MEMORANDUM



environmental management, inc.

From: Deni Chambers, CEM Date: November 22, 2010

Ted Splitter, CEM, P.E.

To: Shannon Harbour, P.E.

Nevada Division of Environmental Protection (NDEP)

RE: Response to Request for Description of Slope Cutting in the Vicinity of the PRP

(Inlet/Outlet) Water Lines

COMMENTS:

As requested on the November 17, 2010 weekly NDEP call, Tronox is responding herein to NDEP's request for a description of the slope cutting in the vicinity of the PRP water lines buried adjacent to the WC Ponds at the Tronox facility in Henderson, Nevada.

The PRP water lines are active lines that carry water from the off-site well fields to the GW-11 Pond for treatment and from the Site to Las Vegas Wash after treatment. The PRP lines, located between 0.0 and 15 feet from the base of the berm associated with the WC ponds as shown in Figure 1, were exposed in potholes by the Contractor, Las Vegas Paving, to confirm their location. Because the PRP lines cannot be taken out of service, Tronox proposes that these lines and the soil left to support the lines be included as an Institutional/Engineering Control Area, in accordance with the Environmental Covenants, Institutional and Engineering Control Plan.

Because of the importance of these lines and the fact that they could be easily damaged if encountered by excavation equipment, the top-of-excavation slope was off-set by 10 feet from the top of the pipe and was then sloped at an inclination of 3 horizontal to 1 vertical to the design depth of the remedial excavations, as shown in Figure 2. The additional volume of soil left in place in order to protect the PRP lines is 9,400 cubic yards. Tronox proposes to cap the soil above the PRP lines as a protective measure as part of the environmental covenant.

If you have any questions or comments concerning this memorandum, please contact us.

Attachments

Figure 1 Plan View PRP Pipeline

Figure 2 Oblique View of PRP Lines and Excavation Slopes, RZ-D 17A Through 25