



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
Toni Hardesty, Director

December 22, 2011

Randy Vranes
P4 Production, LLC
P.O. Box 816
Soda Springs, Idaho 83276

RE: Modified Point of Compliance Determination for the Blackfoot Bridge Mine

Dear Mr. Vranes:

I have enclosed the Modified Point of Compliance (POC) Determination for the Blackfoot Bridge Mine that reflects the recent Settlement Agreement executed by IDEQ and P4. Except as set forth in the Modification or the Settlement Agreement, the original June 14, 2011 POC Determination remains valid and must also be complied with.

Please call me at (208) 373-0502 or Margie English at (208) 373-0306, should you have any questions regarding this letter.

Sincerely,

 FOR BNB

Barry N. Burnell
Water Quality Division Administrator

BNB:ME:dls

cc: Kyle Free, USBLM-Pocatello
Bruce Olenick, DEQ-Pocatello
Ed Hagan, DEQ-Boise
Doug Conde, DEQ-Boise
Doug Tanner, DEQ-Pocatello
Margie English, DEQ-Boise

Idaho Department of Environmental Quality
Modified Point of Compliance Determination

December 22, 2011

Project Name: Blackfoot Bridge Mine, Caribou County, Idaho

Applicant: P4 Production, L.L.C.

Background: On June 14, 2011, the Idaho Department of Environmental Quality (“IDEQ”) issued a Point of Compliance (“POC”) Determination with respect to the proposed Blackfoot Bridge Mine pursuant to the Idaho Ground Water Quality Rule, IDAPA 58.01.11.401. (Hereinafter referred to as the “Determination”). On July 19, 2011, P4 Production, L.L.C. (“P4”) filed a Petition for a Contested Case with the Idaho Board of Environmental Quality challenging the Determination.

On November 4, 2011, IDEQ and P4 entered into a Settlement Agreement resolving all issues raised in P4’s contested case. (The Settlement Agreement is attached to and incorporated as part of this Modified Point of Compliance Determination). The Determination allows P4 to request an alternative approach to establishing background ground water quality, and the Settlement Agreement sets forth such an alternative approach agreed to by P4 and IDEQ. The Settlement Agreement also describes the timing of the installation of new POC wells and the submittal of water quality data to IDEQ associated with the new and existing wells at the proposed mine.

One of the issues contested by P4 in the Contested Case was the use of the discharge from the drainage system associated with the Water Management Ponds as a point of compliance. In the Settlement Agreement P4 and IDEQ agreed that the discharge from the drainage system should instead be treated as an indicator well (as that phrase is used in the Ground Water Quality Rule, IDAPA 58.01.11.401.04.b) as long as P4 monitors the well as described in the POC Determination.

Since the Determination, P4 and IDEQ have discussed P4’s plan to install the new wells required by the Determination. That discussion has identified the need to modify the description of some of the wells in the Determination.

Purpose of Modification: IDEQ is issuing this Modified POC Determination in order to : (a) reflect the alternative approach to establishing background set forth in the Settlement Agreement; (b) reflect the timing of well installation, data collection and submittal and other matters agreed to in the Settlement Agreement; (c) change the discharge of the drainage system associated with the Water Management Ponds from a POC to an indicator well as set forth in the Settlement Agreement; and (d) change the description of several of the POC wells.

Except as expressly set forth in this Modified POC Determination, all requirements in the original Determination remain and are valid and must be followed.

Modification to the Determination:

- 1. Well Installation, Establishment of Background Ground Water Quality, Data collection and Submittal and Other Associated Matters:** Page 6 of the Determination provides that

“The new monitoring wells (point of compliance) must be installed at least two years prior to the start of mining.” The Determination, however, also allows P4 to request an alternative time frame for monitoring to establish background ground water quality. The Determination is hereby modified to reflect the alternative approach for determining background ground water quality set out in the Settlement Agreement, as well as other associated matters, as follows:

- a. The new wells described in the Determination shall be installed and independent background samples for all the POC wells, including the new wells, shall be collected as described in the paragraphs below.
- b. P4 shall install the three (3) additional wells required in the Determination located to the North of the North pit between MW-14 and MW-17 and collect samples, as described in paragraph e, from these wells prior to P4 beginning the routine, ongoing stripping of seleniferous overburden from the mine pits solely in preparation for ore extraction, as that activity is described in Section 5.3 of the June 2011 Revised Blackfoot Bridge Mine and Reclamation Plan (“Mine Plan”), submitted on June 24, 2011. Such additional wells shall be installed as soon as practicable after approval from IDEQ.
- c. P4 shall install the eight (8) wells required in the Determination located around the water management ponds identified in the Mine Plan as WMP-1 and WMP-2 (“Water Management Ponds”) (four to the north, two to the west and two to the south) and collect samples, as described in paragraph e, from these wells prior to placing water that has infiltrated through the seleniferous overburden in the East Overburden Pile and been collected by the Seep Management System (“Seepage Water”) in the Water Management Ponds. Such wells shall be installed as soon as practicable after approval from IDEQ. (The events described in paragraphs b and c, stripping of overburden and placement of seepage water, shall hereinafter be referred to as the “Described Events”).
- d. Any POC wells that are destroyed during mine construction or operation activities shall be reinstalled as soon as practicable, as close to the original well locations as practicable.
- e. P4 shall use reasonable efforts to collect 12 independent background ground water quality samples, collected on a monthly basis, from all POC wells, including the new wells, prior to the Described Events. In the event P4 is unable to collect 12 independent samples from one or more wells prior to the Described Events, IDEQ shall establish background for the applicable constituents for all POC wells using the sample results P4 is able to collect.
- f. P4 shall submit a data summary report of all validated ground water quality data collected from existing and new monitoring wells within the Blackfoot Bridge Mine project area no later than 60 days after P4 collects the 12 background samples or 60 days after the start of stripping seleniferous overburden at the North Pit in preparation for ore extraction as described above, whichever first occurs. The report shall identify proposed background concentrations for the constituents identified as water

analysis parameters in the Determination using the IDEQ *Statistical Guidance for Determining Background Ground Water Quality and Degradation* (http://www.deq.idaho.gov/media/471696-guidance_statistical_degradation.pdf).

IDEQ shall review the report and make a determination of background concentrations using the above-described IDEQ guidance document. Prior to the submittal of the data summary report, P4 shall provide to IDEQ, on a quarterly basis, validated sample results collected during the preceding quarter.

- g. During the time period that P4 is collecting background samples as described above, P4 may place stormwater in the Water Management Ponds. During any month that P4 pumps stormwater to the Water Management Ponds prior to obtaining twelve (12) background samples, P4 shall obtain and analyze a sample of water being pumped to the Water Management Ponds for the following constituents: total dissolved solids, sulfate, aluminum, antimony, cadmium, chromium, iron, manganese, nickel, selenium and zinc. P4 shall submit the sample results to IDEQ.
 - h. After P4 begins the routine, ongoing stripping of seleniferous overburden from the mine pits solely in preparation for ore extraction, as described above, P4 will then sample the wells according to the schedule and in the manner provided for in the Determination for sampling after initiation of mining.
- 2. Discharge from Drain System as an Indicator Well:** Page 5 of the Determination provides that the discharge from the drainage system associated with the Water Management Ponds is an additional POC during periods of high ground water. Page 7 of the Determination provides that the drain system is a point of compliance if water is discharging from the system and shall be sampled weekly when water is discharging from the drainage system. The Determination is hereby modified so that the discharge from the drain system is used as an indicator well, as described in the Ground Water Quality Rule IDAPA 58.01.11.401.04.b, rather than as a point of compliance. The discharge will be sampled weekly when water is discharging as described above in this paragraph.
 - 3. Descriptions of POCs and/or other Required Monitoring Wells:** Table 1 of the Determination, which describes the required monitoring wells and their locations and sampling frequencies, is hereby replaced by the following Table:

Table 1. Monitoring Well Locations and Sampling Frequency.

Well ID Points of Compliance, unless otherwise indicated	Formation	Location	Sampling Frequency Once Baseline Sampling Is Complete
MW-20W	Wells Formation	North of Blackfoot River	2 times/year
MW-13A	Alluvium	Northwest of NW Overburden Pile	Quarterly or monthly
MW-14W	Wells Formation	Northwest of NW Overburden Pile	Quarterly, monthly, or weekly
MW-17W	Wells Formation	N of North Pit	Quarterly, monthly, or weekly
MW-22W, MW-23W, MW-24W (3 new wells)	Wells Formation	North of North Pit and NW Overburden Pile	quarterly, monthly, or weekly
MW-18Da	Dinwoody (shallow)	Northeast of North Pit	2 times/year or quarterly
MW-18Db	Dinwoody (deep)	Northeast of North Pit	2 times/year or quarterly
MW-19T	Travertine and/or Salt Lake Formation	West of Water Management Ponds	monthly
MW-31T	Travertine and/or Salt Lake Formation	West of Water Management Ponds	monthly
MW-25T through MW-30T (6 new wells)*	Travertine and/or Salt Lake Formation	North, West and South of Water Management Ponds	monthly
WMP-underdrain (indicator well only)	Alluvium	Under Water Management Ponds	Weekly samples when discharge occurs from pipe

MW-39W and MW-40W (dual completion completed November 2, 2011) (upgradient; background only)	Wells Formation	Between Conda Mine and South Pit (up gradient reference point for South Pit)	reset frequency
MW-2R	Rex Chert	Between South & Mid Pits	2 times/year then quarterly
MW-3A	Alluvium	Between South & Mid Pits	2 times/year then quarterly

*The two monitoring wells south of the Water Management Ponds will initially be monitored to determine whether there is a component of southward flow in the shallowest ground water. If, on the basis of the ground water elevation data from the new wells, DEQ determines that there is a component of southward flow in the uppermost aquifer beneath the pond, then DEQ will incorporate the new wells south of the Water Management Ponds as additional points of compliance.