

September 30, 2013

Mr. Weiquan Dong, PE Bureau of Corrective Actions, Special Projects Branch Nevada Division of Environmental Protection 2030 E. Flamingo Rd., Suite 230 Las Vegas, Nevada 89119

## Re: Site Management Plan (SMP) Annual Report, June 1<sup>st</sup> 2012 – May 31<sup>st</sup> 2013; Nevada Environmental Response Trust Site, Henderson, Nevada; NDEP Facility ID #H-000539

Dear Mr. Dong:

On behalf of the Nevada Environmental Response Trust (the Trust), this Site Management Plan (SMP) Annual Report for the period June 1, 2012 through May 31, 2013 has been prepared for the Nevada Division of Environmental Protection (NDEP) to summarize and evaluate the results of the inspection, maintenance, and monitoring activities and document the continued adequacy of the implemented risk management measures at the Nevada Environmental Response Trust Site (the Site) in Henderson, Nevada. The SMP was initially submitted to NDEP in April 2012 (ENVIRON International Corporation [ENVIRON], 2012a). On May 23, 2012 and May 30, 2012, errata were submitted to address NDEP's May 14, 2012 comments provided to ENVIRON via phone conversation and incorporate the most recent NDEP worker Basic Comparison Levels (BCLs). The April 2012 SMP and two errata letters (hereafter referred to as the 2012 SMP) were approved by NDEP on June 1, 2012. As described in the 2012 SMP, this Annual Report addresses the following:

- Summarizes the results of the inspection, maintenance, and monitoring of the risk management measures that are implemented through the SMP;
- Documents compliance with the SMP including that appropriate notifications have been made and that appropriate protocols for subsurface activities have been implemented; and
- Records any changes to each ECA boundary, based on work conducted during the previous year.

In addition, this Annual Report summarizes the changes between the 2012 SMP and the SMP submitted September 30, 2013 (hereafter referred to as the 2013 SMP) prepared following an annual review of the 2012 SMP. A list of the changes between the 2012 SMP and the 2013 SMP follow:

Utility and Emergency Projects: In a letter from NDEP to the Trust dated September 3, 2013, NDEP requested changes to the SMP regarding its applicability to soil disturbing activities related to utility projects and responses to emergency situations. The 2013 SMP has been updated to include these changes, specifically through the addition of SMP sections 4.6 (Utility Projects) and 4.7 (Emergency Projects). Under the revised SMP, a "Utility Project" is defined as "activities related to the installation, maintenance, repair, or replacement of equipment and structures used for the provision or storage of utilities, including but not limited to water, gas, electricity, and telecommunications." An "Emergency Project" is defined as "the assessment of, response to, and remediation of contaminants or materials suddenly or abruptly spilled or otherwise released onto the Site as a result of conditions or circumstances beyond the reasonable control of the entity that owns or is otherwise responsible for the contaminants or materials, including, but not limited to, as a result of flood, lightning, natural disaster, acts of God, war, terrorism, or civil disturbances." All owners, operators, tenants, lessees, project

managers and other entities with responsibility for Site activities (collectively "Site Occupants"), or a third party performing a Utility Project or an Emergency Project, must comply with SMP Sections 4.6 or 4.7, respectively, as well as Section 5.

- <u>Site Acreage</u>: Previous documents including the 2012 SMP have identified the total Site area as 453 acres. Following the sale of Parcels I and J and a portion of Parcel B in 2008, the Site comprises approximately 410 acres. In addition, the SMP was updated to reflect the fact that as part of the remediation process for Parcels A, B, C, D, F, G, and H, the Trust has either requested or is in the process of preparing requests for "No Further Action" (NFA) letters from NDEP for each parcel, as well as to indicate that once an NFA letter is received for a parcel (which will include recording an Environmental Covenant), that parcel will no longer be subject to the SMP.
- <u>Schedule for SMP Modification</u>: The SMP modification schedule was revised from annual to biennial. The SMP, and any addenda, will be reviewed by the Trust at least annually and be revised every two years at a minimum. The Trust will update the SMP, as needed, based on the periodic review of the SMP and annual review of Site conditions. If the annual review warrants any revisions to the SMP prior to the biennial update, the SMP will be revised and submitted to NDEP for review and approval. Any modifications to the SMP will consist of issuing replacement pages for the revised portions of the SMP to insert into the full 2013 SMP document.
- <u>Updated Soil Screening Levels</u>: Newly available toxicological data for COPCs from NDEP's August 2013 BCLs (NDEP, 2013) were incorporated into Table 1 of the 2013 SMP. Specifically, toxicity criteria used for calculating BCLs for four COPCs were updated since the 2012 SMP was submitted to NDEP. Based on updated toxicity criteria, the cadmium BCL is approximately 2-fold higher, the cyanide BCL is nearly 500-fold lower, the manganese BCL is approximately 4-fold lower, and the thallium BCL is approximately 1.1-fold lower than those reported in the 2012 SMP.
- <u>New Soil Screening Levels</u>: Since the 2012 SMP was submitted to NDEP, Table 1 was updated with the August 2013 BCLs (NDEP, 2013). Specifically, BCLs were added for two Site COPCs (i.e., delta-BHC and platinum). In addition, BCLs for Site COPCs (i.e., bromide, fluoride, nitrate, and nitrate) not previously listed in Table 1 of the 2012 SMP were added to Table 1 of the 2013 SMP.
- <u>Corrected Soil Screening Levels</u>: The soil screening levels presented in Table 1 of the 2012 SMP inadvertently used a combination of the lower and the higher of the indoor and outdoor worker BCLs. The 2013 SMP only cites the lower of the indoor and outdoor worker BCLs in Table 1.
- <u>Analytical Methods</u>: The analytical methods for Site COPCs were revised as necessary to reflect the most current, standard analytical methods.
- <u>Contact Information</u>: Contact information for NDEP, the Trust, the Trust's technical consultant for Tenant Construction Projects, and the groundwater extraction and treatment system (GWETS) operator has been updated in Table 6.
- <u>Certification and Checklist</u>: For ease of reference, the Certification of Compliance with the Site Management Plan and the Checklist of Notification and Reporting Requirements to NDEP and the Trust for Site Occupants and Their Contractors were moved from Appendices B and C to Requirements 1 and 2, respectively, immediately following the text of the 2013 SMP.
- <u>ECA Appendix Table A-1</u>: Additional information on the engineering controls in place was added to Table A-1. Additionally, the minimum required analyses for soils were updated for clarity.

# Inspection, Maintenance, and Monitoring Activities and Implemented Risk Management Measures

An evaluation of the results of the inspection, maintenance, and monitoring activities and the adequacy of the risk management measures during the period of June 1, 2012 through May 31, 2013 is provided below.

- The future land uses were confirmed to be consistent with the planned land use assumed in the SMP (i.e., industrial/commercial) in terms of exposure risk assumptions;
- No changes to ECA boundaries were made based on work conducted during the evaluation period;
- Groundwater has not been used for drinking water or any other purpose at the Site;
- There were no significant changes in land use or COPC toxicity parameters that warranted conducting additional risk analysis or additional or lesser mitigation;
- The groundwater monitoring data evaluated in the Annual (ENVIRON, 2012b) and Semi-Annual Remedial Performance Reports for Chromium and Perchlorate (ENVIRON, 2013) indicated that there were no significant changes in Site environmental conditions that require modification of this SMP; and
- On behalf of the Trust, ENVIRON and Geotechnical & Environmental Services (GES) inspected the Site as necessary and verified that risk management controls are being implemented and that they are effective in limiting potential exposure to COPCs at the Site. There were no incidents of non-compliance with the SMP during this period.

## **SMP** Compliance

Upon approval of the 2012 SMP, all Site Occupants were provided a copy of the SMP and notified of the known environmental conditions at the Site and the requirements of the SMP. Each Site Occupant, excluding Tronox LLC (Tronox), certified that it would comply with the provisions in the 2012 SMP. The Certifications of Compliance (included as Appendix B of the 2012 SMP) for all Site Occupants, excluding Tronox and Veolia Water North America (Veolia), are included as Attachment A of this letter. Veolia did not complete a Certification of Compliance because they did not conduct any subsurface projects between June 1, 2012 and May 31, 2013. The work conducted by Tronox, their contractors, or any other third party performing work for Tronox, was completed in compliance with the SMP, as certified by Geotechnical & Environmental Services, Inc. (GES). Therefore, ENVIRON certifies that all Site disturbances were conducted in compliance with the SMP notifications and the appropriate protocols for subsurface activities.

## Summary

The evaluation of the results of the inspection, maintenance, and monitoring activities and the continued adequacy of the implemented risk management measures at the Site during the Annual Review period indicate that all site disturbances have been conducted in compliance with the SMP.

Sincerely,

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John M. Pekala, PG Senior Manager Nevada CEM #2347, expires 9/20/2014

au J. Leh

Allan J. DeLorme, PE Principal

## Attachment

- cc: BMI Compliance Coordinator, NDEP, BCA, Las Vegas Brian Rakvica, McGinley and Associates, Las Vegas NDEP c/o McGinley and Associates, Reno
- ec: James Dotchin, NDEP Greg Lovato, NDEP Stephen Tyahla, USEPA Nevada Environmental Response Trust Tanya O'Neill, Foley & Lardner LLP Jeff Gibson, AMPAC Mark Paris, BMI Lee Farris, Landwell Ranajit Sahu, BMI Joe Kelly, Montrose Paul Sundberg, Montrose Curt Richards, Olin

Jay Gear, Olin David Share, Olin Chuck Elmendorf, Stauffer Nick Pogoncheff, Stauffer George Crouse, Syngenta David Hadzinski, TIMET Kirk Stowers, Broadbent & Associates Steve Sarandis, GEI Consultants Victoria Tyson, Tyson Contracting Enoe Marcum, WAPA Fredrick R. Stater, Tronox LLC Wendy Prescott, Envirogen

## Attachments

Attachment A Certifications of Compliance with Site Management Plan

## References

- ENVIRON International Corporation (ENVIRON), 2012a. Site Management Plan (SMP), Nevada Environmental Response Trust Site, Henderson, Nevada. Revised April 2011 with May 23 and May 30, 2012 Errata. NDEP approved June 1, 2012.
- ENVIRON, 2012b. Annual Remedial Performance Report for Chromium and Perchlorate, July 2011-June 2012; Nevada Environmental Response Trust Site, Henderson, Nevada. August 31. ENVIRON submitted response to comments on June 10, 2013. NDEP approved July 2, 2013.
- ENVIRON, 2013. Semi-Annual Remedial Performance Report for Chromium and Perchlorate, July 2012-December 2012; Nevada Environmental Response Trust Site, Henderson, Nevada. March 1. ENVIRON submitted response to comments on June 10, 2013. NDEP approved July 2, 2013.
- Nevada Division of Environmental Protection (NDEP), 2013. User's Guide and Background Technical Document for NDEP Basic Comparison Levels (BCLs) for Human Health for the BMI Complex and Common Areas. Revision 12, August.

## Attachment A

Certifications of Compliance with Site Management Plan

The undersigned ("Site Occupant") acknowledges receipt of a copy of the Site Management Plan dated <u>June 1, 2012</u> (the "SMP") prepared by ENVIRON International Corporation pertaining to the Nevada Environmental Response Trust Site located in Clark County, Nevada (the "Site"), which Site is more thoroughly described in the SMP. Site Occupant affirms that it is an owner, operator, tenant, lessee, project manager or other entity with responsibility for activities at the Site. Site Occupant specifically acknowledges having read and understood the provisions of the SMP. Site Occupant further acknowledges that it has the responsibility to ensure that the risk management measures and procedures described in the SMP are fully implemented in any applicable activity or operation. Site Occupant certifies that it will comply with all provisions of the SMP applicable to its occupancy of or work upon the Site. Site Occupant further certifies that it has provided or will provide a copy of the SMP to its contractors and any third partles that Site Occupant may Invite to the Site and shall ensure said contractors' or invitees' compliance with the SMP.

Company:	American PACIFIC Corr.
By:	mp
Printed Name:	MILLO SHANSON
Title:	OPERATIONS Supervisor
Date:	6/20/12

The undersigned ("Site Occupant") acknowledges receipt of a copy of the Site Management Plan dated  $\frac{4-ll-l2}{l}$  (the "SMP") prepared by ENVIRON International Corporation pertaining to the Nevada Environmental Response Trust Site located in Clark County, Nevada (the "Site"), which Site is more thoroughly described in the SMP. Site Occupant affirms that it is an owner, operator, tenant, lessee, project manager or other entity with responsibility for activities at the Site. Site Occupant specifically acknowledges having read and understood the provisions of the SMP. Site Occupant further acknowledges that it has the responsibility to ensure that the risk management measures and procedures described in the SMP are fully implemented in any applicable activity or operation. Site Occupant certifies that it will comply with all provisions of the SMP applicable to its occupancy of or work upon the Site. Site Occupant further certifies that it has provided or will provide a copy of the SMP to its contractors and any third parties that Site Occupant may invite to the Site and shall ensure said contractors' or invitees' compliance with the SMP.

Company:	ENVIROGEN TECHNOLOGIES
By:	J. F. Landth
Printed Name:	JEFF LAMBETH
Title:	DIRECTOR of OPERATIONS
Date:	6-25-13

The undersigned ("Site Occupant") acknowledges receipt of a copy of the Site Management Plan dated <u>JUNE 1, 2012</u> (the "SMP") prepared by ENVIRON International Corporation pertaining to the Nevada Environmental Response Trust Site located in Clark County, Nevada (the "Site"), which Site is more thoroughly described in the SMP. Site Occupant affirms that it is an owner, operator, tenant, lessee, project manager or other entity with responsibility for activities at the Site. Site Occupant specifically acknowledges having read and understood the provisions of the SMP. Site Occupant further acknowledges that it has the responsibility to ensure that the risk management measures and procedures described in the SMP are fully implemented in any applicable activity or operation. Site Occupant certifies that it will comply with all provisions of the SMP applicable to its occupancy of or work upon the Site. Site Occupant further certifies that it has provided or will provide a copy of the SMP to its contractors and any third parties that Site Occupant may invite to the Site and shall ensure said contractors' or invitees' compliance with the SMP.

Company:	ENVIRON International Corp
By:	alfilia
Printed Name:	Allen Delorme
Title:	Principal
Date:	6/20/12

The undersigned ("Site Occupant") acknowledges receipt of a copy of the Site Management Plan dated  $\int uec \left[ \frac{2\sigma/2}{2} \right]$  (the "SMP") prepared by ENVIRON International Corporation pertaining to the Nevada Environmental Response Trust Site located in Clark County, Nevada (the "Site"), which Site is more thoroughly described in the SMP. Site Occupant affirms that it is an owner, operator, tenant, lessee, project manager or other entity with responsibility for activities at the Site. Site Occupant specifically acknowledges having read and understood the provisions of the SMP. Site Occupant further acknowledges that it has the responsibility to ensure that the risk management measures and procedures described in the SMP are fully implemented in any applicable activity or operation. Site Occupant certifies that it will comply with all provisions of the SMP applicable to its occupancy of or work upon the Site. Site Occupant further certifies that it has provided or will provide a copy of the SMP to its contractors and any third parties that Site Occupant may invite to the Site and shall ensure said contractors' or invitees' compliance with the SMP.

Company:	Geotechnical & Environmental	Services
By:	Tyle J. Hansen	
Printed Name:	Kyle S. Hansen	
Title:	Project Geologiat, CEM	
Date:	6/25/13	

The undersigned ("Site Occupant") acknowledges receipt of a copy of the Site Management Plan dated \_\_\_\_\_\_ (the "SMP") prepared by ENVIRON International Corporation pertaining to the Nevada Environmental Response Trust Site located in Clark County, Nevada (the "Site"), which Site is more thoroughly described in the SMP. Site Occupant affirms that it is an owner, operator, tenant, lessee, project manager or other entity with responsibility for activities at the Site. Site Occupant specifically acknowledges having read and understood the provisions of the SMP. Site Occupant further acknowledges that it has the responsibility to ensure that the risk management measures and procedures described in the SMP are fully implemented in any applicable activity or operation. Site Occupant certifies that it will comply with all provisions of the SMP applicable to its occupancy of or work upon the Site. Site Occupant further certifies that it has provided or will provide a copy of the SMP to its contractors and any third parties that Site Occupant may invite to the Site and shall ensure said contractors' or invitees' compliance with the SMP.

Company:	Logistical Solutions, LLC
By:	Knoton Event
Printed Name:	Kristopher Everett
Title:	- froject Minager
Date:	03/11/2013