



Air Quality Permitting Response to Public Comments

December 23, 2015

**Tier I Operating Permit No. T1-2014.0001
Project 61319**

**P4 Production LLC
Soda Springs, Idaho**

Facility ID No. 029-00001

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Final

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1. BACKGROUND

As deemed appropriate by the Director, the Department of Environmental Quality (DEQ) provided for public comment regarding the proposed Tier I Operating Permit, T1-2014.0001 Project 61319 for P4 Production LLC from November 19, 2015 through December 21, 2015, 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.

2. PUBLIC COMMENT 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://adm.idaho.gov/adminrules/rules/idapa58/0101.pdf>

SO₂ Emissions from No. 8 Tap Hole Fume Collector

Comment 1. The No. 7, No. 8, and No. 9 Furnaces are each equipped with tap hole fume collectors (THFC) as emission control devices. According to Table 5.4 in DEQ's statement of basis (SOB), each THFC controls emissions from the same number and type of emission units. The workload for the THFC units appear identical on paper, yet the potential to emit (PTE) SO₂ from the No. 8 THFC is approximately 2-4 times greater than the No. 7 and No. 9 THFC.

We ask DEQ to clarify the variability in the PTE SO₂ between the THFC units, and why No. 8 is so much greater relative to the other two units.

Response:

The PTE for criteria pollutants was established and carried forward from PTC No. P-2012.0055 issued April 20, 2015. Although on paper the THFC units appear identical, the emissions from the No. 7, No. 8, and No. 9 THFC stacks are different and are dependent on the processes they are controlling. The emission inventory was developed by P4 based on stack testing on the three different THFC stacks. The emissions from the FeP slag tapping, CaSi slag tapping, No. 8 treater doghouses, and PRV vent gases which the No. 8 THFC is controlling are higher than the No. 7 and No. 9 THFCs.

Mercury Emissions

Comment 2. The emissions inventory presented in the SOB states that P4 has the PTE mercury at a rate of approximately 600 lbs/yr. Mercury is a particularly hazardous substance and is poisonous to humans in all of its forms. The EPA recognized the hazard mercury poses, and in 2011 implemented new rules regulating mercury emissions. DEQ followed EPA's example and adopted a new rule in 2011 to address mercury emissions. These rulings highlight Idaho's and the nation's priority to reduce mercury emissions.

In 2014, P4 performed a mercury best available control technology (MBACT) analysis in an attempt to reduce their mercury emissions in accordance with obtaining a Tier II operating permit. P4 was presented with 10 options to help reduce mercury emissions. Based on available technology, efficacy of mercury reduction, and economic feasibility, P4 chose to continue to rely on their existing scrubbers as a means to mitigate mercury emissions.

We ask that P4 please revisit the results from this analysis and reconsider implementing control devices to reduce mercury emissions. We understand that some of these technologies have not been proven on nodulizing kilns for phosphate plants; however, given that P4 operates the only nodulizing kilns at a phosphate plant in the U.S., we encourage P4 to adopt a proactive approach to curbing mercury emissions at their facility.

Response:

DEQ acknowledges the comment regarding mercury emissions. On July 24, 2015, P4 signed a compliance agreement schedule to address future compliance issues. The compliance agreement can be found on DEQ's website at the following link: <https://www.deq.idaho.gov/permitting/air-quality-permitting/tier-ii/p4-production-compliance-agreement-schedule/>.