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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 22, 2015

Mr. Roberto Puga, P.G.
Trustee, Texas Custodial Trust
Project Navigator, Ltd.
One Pointe Drive, Suite 320
Brea, California 92821

Re: TCEQ Review of the following documents:

- *Proposed Plant Site Evapotranspirative Soil, Asphalt and Flexible Membrane Covers*, dated April 8, 2015
- *Plant Site Cover Improvement Plans and Specifications/CQA Requirements Submittal*, dated April 21, 2015

Former ASARCO Smelter site, El Paso, Texas
TCEQ SWR No. 31235; EPA ID No. TXD990757668; Customer No.
CN603597782; Regulated Entity No. RN100219021

Dear Mr. Puga:

The Texas Commission on Environmental Quality (TCEQ) and the US Environmental Protection Agency (EPA) have reviewed the above referenced documents submitted by Malcolm Pirnie on behalf of the Texas Custodial Trust. The April 8, 2015 plan provides discussion of a system of reduced permeability covers proposed for the plant site. The April 21, 2015 document provides the supporting plant site grading, cover and drainage system improvement plans and designs (sealed April 1, 2015) and supporting site grading plans, backfill specifications and construction quality assurance (CQA) requirements supporting the construction of the cover systems proposed for the plant site. Based on our review, the TCEQ, with concurrence of the EPA, hereby approves the technical information presented in the April 21, 2015 *Plant Site Cover Improvement Plans and Specification/CQA Requirements Submittal*. The TCEQ notes the computation results for the proposed drainage system utilized guidance and requirements from the City of El Paso Drainage Manual on drawing C-13 of the April 21, 2015 document. As such, please ensure the City of El Paso (City) is also consulted with respect to the evaluation of the information presented in the April 21, 2015 document.

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The TCEQ and EPA request the submittal of additional supporting information to address the enclosed comments regarding our review of the April 8, 2015 submittal titled *Proposed Plant Site Evapotranspirative Soil, Asphalt and Flexible Membrane Covers*. Please prepare a written response to each comment, referencing the assigned TCEQ/EPA comment number, unless otherwise specifically requested in the enclosure.

An original and one copy of a response clarifying the enclosed comments should be submitted to the TCEQ Remediation Division for review within 60 days of the date of this letter at the letterhead address using mail code number MC-127. Additional copies should be submitted to the TCEQ Region 6 Office in El Paso and EPA Region VI Office in Dallas, respectively. Please call me at (512) 239-6542 if you need additional information or wish to discuss these comments or the due date.

Sincerely,



Eleanor T. Wehner, P.G.
Project Manager
VCP-CA Section
Remediation Division
ETW/mdh

Enclosures: TCEQ Comments to the *Proposed Plant Site Evapotranspirative Soil, Asphalt and Flexible Membrane Covers*, dated April 8, 2015, Former ASARCO El Paso Smelter Site, El Paso, Texas

cc: Mr. Scott M. Brown, P.E., Project Manager, Malcolm Pirnie, Inc., 410 N. 44th Street, Suite 1000, Phoenix, AZ 85008

Mr. Charles Fisher, Superfund Division, U.S. EPA Region 6, Mail Code 6SF-RA, 1445 Ross Ave, Dallas, TX 75202

Ms. Lorinda Gardner, Region Director, TCEQ Region 6 Office, El Paso

TCEQ letter dated May 22, 2015
ENCLOSURE
TCEQ SWR No. 31235

TCEQ Comments to the *Proposed Plant Site Evapotranspirative Soil, Asphalt and Flexible Membrane Covers*, dated April 8, 2015, Former ASARCO El Paso Smelter Site, El Paso, Texas

1. Please amend the design approach section of the April 8, 2015 report to provide a summary and supporting calculations of the range of hydraulic conductivities (i.e., K_{sat}), percolation rates anticipated with each cover system design. Although percolation analysis and an evaluation of maximum hydraulic conductivity anticipated for each component were provided for some of the designs (i.e., ET soil cover), similar clarification of the overall anticipated range of hydraulic conductivities/percolation rates for all of proposed cover system designs is requested.
2. The proposed cover system designs should be amended to provide additional discussion of the long term effectiveness, permanence, cost and ease of obtaining technically equivalent replacement components and professional qualification requirements to support long term maintenance, replacement and/or eventual repair of specific components (with particular emphasis on engineered/proprietary materials) supporting each cover system design.
3. Please provide additional discussion to address anticipated concerns related to differential settlement in particular at perimeter boundaries where different cover systems intersect. Also, summarize anticipated cover system integrity condition issues which would be unique to each particular design (e.g., development of cracks/localized subsidence issues with exceedance of particular vehicular load limits with asphalt pavement cover, burrows in ET covers, will the vegetation remain viable under severely altered precipitation patterns, will an irrigation system be a necessary component of long-term care for the ET cover, etc.). Even if such problems have not occurred in several years of construction, what unique condition issues are likely to arise with each proposed cover system design without consistent, regular long-term care, or in periods of altered precipitation patterns, etc.? How will each of the designs facilitate and/or potentially limit site redevelopment?

Comments for future consideration:

1. The proposed cover system designs for the plant site focus on the protection of Category II materials. The overall cover system design objectives, however, must be further refined to provide an evaluation of the nature and extent of specific constituents of concern (COCs) and analytes of interest associated with Areas of Interest (AOCs) within the plant site with exceedances of anticipated regulatory risk based assessment levels [e.g. refer to the requirements of 30 TAC 350.94(a) of the Texas Risk Reduction Program rules]. An evaluation of the specific COC exceedance's in relation to the overall compatibility with the proposed cover system designs is required to verify all COCs exceeding concentration levels also '...will not impact groundwater if managed properly' (i.e., are the design goals, overall K_{sat} values, percolation rates supporting each proposed cover designs, etc. technically adequate to address the COCs?). Please provide additional evaluation of this issue.

2. The Revised Supplemental Remedial Investigation (RI) Report (dated October 17, 2014) documented soil sample locations with exceedances of industrial soil screening levels at perimeter areas of the plant site. Several of the sample locations are noted to extend beyond the aerial footprint of the proposed plant site cover system based on review of the existing plant site surface area map provided in Figure 2 of the April 8, 2015 submittal. For example, Figure 4-28 and 4-29 of the Revised Supplemental RI Report depicts the distribution of concentrations of arsenic and lead in soil associated with the Plant Entrance Arroyo. Although the Plant Entrance Arroyo is considered part of the plant site, the location of some of the samples with exceedances appear will extend beyond the boundary of the proposed cover system in this area. (The distribution of arsenic and/or lead and mercury in soil samples associated with the South Terrace Arroyo, Pond 1 Arroyo, Pond 5, 6 Arroyo, Acid Plan pose similar question.) Please ensure the exceedances associated with these perimeter areas are appropriately addressed. For example, will these areas be subject to excavation and placed under the proposed plant site soil cover prior to construction and/or proposed for other remedial alternative(s)?

3. As the cleanup of the site is anticipated to transition to the Texas Risk Reduction Program rule (TRRP), please note that the final proposed remedy including supporting final (i.e., 100%) engineering designs, plans, specifications and implementation schedule for the physical controls proposed for the plant site cover system will need to be incorporated into the Response Action Plan as per 30 TAC 350.94. The RAP must provide an Operation, Maintenance and Monitoring (OM&M) Plan and implementation schedule for post-response action inspection, operation and maintenance of the physical controls for the plant site as per 30 TAC 350.94(k).