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Mr. James Webb  
Project Manager  
U.S. Nuclear Regulatory Commission  
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November 22, 2006

Addendum to Decommissioning Plan Amendment Request  
Molycorp Washington, PA Decommissioning Project  
License Number SMB-1393

Dear Mr. Webb:

This letter (addendum) and attachment constitute supplemental information requested during a November 16, 2006 teleconference between the U.S. Nuclear Regulatory Commission (NRC) and Molycorp, Inc. (Molycorp) concerning the October 11, 2006 request by Molycorp to amend and update the information contained in the *Washington, PA Facility Decommissioning Plan, Part I Revision*, dated June 30, 1999 (DP). The DP is incorporated by reference into the Molycorp Washington, PA Site Radioactive Materials License No. SMB-1393, Amendment No. 7, Condition 15.

This addendum is intended to clarify and, where applicable, supersede the information that was submitted in the Molycorp October 11, 2006 DP Amendment Request and Molycorp Letter to NRC dated May 22, 2006, addressing the disposition of concrete and asphalt debris.

#### **CLARIFICATION**

It is estimated that more than 2,500 tons of concrete debris and approximately 9,500 tons of asphalt debris will be encountered throughout the course of decommissioning. Most of this debris material is not conducive to surface scanning. Therefore, Molycorp proposes to manage this concrete and asphalt debris using essentially the same decision methods used in managing soils and slag.

The details for managing soil and slag are documented in the June 30, 1999 Decommissioning Plan and other sections of the October 11, 2006 Amendment Request to which this addendum applies. The following list is a reiteration of those management decision methods as they currently apply to all soil and slag, and are proposed to apply to concrete and asphalt debris.

- Sampling and analyses of the materials will be performed to determine the activity concentrations of U-234, U-238, Th-228, Th-232 and Ra-226 such that a 95% confidence level is achieved in the results.

- Classification of the materials will be based on the net activity concentrations in **Table 4-2** (attached) of the *Technical Basis Document on Classifying Areas, Release Criteria and Final Status Surveys* (TBD) submitted by Molycorp to the NRC on February 4, 2005 and approved June 21, 2005. Unity rule applies.
- All materials classified as disposal will be shipped off site as low-level radioactive waste (LLRW) to an approved facility.
- All materials not classified as disposal will be re-used on site as backfill material.

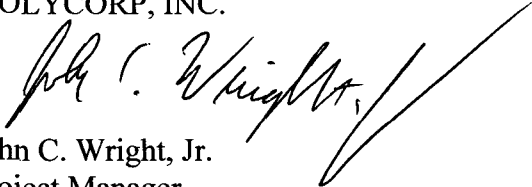
The following is a list of the additional managing decision methods that will be applied to concrete and asphalt debris:

- Concrete and asphalt debris will be segregated from soil and slag, to the extent practical, and staged on site in separate concrete and asphalt interim bulk stockpiles.
- Each debris material will be size reduced (e.g., pulverized, milled) separately to a manageable matrix prior to sampling and analysis.
- Samples will be taken as size reduced materials stockpiles are built as described in the TBD. A minimum of 20 samples per stockpile will be obtained and analyzed.
- Material-specific background values for radionuclide constituents-of-concern will be evaluated to facilitate the determination of net activity concentration values in the debris material.
- The net activity concentration values will be compared to the radionuclide-specific classification criteria in TBD **Table 4-2, 0 to 2 feet Layer, 4 Samples from Layer Area**. Any applicable volume of debris material that exceeds these criteria will be managed as LLRW, all other debris material will be managed as on-Site backfill material; management will be consistent with soils and slag. Unity rule applies.

If you have any questions, comments, or need for additional information, please contact me by phone (724) 222-5605, fax (724) 222-7336, or e-mail ([jwright@chevron.com](mailto:jwright@chevron.com)).

Sincerely,

MOLYCORP, INC.

  
John C. Wright, Jr.  
Project Manager

Attachment:  
TBD Table 4-2

**TABLE 4-2**  
**Site-Specific Subsurface Soil Averaging Limits - Molycorp's Washington, PA Site**

Layer #	Layer	# of Quadrants	Volume (ft3)	Uranium (238 + 234)	Average, pCi/g Thorium (232 + 228)	Ra (226)
1	<b>0 to 2 feet Layer</b>				<b>Average</b>	
	4 Samples from Layer Area	4	2153	18.7	14.2	7.4
	Maximum in Layer	1	538	25.4	17.8	9.4
2	<b>0 to 4 feet Layer</b>					
	2 Vertical Quadrants	2	1076	21.8	15.7	8.2
	4 Samples from Layer Area	4	2153	30.9	25.7	13.2
	8 Samples from Surface to this Layer	8	4306	15.5	12.9	6.6
	Maximum in Layer	1	538	43.6	31.5	16.5
3	<b>0 to 6 feet Layer</b>					
	3 Vertical Quadrants	3	1615	20.1	14.9	7.8
	4 Samples from Layer Area	4	2153	40.0	35.7	18.1
	12 Samples from Surface to this Layer	12	6458	13.3	11.9	6.0
	Maximum in Layer	1	538	60.2	44.7	23.3
4	<b>0 to 8 feet Layer</b>					
	4 Vertical Quadrants	4	2153	18.7	14.2	7.4
	4 Samples from Layer Area	4	2153	47.2	44.8	22.5
	16 Samples from Surface to this Layer	16	8611	11.8	11.2	5.6
	Maximum in Layer	1	538	74.8	56.9	29.6
5	<b>0 to 10 feet Layer</b>					
	5 Vertical Quadrants	5	2691	17.8	13.8	7.2
	4 Samples from Layer Area	4	2153	53.3	53.0	26.4
	20 Samples from Surface to this Layer	20	10764	10.7	10.6	5.3
	Maximum in Layer	1	538	88.8	69.2	35.9
6	<b>0 to 12 feet Layer</b>					
	6 Vertical Quadrants	6	3229	16.9	13.5	7.0
	4 Samples from Layer Area	4	2153	63.8	63.4	31.6
	24 Samples from Surface to this Layer	24	12917	10.6	10.6	5.3
	Maximum in Layer	1	538	101.5	80.9	41.8
7	<b>0 to 14 feet Layer</b>					
	7 Vertical Quadrants	7	3767	16.2	13.2	6.8
	4 Samples from Layer Area	4	2153	74.2	73.8	36.8
	28 Samples from Surface to this Layer	28	15069	10.6	10.5	5.3
	Maximum in Layer	1	538	113.1	92.1	47.7
8	<b>Each Layer deeper than 14 feet</b>					
	Maximum in Layer	1	538	129.2	105.2	54.6
<b>Assumptions</b>		Area:	100	m2	1076	ft2
		Quadrants:	25	m2	269	ft2
		Thickness:	NA		2	ft
		Area Volume:	NA		2153	ft3
		Quadrant Volume:	NA		538	ft3