Air Quality Permitting
Response to Public Comments

November 5, 2009

Permit to Construct No. P-2009.0053

J. R. Simplot Company – Don Siding Plant
Pocatello, Idaho

Facility ID No. 077-00006

Prepared by:
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Final

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APPENDIX A – PUBLIC COMMENTS

1. BACKGROUND

As deemed appropriate by the Director, the Department of Environmental Quality (DEQ) provided for public comment the proposed Permit to Construct Permit to Construct No. P-2009.0053 for the construction and operation of a 10-acre decant pond to be located at the Don Siding Plant in Pocatello, Idaho.

An opportunity for public comment was provided from May 5 through May 20, 2009. During this time, a member of the public requested a public comment period. DEQ provided the public comment period from October 3 through November 2, 2009. Comments were provided via e-mail and online via the DEQ website. Comments with a common theme have been grouped together as one comment and responded to as one comment. All comments submitted in response to DEQ's proposed action are included in the appendix to this document.

2. PUBLIC COMMENT AND RESPONSES

Public comments regarding the permit analysis and air quality aspects of the proposed permit are summarized below, including comments 1 and 2. The summary presented below combines and/or paraphrases some comments in order to eliminate duplication and to provide a more concise summary. 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 were not required to be addressed and were not addressed, including comment 4. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: http://adm.idaho.gov/adminrules/rules/idapa58/0101.pdf.

Comment 1: What about temperature inversion events?

Response 1: The Portneuf Valley is more likely to experience inversions than other areas in Idaho due to local topography and weather patterns. During an inversion, pollution from cars, industry, fires, and other sources becomes trapped within the cooler layer of air near the earth's surface. Because inversions are natural weather phenomenon which cannot be avoided, DEQ takes efforts to forecast regional air quality and to provide advisory information during such events, including information on actions that can be taken to reduce air pollution. Additional information concerning Pocatello regional air quality and actions to reduce air pollution can be found on the DEQ website at: http://www.deq.idaho.gov/air/aqindex.cfm?sitenum=16.

Weather in the Pocatello area is accounted for within the atmospheric dispersion modeling analyses that was conducted for this project, because the model is driven by hourly meteorological data collected at the Pocatello airport. The model generates a vertical profile of the atmosphere that will identify and account for temperature inversions. A limitation of the model is that calm periods (wind speeds below the lower detection of the instrumentation) are not handled by the model. This is not considered a serious limitation of the model in this case for the following reasons:

- Fluoride emissions from the pond are likely to be lower during periods of low wind speeds. Emissions are driven by the temperature and concentration gradient between the water in the pond and the air right above the pond. Higher winds would tend to result in a larger gradient which would drive emissions up, while low winds would tend to result in a concentration buildup in the thin layer right above the pond surface and slow the transport from the pond to the air.
- Calm periods are typically associated with periods of highly variable wind direction. This will result in greater dispersion of fluoride in the long term (lower concentrations and deposition at areas along the predominant wind direction).

Comment 1: **What about groundwater concerns, including selenium?**

Response 2: Groundwater discharging from the Don Plant area has been previously identified as a major source of phosphorus loading to the Portneuf River, and the Portneuf River Subbasin has documented water quality issues, including that of selenium contamination. Although not directly within the scope of this air quality permitting action, it should be noted that the decant pond project is an integral part of the gypsum stack lining project. For the gypsum stack lining project a geosynthetic high density polyethylene (HDPE) liner is installed on the surface of the existing gypsum stack to contain the by-product gypsum, associated stack system process waters, and any runoff from the active gypsum storage area. Water captured will be re-routed for re-use in the process, thereby minimizing groundwater impacts.

Idaho DEQ has been actively involved in developing and implementing water quality improvement plans, including that of the Portneuf River Subbasin. Additional information on these efforts can be found on the DEQ website at: http://www.deq.state.id.us/water/data_reports/surface_water/tmdls/sba_tmdl_master_list.cfm.

Comment 2: **Why is an air quality permit being issued for a pond?**

Response 3: Although facility-wide fluoride emissions are not expected to increase as a result of this project, the addition of a 10-acre decant pond creates an additional emission source at the facility. As a result, the proposed project did not meet the permit to construct exemption criteria in IDAPA 58.01.01.220-223. Therefore, a permit to construct was required in accordance with IDAPA 58.01.01.201.

Comment 2: **Will air pollution concentrations be acceptable for people who live near the plant?**

Response 4: Fluorides are regulated in Idaho as a toxic air pollutant (TAP). Preconstruction compliance with non-carcinogenic TAP increments has been demonstrated in accordance with IDAPA 58.01.01.210.06.b, because the modeling analysis of the emissions of fluorides from the pond predicts ambient air impacts to be equal to or less than 37% of the increment outside the property boundary. The increment listed in IDAPA 58.01.01.585 for fluorides is based on occupational exposure limits for airborne toxic chemicals, expressed in terms of an acceptable ambient concentration.

Although preconstruction compliance for the project was demonstrated in accordance with IDAPA 58.01.01.210.06.b, DEQ is cognizant of apparent violations by the permittee of the primary and secondary Ambient Air Quality Standards for Fluorides in IDAPA 58.01.01.577.06. Supplemental information provided by the permittee indicated that although the addition of a 10-acre decant pond will create an additional emission source at the facility, facility-wide fluoride emissions are not expected to increase as a result of this project because no increase in process throughput has been proposed and because actual cooling tower fluoride emissions are expected to decrease in direct relationship to any actual increase in fluoride emissions observed in the pond. Cooling towers historically have been the largest source of airborne fluoride at the Don Plant, contributing over 86 percent of the Don Plant allowable and actual point source total emissions.[1] A decrease in existing facility-wide emissions of fluoride (cooling tower emissions) is expected to offset the source-specific potential increase in emissions associated with operation of the decant pond.

Refer to Sections 3.2 and 3.3 and the application for additional information regarding the associated emissions inventory estimates and the ambient air quality impact analysis.

[1] Fluoride Deposition Modeling Report, Simplot Don Plant, October 24, 2004.

APPENDIX A – PUBLIC COMMENTS

From: wmc113@hotmail.com
Sent: Tuesday, May 05, 2009 4:20 PM
To: Faye Weber
Subject: Public Comment

every time there is a temperature inversion our entire city stinks the rivers are full of selenium i think simplot is big enough already

william crook

From: tammir@bannockcounty.us
Sent: Wednesday, May 06, 2009 12:51 PM
To: Faye Weber
Subject: Public Comment
Affiliation: Pocatello resident

Why is this an air quality permit if it is for a decant POND? And I seem to remember problems with a decant pond before. Like a whole flock of ducks thinking it was a real pond and landing in it and then DYING! So what exactly does this mean to the people who live close to this plant. Will the pollution be worse? This Pocatello resident is already so tired of being polluted and sick. I already cannot travel past this plant without taking strong medicine to control the sinus headache, and when the pollution socks in Pocatello, I get nosebleeds to go with the headache.

Tammi Gifford

From: jhayes@wildidaho.org
Sent: Wednesday, May 13, 2009 10:46 AM
To: Faye Weber
Subject: Public Comment
Affiliation: Idaho Conservation League

Faye - I am requesting a public comment period on the Simplot Don Siding plant PTC.

Thank you,
Justin Hayes

From: wmc113@hotmail.com
Sent: Monday, October 5, 2009 5:50 PM
To: Faye Weber
Subject: Public Comment

10 acres of water just sitting there will, a really stink, and b create a breeding ground for insects mainly mosquitoes

william crook

Sent: Monday, November 2, 2009
To: Faye Weber
Subject: Public Comment Re: Docket No. AQ-0925

Not again!!
It seems that we finally cleared the stench from the air in our area: North of the Simplot Co. Don plant west of Pocatello. Now those people want to add more stench/pollution according to your recent Notice in the ID State Jrnl. They simply cannot be permitted to foul air again for us and the entire area plus the Pocatello Valley.
No new emissions.

Barbara Felton