to assure that NAAQS compliance was satisfactorily demonstrated, as required by Idaho Air Rules Section 203.02 for applicable air pollutants. Section 3.1.1 of the DEQ modeling review memorandum explains that the proposed project would qualify for a PTC exemption as a BRC source (as per Idaho Air Rules Section 221) if it were not for estimated emission quantities of CO and arsenic, cadmium, and formaldehyde TAP pollutants. Therefore, those pollutants that met the exemption criteria were not subjected to the NAAQS compliance demonstration requirements of Idaho Air Rules Section 203.02.

The NAAQS air impact modeling assessment for lead was originally performed by DEQ in the first PTC application submittal because initial conservatively-estimated emissions estimates did not meet the BRC criteria for lead. DEQ found that emissions did not meet the BRC criteria and that modeled impacts did not demonstrate compliance with the NAAQS, with high impacts largely driven by estimated emissions from the extruders. DEQ subsequently denied the application.

The applicant submitted a second PTC application with information demonstrating that lead is not emitted from the extruders (the driving source for the previous analyses, resulting from the poor dispersion characteristics attributed to this source). Although not specifically required by the Idaho Air Rules, DEQ completed a facility-wide lead impact analysis to provide reasonable assurance that the lead NAAQS will not be violated.

The estimated emission quantities of PM₁₀, PM_{2.5}, NO_x, and SO₂ from the proposed project are well below the BRC thresholds for those pollutants; therefore, a NAAQS compliance demonstration was not required by DEQ. DEQ is confident of NAAQS compliance because: 1) emissions quantities are well below the BRC levels; and 2) none of these pollutants are emitted by the extruders, which was the driving source of the initial lead analysis that showed an exceedance of the NAAQS.

Estimated emissions of CO were above the BRC threshold, requiring a NAAQS compliance demonstration. However, the hourly emissions rate of CO is well below the DEQ Level I Modeling Applicability Threshold that has been established by DEQ to reasonably assure NAAQS compliance. As explained in the DEQ Modeling Review Memorandum, Modeling Applicability Thresholds were established by using conservative screening-level modeling designed to be protective of the Significant Impact Level (SIL) for specified pollutants rather than the higher value of the NAAQS.

Comment 6: A comment was submitted stating that DEQ did not properly perform a cumulative impact analysis of lead for the proposed project. Several co-contributing lead sources were listed by the commenter for the immediate area, including the Lewiston Airport. It was requested that DEQ obtain emissions data for these facilities and include these emissions in the cumulative impact analysis for lead. (ICL)

Response 6: As previously stated, a lead NAAQS compliance demonstration was not required to be conducted by the applicant because facility-wide estimated emissions are less than Below Regulatory Concern (BRC) threshold levels. However, DEQ performed a facility-wide lead impact analysis to reasonably assure lead NAAQS compliance.

The lead emission estimates in the application for the proposed project are 0.02 ton/year, as compared to the 0.06 ton/year BRC threshold. These emissions were included in the impact modeling analysis, and a modeled impact of 0.019 $\mu\text{g}/\text{m}^3$ was obtained for a 3-month averaging period. This is nearly an order of magnitude below the 0.15 $\mu\text{g}/\text{m}^3$ NAAQS. DEQ also added a conservative background value 0.015 $\mu\text{g}/\text{m}^3$, giving a total cumulative impact of 0.034 $\mu\text{g}/\text{m}^3$. This background value reasonably accounts for sources in the area that are not explicitly included in the impact model, such as neighboring point sources and the airport.

DEQ determined a more refined and extensive impact analysis for lead (beyond that which was completed) was not warranted for this permitting action because: 1) estimated maximum emissions of lead from the proposed project is well below levels defined as BRC; and 2) modeled maximum impacts of lead are only about 13% of the lead NAAQS, and these impacts drop off dramatically within a very short distance from the facility.

Though none of the facilities identified by the commenter presently have an air quality permit, at least one has been evaluated and determined exempt from the requirement to obtain a Permit to Construct (Clearwater Bullets). Additional information concerning this exemption determination can be obtained upon request.

Comment 7: A comment was submitted asserting MACT Subpart X applicability based on the presence of potentially affected sources, such as refining and holding kettles (ICL).

Response 7: Although the proposed plant will include sources such as the Rotary Furnace and refining kettles and that could potentially be applicable to NESHAP Subpart X requirements, the stated operating temperatures for the Rotary Furnace and kettles were below the applicability criteria of 980°C required for these processes to meet the definition of “smelting,” and for the proposed plant to meet the definition of “secondary lead smelter.” Because smelting will not be conducted at this facility as defined in 40 CFR 63.542, NESHAP Subpart X is not applicable.

As provided in this PTC application, only the Rotary Furnace is proposed to operate at a process temperature up to 930°C, and the temperature of the remaining kettles will not exceed 482°C. In an effort to better capture this key information regarding operation of these sources and pertaining to regulatory applicability, the maximum operating temperature has been added for each kettle and provided in the Regulated Source table of the permit and the Emissions Unit and Control Equipment table of the Statement of Basis. To ensure that the Rotary Furnace is not operated above the criteria for applicability, a temperature limit and monitoring requirements have been included in the permit (Permit Conditions 2.11, 2.18, and 2.19).

Subpart X requirements apply to smelting operations rather than melting operations. In the smelting process, lead compounds are processed at temperatures exceeding 980°C (1,796°F) to separate elemental lead from other metals and contaminants (e.g., arsenic, antimony, and cadmium). In the melting process, lead or lead compounds are processed at below 980°C to change the shape (e.g., scrap to ingots). Components are not separated in the melting process. The temperature of the combustion environment heavily influences the behavior of lead emissions. At elevated temperatures, many heavy metal compounds (including lead) vaporize. The higher the temperature, the larger the fraction of lead vaporized. As exhaust temperatures drop to 149°C and below (300°F), lead condenses in proportion to available surface area, and collection of lead condensed onto particulate matter occurs while passing through the baghouse

control equipment. The lower temperatures involved in lead melting result in insignificant emission levels when compared to smelting.^{1,2}

Comment 8: A comment was submitted regarding the applicability of 10% and 20% opacity limits, suggesting only the most stringent standard should be applied to the Rotary Furnace. (ICL)

Response 8: Streamlining of opacity limits was not requested by the applicant, and therefore all of the applicable opacity limits from NSPS Subpart L and from the Idaho Air Rules were incorporated into the permit.

As clarified in the Statement of Basis, from a practical standpoint when the Rotary Furnace and Kettle 2 are operated together, combined emissions would be subject to the more stringent 10% opacity limit (Subpart L). Conversely, if the Rotary Furnace were operated in a standalone manner, it would be subject to only the 20% state and federal (Subpart L) opacity limits.

Comment 9: A comment was submitted regarding the timing of performance test notification, suggesting only the most stringent standard should be applied. (ICL)

Response 9: With regard to the prescribed timing of monitoring, notification, reporting, and permit expiration, general provisions of the permit are designed to cover instances in which other more stringent requirements do not apply. As provided in the case of NSPS (and other state or federal requirements, when applicable), the permittee would be subject to the most stringent performance test notification deadline (Permit Condition 2.29).

In the case of performance testing to demonstrate compliance with NSPS standards (Permit Conditions 2.4 and 2.5), the most stringent requirement is notification to DEQ at least 30 days in advance of completing performance testing (as required by Permit Condition 2.29). In the case of performance testing to demonstrate compliance with lead and PM emissions limits that are not derived from NSPS (e.g., Permit Conditions 2.4 – 2.6), the pertinent requirement (as required by General Provision 3.7) is notification to DEQ at least 15 days in advance of completing performance testing, in accordance with Section 157 (Idaho Air Rules).

Similarly, initial startup of (NSPS-affected) sources such as the Rotary Furnace and twelve kettles is subject to notification of initiation of construction within 5 working days (as required by General Provision 3.6), which is more stringent than what the requirements of NSPS allow (Permit Condition 2.29).

Comment 10: A comment was submitted regarding permit condition citation discrepancies in the Statement of Basis. (ICL)

Response 10: As addressed in the Facility Draft Comments appended to the Statement of Basis (Appendix D), permit conditions limiting annual fuel usage were deemed unnecessary and were not included in the permit. This deletion impacted numbering of the remaining permit conditions, and the present Statement of Basis has been updated for accuracy and consistency with the permit. Upon further review, it was determined that the requirement to burn natural gas only for the burners should have been retained, and this requirement has been included in the final permit (Permit Condition 2.14)

¹ Appendix 112U2 - Secondary Lead Smelting Industry NESHAP (40 CFR 63 Subpart X).

² Locating and Estimating Air Emission from Sources of Lead and Lead Compounds, EPA, May 1998.

APPENDIX

Public Comments Submitted for P-2017.0013 Project 61854

From: Stacia Moffett
Sent: Tuesday, March 14, 2017 12:45 PM
Subject: Lead Processing Plant permit

Hello — I want a chance to speak out against this development as I know that it poses a health risk for area inhabitants and wildlife. When may I plan to submit a statement?

From: Naomi Brownson
Sent: Tuesday, March 14, 2017 7:51 PM
Subject: Public hearing on lead processing plant proposal

Dear Ms. Drier,

I am writing to request a public open forum to discuss the proposed lead processing plant in Lewiston. As a Moscow resident and the mother of a young child, I have grave concerns about locating such a plant in our, or any populous, area. I would like to voice concerns.

Thank you,
Naomi Brownson

From: [Dode Bovey](#)
Subject: P. Kay Metal's at Lewiston Air Port
Date: Wednesday, March 15, 2017 11:02:21 AM

The company of P. Kay Metal's does not need to build a plant here in Lewiston. The air here is already full of toxins and we do not need any more companies to cause more health damage to the people who live in and around the Lewiston, Idaho area. For proof of health diseases that are caused due to breathing arsenic, cadmium, formaldehyde, carbon monoxide emissions refer to: globalhealingcenter.com. If that site doesn't scare the public enough, I don't know what would.
Dode Bovey, Lewiston, Idaho

From: [Eliza Fletcher](#)
Subject: P. Kay Metal
Date: Wednesday, March 15, 2017 12:58:03 PM

Dear Ms. Drier,

I am very concerned at the proposed lead processing plant in Lewiston.

We live in Latah County. My son's doctor orders routine lead tests for all his juvenile patients. He told me the reason he did this is because elevated lead levels are a common problem in this area. My son's lead levels were found to be elevated, and despite many efforts (water testing, etc.) we have not been successful in locating the source.

Of course we all know the public health problems with lead in the CDA area.

Given that we already know lead contamination is a concern in this region, it makes no sense to allow an industry that could potentially exacerbate an already known problem.

Please do not approve this permit.

Sincerely,

Elizabeth Secrist Fletcher

From: [Allan Jones](#)
To: [Anne Drier](#)
Subject: Request for Public Comment Period for new construction
Date: Wednesday, March 15, 2017 3:09:32 PM

Dear Ms Drier,

RE: Proposed P. Kay Metal Inc. lead processing plant in Lewiston ID

I believe that proximity of the proposed facility to neighborhoods, agriculture, and recreation areas combined with chronic and serious weather inversion problems the Lewis/Clark Valley more than warrants a public comment period before this project is approved.

Thank you for your service to the people of Idaho,

Regards,

J. Allan Jones
325 W Reservoir Drive
Lewiston ID
208-743-3762

From: James, Douglas
Sent: Thursday, March 16, 2017 5:05 PM
To: Anne Drier
Subject: Lead Processing Plant Lewiston Idaho

Hello Ms Drier,

I'm making sure everyone in our Valley is aware of this plant so they can contact you. The last thing we need in Lewiston Idaho is a lead processing plant. Did this get cleared by the City of Lewiston and if so, I'd like a copy of the document and person who allowed this to even get this far. The notice to contact the DEQ was on the back page of the NW section of the Lewiston Morning Tribune, not very visible for the public to see I noticed.

Lead poisoning in water, soil and the air are very common when plants of this type are present. There is always a chance of this contamination happening and now that a recent bond has been passed to build a new high school, we certainly don't want a lead processing plant here.

I'm shocked the DEQ for Idaho would even allow it, but they allow nuke plants and nuclear waste to be buried so I'm not surprised I guess. My only question is, would you allow this in your home town?

Thanks

Doug James
1621 25th Ave
Lewiston ID 83501

From: Webmaster
Sent: Monday, June 19, 2017 6:31 PM
To: Tanya Chin
Subject: Proposed Air Quality Permit - P. Kay Metal - Lewiston

Name:
Shane Ristau

Affiliation:
Lewiston resident and property owner

Comments:
I currently live directly East about 2 miles of where the proposed factory with multiple huge kettle smelters will be "diffusing" the air contaminants. It is utterly ridiculous putting this there, our town has enough problems with odor producing facilities as it is, such as the paper mill already. The carcinogenic contaminants alone will force me to take my family elsewhere.

Funny thing is , this has almost gotten passed under the table, nobody I know with children who live in what will be the affected area is aware of what exactly they will be doing, how many melting pots there will be in use , and how much odor as well as birth defect and cancer causing contaminants will be put into the air on a direct path to the major portion of the residential upper end of Lewiston, which is known as the Lewiston Orchards area. I live right there, my family will be one of the first in line to catch the fallout, I know where the wind blows everyday. It mostly comes from the area they will place the "smelter" , which is a more appropriate name. The general wind directions will carry it either east or north east, which basically is the whole populated upper residential area starting about a mile away.

And by the way it's a "Smelter", not a metal manufacturing company. The stuff they "manufacture" by extrusion is done after they melt and separate the metals.
Misleading even in the naming of it. The the process of using fluxes they use to melt the metal is called smelting.

Thank you:

From: Russ and Susie Ristau
Sent: Thursday, June 29, 2017 10:02 AM
To: Morrie Lewis
Subject: p kay metal , lewiston id

Mr Lewis- I spoke with you last week with some questions about the P Kay Metals project. You suggested that I spread the word to inform people of the public input option. I did this-actually talked with 52 individuals. Zero of these 52 had heard of this business when I asked what their opinion was of it! Can't really expect much input from the public if they have little or no knowledge of this project.

I have several questions remaining. I would appreciate hearing from you to address these.

1. It appears that SO2 will be produced and emitted. Will this produce an odor and to what extent? We currently have odor from Clearwater Paper on the opposite side of the city.
2. Are the amounts of Cadmium, Arsenic, and Formeldahyde tthat are emitted monitored, measured and reported to DEQ?
3. Is P Kay Metals licensed to store waste on the property or where will this be disposed of? This location is in any area that potentially could be affected by wildfires. I didnt notice any mention of this in the property location description.

I would appreciate an Email response at your earliest convenience. Thank you for your assistance.

S Ristau

From: Webmaster
Sent: Thursday, July 13, 2017 2:31 PM
To: Tanya Chin
Subject:

Name:

susanna ristau

Affiliation:

Comments:

Request for public hearing/meeting for P Kay Metals Project, Lewiston, Idaho. I strongly believe that there is need to have an open public informational meeting in Lewiston. I have talked to many people and find near 0 have knowledge of this project. It is not reasonable to expect people to read and understand the highly technical information on line about emissions, risks, monitoring, etc. I believe this informational meeting needs to include city government personnel that are in the decision making process to assure that the requirements of the city zoning codes would allow such an operation as the zoning codes specifically prohibit operations that produce nuisances such as odor, dust, gases, etc. and are designed to protect surrounding zones, not the industrial zone in which they are located. I am requesting that such a public meeting be held as soon as possible with understandable information on the impact on those persons living in Lewiston and the surrounding area. The additional testing required by DEQ is appreciated. My concerns include odor from SO₂ created by sulfur added to the flux, emissions of Arsenic, Cadmium and other toxic substances which are not monitored and continued concerns of fugitive dust created by storage, wind, transportation, and cleaning. Also meteorological data seems to be weak and somewhat questionable. With typical low wind velocity, it would seem probable that PM dispersion would likely be most concentrated directly over the city of Lewiston and especially over the residential area of Lewiston orchards as compared to a more widespread dispersion with a higher wind velocity of prevailing winds. Thank you for the opportunity to have input and for your consideration of such input. S. Ristau

Thank you:



208.345.6933 • PO Box 844, Boise, ID 83702 • www.idahoconservation.org

7/14/17

Morrie Lewis
Air Quality Division
DEQ State Office
1410 N. Hilton
Boise, ID 83706

Tanya Chin
Air Quality Division
DEQ State Office
1410 N. Hilton
Boise, ID 83706

Submitted via email: tanya.chin@deq.idaho.gov and morrie.lewis@deq.idaho.gov

RE: Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID.

Dear Ms. Chin and Mr. Lewis:

Thank you for the opportunity to comment on the draft air quality permit to construct for the P. Kay Metal (PKM) facility in Lewiston, ID.

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 air quality.

Our detailed comments are provided following this letter. Please do not hesitate to contact me at 208-345-6933 ext. 23 or 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 Associate

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 1 of 6

Change in Lead Emissions

In the initial application submitted by PKM to DEQ, potential lead emissions were shown to be slightly above Level I Modeling Applicability Thresholds. According to the Modeling Memorandum (Memo) included in the Statement of Basis for this PTC, DEQ discussed this matter with Spring Environmental, Inc. (Spring), the company which performed the emission modeling on behalf of PKM. In response to DEQ's concerns, Spring submitted a new permit application with refined lead emissions estimates that were below BRC.

DEQ provides no information within the Statement of Basis (SOB) on what changes were made to bring potential lead emissions below BRC, nor do they provide reference to where reviewers can find more detailed information. It is not until section 3.3.2 of DEQ's Memo (Appendix B of SOB) that the review is informed on how the reduction of lead emissions were achieved. According to Spring, the reduction in lead emissions was achieved by omitting emissions from the extruders.

Spring claims that lead emissions do not occur from the extruders due to the operating temperature range of the extruding process. However, no scientific rationale or manufacturer specifications are referenced to support this claim. Unless Spring or DEQ can provide documentation supporting this claim, the lead emissions from the extruding process should be left in tact for this permitting decision. Further, any lead modeling analysis performed that excluded these emissions should be redone in order to assess the potential greater impact on ambient air quality.

BRC and Level I Thresholds Insufficient in NAAQS Compliance

According to the Modeling Memorandum (Memo) prepared by DEQ, emissions of lead – despite being below both BRC and Level I Modeling Applicability Thresholds – had the potential to violate the NAAQS at this specific site. In light of this, DEQ required a full air impact modeling analysis to support permit issuance.

While BRC and Level I thresholds were not adequate in assuring compliance with the lead NAAQS, DEQ still utilizes these thresholds to dismiss modeling for other pollutants that were deemed significant, such as CO. If it is the case that BRC and Level I were shown to not be protective of the NAAQS for one pollutant, then these same thresholds should not be relied upon for other pollutants. A full air impact modeling analysis should be performed for all pollutants that exceeded initial emission limits stipulated in Idaho's Air Rules (IDAPA 58.01.01). If DEQ chooses not to perform such an analysis, we request justification regarding how NAAQS compliance is being demonstrated in light of BRC and Level I protection levels being deemed inadequate.

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 2 of 6

Analysis of Co-Contributing Sources

DEQ's Memo provides the following guidance for what constitutes a cumulative NAAQS impact analysis:

A cumulative NAAQS impact analysis for attainment area pollutants involves assessing ambient impacts (typically the design values consistent with the form of the standard) from facility-wide emissions, and emissions from any nearby co-contributing sources, and then adding a DEQ-approved background concentration value to the modeled result that is appropriate for the criteria pollutant/averaging-period at the facility location and the area of significant impact. Sec. 2.4 – Pg. 8 in Memo.

Yet, despite the explicit guidance to consider co-contributing sources in the NAAQS impact analysis, it does not appear that DEQ considered emissions from any nearby, co-contributing source. We are particularly concerned with this decision given the proposed location of this facility. PKM will be located on an industrial street in Lewiston, along with other neighboring manufacturing facilities such as Clearwater Bullets IMT and Bentz Boats (viewed using Google Maps). PKM will also be located adjacent to the Lewiston-Nez Perce County Regional Airport (Lewiston Airport).

At present, none of these facilities are listed on DEQ's website as having an air permit. As an unrelated matter, we are curious if DEQ has looked into whether air permits are necessary for these facilities. We request that DEQ please include this information in their formal response to comments.

With regards to NAAQS impact modeling, we feel that the modeling as presented in DEQ's Memo is incomplete given it's lack of consideration for the nearby, co-contributing sources just discussed. Without consideration of co-contributing sources DEQ's modeling has failed to meet the guidelines prescribed within its own Memo. Issuance of a permit should therefore be delayed until DEQ has performed NAAQS impact modeling that accounts for emissions from any and all co-contributing sources.

MACT Applicability

DEQ incorrectly omitted the NESHAP requirements in 40 CFR 63, Subpart X in the Draft Permit. We request that DEQ delay issuing a final permit, until it fully evaluates and incorporates all the applicable requirements pursuant to 40 CFR 63 into the permit.

The Code of Federal Regulations at 40 CFR 63, Subpart X provides the National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting. This subpart applies if:

“...you own or operate any of the following affected sources at a secondary lead smelter:

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 3 of 6

- Blast, reverberatory, rotary, and electric furnaces;
- Refining kettles;
- Agglomerating furnaces;
- Dryers;
- Process fugitive emissions sources;
- Buildings containing lead bearing materials; and
- Fugitive dust sources.

The provisions of this subpart do not apply to primary lead processors, lead refineries, or lead remelters.”

40 CFR § 63.541(a) (2017) (formatting added).

This subpart goes on to define rotary furnace and refining kettle – sources the applicant proposes to operate.

“*Refining kettle* means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of refining and alloying the lead. Included are pot furnaces, receiving kettles, and holding kettles.

...*Rotary furnace* (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature (greater than 980 degrees Celsius) that lead compounds are chemically reduced to elemental lead metal.”

Id. § 63.542.

At Permit Condition 1.2 and Table 1.1, the Draft Permit states that the applicant proposes to construct and operate 12 kettles, one of which is a tilting rotary furnace, two of which are refining kettles, and seven of which are holding kettles. In other words, 10 of the applicant's proposed kettles, at the outset, appear to trigger NESHAP requirements under 40 CFR 63, Subpart X.

However, at page 15-16 of the Statement of Basis, DEQ determined that the requirements of Subpart X are not applicable in this case because the applicant has stated – and the Draft Permit requires – that the rotary furnace will not exceed an operating temperature of 980 degrees Celsius. Although restricting the operating temperature of the applicant's rotary furnace to no more than 980 degrees Celsius prevents the applicant's rotary furnace from triggering Subpart X, the applicant's refining and holding kettles, nevertheless, trigger Subpart X anyway.¹ We were surprised to note that DEQ's Statement of Basis does not address or provide any explanation for why the requirements

¹ Process fugitive emissions sources included in the applicant's proposed facility may also trigger Subpart X, and we request DEQ evaluate and make a determination regarding this source as well.

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 4 of 6

of Subpart X were determined to be not applicable given the applicant's refining and holding kettles.

According to the language in 40 CFR §63.541, the applicant is subject to Subpart X, and DEQ should incorporate the requirements of this subpart into the applicant's permit accordingly. Because the applicant is proposing a new source, this Subpart requires a list of requirements beginning at 40 CFR §63.543(b).

We request DEQ delay issuing a final permit for this applicant until DEQ has had sufficient time to evaluate all the requirements of this subsection, to evaluate the requirements of any other regulations triggered by Subpart X, and to revise the Draft Permit accordingly. For example, because the applicant is subject to provisions of Subpart X, the applicant is also subject to title V permitting requirements under 40 CFR parts 70 or 71, as applicable. 40 CFR §63.541(c). Since the applicant is proposing to construct a new source, the applicant's permit must also be revised to restrict the concentration of lead compounds in any process vent gas to at or below 0.20 milligrams of lead per dry standard cubic meter (0.000087 grains of lead per dry standard cubic foot). 40 CFR §63.543(b). Subpart X also requires that the applicant demonstrate compliance with the requirements of this subpart upon the startup of operations, so the applicant's permit must be revised to include this compliance deadline. 40 CFR §63.546(b).

There may be further requirements that apply to the applicant's proposed facility. DEQ should fully evaluate Subpart X to determine what other requirements must be incorporated into the applicant's permit. In addition to revising the Draft Permit, we request DEQ issue, in a response to this comment or in a separate memorandum, an explanation of why each requirement for new sources in Subpart X either does or does not apply to the applicant's proposal. If DEQ declines this request, we further request an explanation of DEQ's decision to decline.

Opacity Emission Limit

Pursuant to 40 CFR §60.122(b), Permit Condition 2.4 of the Draft Permit must be revised to state, "...the permittee shall not discharge nor cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which...exhibit 10 percent opacity or greater."

In the Statement of Basis at page 17, DEQ states that because emissions from the Tilting Rotary Furnace and Refining Kettles 2 and 3 are combined and controlled by the Rotary Furnace Baghouse, compliance with the more stringent standard of 10% opacity for the combined emissions is required while both sources are in operation. Given DEQ's acknowledgement of the 10% opacity requirement in the Statement of Basis, we believe the 20% restriction listed in the Draft Permit is a typographical error. We request DEQ revise the Draft Permit accordingly or provide an explanation, if DEQ determines this revision is not required.

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 5 of 6

Performance Testing Notice

Permit Condition 3.7 of the Draft Permit should be revised to require notice to DEQ of intent to conduct any performance test at least 30 days (rather than 15 days) prior to the scheduled test date.

There is a discrepancy within the Draft Permit regarding the notice requirement for performance testing. At page 15, the Draft Permit states that 40 CFR §60.8(d) requires the applicant to provide at least 30 days prior notice of any performance test. But then the Draft Permit, at page 18, states that the applicant need only provide 15 days prior notice of a performance test. The applicant must comply with the more stringent of the two standards.

Therefore, we request DEQ revise the Draft Permit to require at least 30 days prior notice of any performance test. If DEQ declines this request, we further request DEQ explain this discrepancy in the Draft Permit and the basis of DEQ's decision regarding performance test notice.

Missing Citation

At pages 15 and 19 of the Statement of Basis, DEQ refers to Permit Condition 2.31 in the Draft Permit. However, there is no Permit Condition 2.31 in the Draft Permit. We request DEQ explain this discrepancy and ensure that the Draft Permit is not missing a required permit condition.

RE: Idaho Conservation League comments on Air Quality Permit to Construct for P. Kay Metal in Lewiston, ID

Page 6 of 6

From: Austin Hopkins
Sent: Friday, July 14, 2017 3:41 PM
Subject: Additional clarification on ICL's comments re P. Kay Metals

Mr. Lewis,

I wanted to provide additional context to our concerns regarding analyzing co-contributing sources, particularly the Lewiston Airport, in DEQ's modeling work for the P. Kay Metal facility. Despite lead being banned in gasoline for vehicles, many small aircraft still rely on leaded gasoline for power. This source of lead can be a major contributor to background lead concentrations (see <https://www.scientificamerican.com/article/lead-in-aviation-fuel/>) and is often overlooked.

As mentioned in our comments, we were unable to estimate any emissions from the Lewiston Airport as this facility does not appear to have an air permit through DEQ. Given the size of Lewiston Airport, we are concerned that small aircraft utilizing leaded gasoline may frequent the airport often, producing lead emissions that were unaccounted for in the analysis of the P. Kay Metal facility.

I hope these details provide further context to the concerns raised in our submitted comments. We hope DEQ chooses to analyze the cumulative impact of lead emissions from not only this new facility but also the Lewiston Airport and any other nearby facilities. If you have any questions regarding any of our comments, please don't hesitate to contact me.

Regards,

Austin Hopkins
Conservation Associate
Idaho Conservation League
PO Box 844, Boise, ID 83701