

Brian Sandoval, Governor Bradley Crowell, Director

Greg Lovato, Administrator

April 26, 2017

Jay A. Steinberg Nevada Environmental Response Trust 35 East Wacker Drive, Suite 1550 Chicago, IL 60601

# Re: Tronox LLC (TRX) Facility Nevada Environmental Response Trust (Trust) Property NDEP Facility ID #H-000539

# 2016 Performance Assessment and 2017 Priorities

Dear Mr. Steinberg,

The Nevada Division of Environmental Protection (NDEP) has prepared the 2016 Performance Assessment (Attachment A) for Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as Trustee of the Nevada Environmental Response Trust (NERT or Trust). This performance assessment was completed by the NDEP with input and concurrence from the US Environmental Protection Agency (EPA).

The NDEP and the US EPA have additionally prepared the NERT 2016 Milestone Activities document. (Attachment B) This document was used to track the progress of specific activities conducted in calendar year 2016. The NDEP has also attached the 2017 Milestone Activities document (Attachment C) which was developed with the input and concurrence from both the US EPA and the NERT to track specific activities during calendar year 2017.

Please contact the undersigned with any questions at jdotchin@ndep.nv.gov or 702-486-2850 x235.

Sincerely

James (JD) Dotchin Chief Bureau of Industrial Site Cleanup NDEP-Las Vegas Office

EC:

Attachments (3) JD:jd

Jeffrey Kinder, NDEP, Deputy Administrator, Carson City Carlton Parker, NDEP BISC Las Vegas Weiquan Dong, NDEP, BISC, Las Vegas Rick Perdomo, Nevada AG's Office Allan Delorme, Ramboll Environ Alison Fong, U.S. Environmental Protection Agency, Region 9 Andrew Steinberg, Nevada Environmental Response Trust Betty Kuo Brinton, MWDH2O Brenda Pohlmann, City of Henderson Carol Nagai, MWDH2O David Johnson, Central Arizona Water Conservation District Dave Johnson, LVVWD Jay Steinberg, Nevada Environmental Response Trust Jill Teraoka, MWDH2O Kevin Fisher, LV Valley Water District Marcia Scully, Metropolitan Water District of Southern California Maria Lopez, Metropolitan Water District of Southern California Mickey Chaudhuri, Metropolitan Water District of Southern California Peggy Roefer, CRC Scott Bryan, Central Arizona Project Steve Clough, Nevada Environmental Response Trust Steven Anderson, LVVWD Tanya O'Neill, Foley & Lardner L Todd Tietjen, SNWA

### PERFORMANCE ASSESSMENT FOR

Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as Trustee of the Nevada Environmental Response Trust ("NERT" or "Trust")

## [Effective Date of Trust: February 14, 2011]

## PERIOD OF PERFORMANCE: January 1, 2016 to December 31, 2016

## Consolidated Review by NDEP Bureau of Industrial Site Cleanup and U.S. EPA Region 9

#### Ratings: EE-Exceeds Expectations; ME-Meets Expectations; DNME-Does Not Meet Expectations

CA	ΓEGORY	TRU	STEE ACTIONS	RATING		
1.	Quality of	Servic	(2015)			
			Fulfillment of core Trust Requirements.	(ME) ME		
		B.	Ownership of the Henderson Property.	(EE <sub>1</sub> ) $\mathbf{EE}_1$		
		C.	Performance of administrative and property management functions related to the Henderson Property.	(ME) <b>ME</b>		
		D.	Management and/or funding implementation of Environmental Actions for the Henderson Legacy Conditions that are approved by the Henderson Lead Agency and the payment of future oversight costs of the Lead and Non-Lead Agency.	(ME) <b>ME</b>		
		Е.	Pursing claims and obtaining recoveries under the Henderson Chartis Policy.	(EE <sub>2</sub> ) <b>EE<sub>2</sub></b>		
		F.	Actions as landlord under the Henderson Facility Lease.	(ME) ME		
		G.	Actions as substitute party for Tronox LLC under the 2006 Henderson Consent Decree.	(EE <sub>2</sub> ) <b>EE<sub>2</sub></b>		
		H.	Accuracy of reports/deliverables.	(ME) ME		
		I.	Effectiveness of personnel.	(ME) ME		
		J.	Technical excellence.	(ME) ME		
		К.	Effectiveness of quality control program.	(ME) ME		
2.	<b>Cost Cont</b>	rol:				
		Α.	Budget estimate accuracy and cost control.	(EE <sub>3</sub> ) <b>EE<sub>3</sub></b>		
		В.	Current, accurate, supported and complete fee applications.	(ME) ME		
		C.	Cost efficiencies or deficiencies.	(ME) <b>EE</b> <sub>6</sub>		
3.	Schedule:			h		
		А.	Maintains current project schedule with regular updates.	(ME <sub>4</sub> ) <b>ME</b>		
		В.	Met project interim milestones (see attached).	(ME <sub>5</sub> ) <b>ME</b>		
		C.	Responsiveness to technical feedback.	(ME) ME		
		D.	Met deliverables schedules.	(ME <sub>5</sub> ) <b>ME</b>		
4.	Business F	usiness Relations:				
		A.	Effective management.	(ME) ME		
		B.	Reasonable/cooperative.	(EE) <b>EE</b> <sub>4</sub>		
		C.	Responsiveness to Trust Requirements.	(ME) <b>ME</b>		

CATEGORY	TRUSTEE ACTIONS	RATING				
	D. Informs of issues/problems.	$(EE_6)$ <b>EE</b> <sub>4</sub>				
	E. Flexibility.	(ME) <b>EE</b> <sub>7</sub>				
	F. Pro-active vs. reactive.	(ME <sub>7</sub> ) <b>EE</b> <sub>7</sub>				
5. Management of Key Personnel:						
	A. Effective management.	(ME) <b>ME</b>				
	B. Reasonable/cooperative.	(ME) <b>ME</b>				
	C. Responsiveness to Trust Requirements.	(ME) ME				
	D. Informs of issues/problems.	(EE <sub>6</sub> ) <b>EE</b> <sub>4</sub>				
	E. Flexibility.	(ME) ME				
	F. Pro-active vs. reactive.	(ME <sub>7</sub> ) <b>ME</b>				
6. Environmental Performance:						
	A. Overall progress towards NERT site goals	(NA) ME				
	B. Projects on schedule to meet Final Remedy timeframes	(NA) ME				
	C. Increase in Perchlorate mass removal from groundwater met projections and milestones.	(NA) <b>NA</b> 5				
	D. Decrease in Perchlorate loading to Las Vegas Wash along NERT RI Study Area and Downgradient Study Area.	(NA) ME				
	E. Provide multiple lines of evidence to demonstrate the effective management of the plume and plume shrinkage	(NA) ME				

#### Footnotes (2015):

- 1. The NERT has taken an active role as owner of the Henderson property and has taken a leadership role with the Sewer project, the TIMET/NERT grading project and the outfall 002 project.
- 2. The NERT received payment for 100% of the claims submitted under the Chartis insurance policy and payment representing 100% of the 2014 demand (plus interest) under the 2006 Consent Decree. The NDEP recognizes that this payment rate is well above average and justifies the EE rating for these categories.
- 3. The NERT has taken steps to reduce actual costs of projects including reducing or eliminating specific line items in consultant invoices, and adjusting schedules to obtain lower costs on their own without the request of the lead or non-lead agency.
- 4. The Schedule (Gantt Chart) should be updated and submitted on a more frequent basis. Suggest monthly or at least quarterly as things change frequently on the project.
- 5. Project milestones and deliverable timelines shifted during the course of the year. The table below shows the timelines NERT and NDEP communicated during the Annual Stakeholder meeting, any revisions to those timelines during the year, and the actual date the project milestones were completed. NERT needs to put more emphasis on schedule moving forward.
- 6. The NERT does an exceptional job at notifying the lead agency immediately of issues or problems that could wait for a Monthly/Semiannual Report, keeping the lead and non-lead agency informed of both major and minor items at the Site as they arise.
- 7. This has been a challenge for the NERT. NDEP and EPA communicated to the NERT in January 2015 that the RPM (Steve Clough) was brought in to help NERT come up with independent ideas to push this project in new directions. After the August 2015 COP Meeting and Report NDEP began to see the NERT take on a more proactive role by coming up with independent ideas to focus the COP and not let concerns about NCP become a hindrance to the entire project.

#### Footnotes (2016):

- 1. The NERT has continued an active role as owner of the Henderson property and has taken a leadership role with the Timet perchlorate project and the Phase II investigation of the Eastside.
- The NERT received payment for 100% of the claims submitted under the AIG policy and payment representing 100% of the 2015 demand (plus interest) under the 2006 Consent Decree. The NDEP recognizes that this payment rate is well above average and justifies the EE rating for these categories.

- 3. The NERT has taken steps to reduce actual costs of projects including reducing or eliminating specific line items in consultant invoices, and adjusting schedules to obtain lower costs on their own without the request of the lead or non-lead agency.
- 4. The NERT does an exceptional job at notifying the lead agency immediately of issues or problems that could wait for a Monthly/Semiannual Report, keeping the lead and non-lead agency informed of both major and minor items at the Site as they arise.
- 5. NERT was not able to increase perchlorate mass removal from groundwater to meet 2016 projections and milestones. During the calendar year it became clear that current site conditions would make this technically infeasible without incurring additional expense and without providing additional information to contribute to the RI/FS. NERT, the US EPA and the NDEP agreed to suspend any additional efforts to attempt to reach the 15% increase in perchlorate mass removal over baseline conditions.
- 6. During the 2016 Stakeholders Pre-Meeting NERT explained its internal decision making process and internal cost controls to the US EPA and NDEP. This insight along with other planned cost controls elevated this category to EE.
- 7. During the 2016 calendar year the NERT has demonstrated its ability to be flexible to evolving understanding of site conditions and to changing directives from the lead and non-lead agencies. Additionally the NERT has proven the ability to come up with independent ideas and strategies for the COP and Treatability Studies and Pilot Tests for use in the RI/FS process without direction from the lead and non-lead agencies.

# **2016 Milestone Activities**

Milestone Activity		Timeframe	Timeframe	Quarterly Progress			
			as				
			Amended	Q1	Q2	Q3	Q4
1.	NDEP will issue final Up-Gradient groundwater concentrations for AS, ClO4 and TDS	Jan 2016		100%	_	-	
2.	NDEP BISC will complete Bureau expansion to support achievement of NDEP Regional Milestones	February 2016		100%		_	
3.	NDEP (AECOM) will implement Downgradient Study Area field sampling events (Surface Water and existing Groundwater wells)	April 2016	May 2016 <sub>B</sub>	10%	100%		—
4.	NDEP (AECOM) will complete Geophysics Pilot Testing in Downgradient Study Area	August 2016		0%	0%	0%	100%
5.	NDEP will enter into contract with USGS to complete stream gauge installation and seepage studies	August 2016		30%	50%	100%	
6.	NERT will proactively implement the COP and will give monthly updates to NDEP/EPA and Stakeholders. At a minimum NERT will implement the 2016 COP Activities presented in the January 25, 2016 Annual Summary Report <sup>A</sup>	Dec 2016		10%	30%	80%	100%
7.		Ongoing (Minimum 15% target to be achieved by December 2016)		0%	0%	0%	0% <sub>D</sub>
8.	Finalize GWETS O&M Amendment 6 to Establish more favorable terms for the COP implementation and for treatment of AP-5 pond material	June 2016	Tabled this activity <sub>C</sub>	0%	0% <sub>C</sub>		
9.	NERT Soil Flushing and In Situ Bio Pilot tests initiated in 2015 will be completed	Nov 2016		30%	40%	80%	100%
10.	NERT will expand Soil Flushing pilot test to include larger on-site implementation	Dec 2016		0%	10%	30%	100%
11.	Unit 4 Sub floor demolition will be complete	June 2016		10%	90%	100%	
12.	Unit 4 subsurface sampling will be initiated	July 2016		0%	5%	100%	
13.	NERT will submit the RI Data package Tech Memo and Phase II Work Plan	June 2016		0%	100%		
14.	NERT will conduct annual Agreed Upon Procedures "Audit"	June 2016		0%	0%	100%	
	NERT will obtain an agreement (Option to Purchase) with BMI for a potential expansion of the current LS-1 near the LVW	July 2016		5%	5%	50%	100%
16.	NERT will begin AP-5 solids (~900 tons of Ammonium Perchlorate) transfer to above ground tanks	Dec 2016		0%	0%	0%	100%
17.	NERT will submit a treatability study work plan for Pilot Study for In Situ Chrome treatment	September 2016		0%	100%		

Footnotes A. 2016 COP Activities

- 1) Continue active re-balancing and optimization (AWF focused);
- 2) Initiate groundwater bioremediation pilot study east of the SWF and/or install additional extraction well at SWF; rebalance SWF;
- 3) Initiate operation of IX at Lift Station 1;
- 4) Initiate additional soil flushing (Interim Remedial Measure AP Area Soil Flushing);
- 5) Design additional soil flushing (Interim Remedial Measure Barrier Wall Downgradient Area Soil Flushing);
- i. NDEP and US EPA agreed that this additional COP task was not something to consider in 20166) Evaluate perchlorate removal options for Parcels A and B
  - i. NDEP and US EPA agreed that this additional COP task was not something to consider in 2016
- B. The NDEP and the NERT took longer to approve the work plans and amendments than anticipated causing the delay in field implementation of the Surface Water Sampling. Groundwater activities began on in early April.
- C. Tabled this milestone activity per mutual agreement between NERT EPA and NDEP. The planned amendment was not necessary to treat the AP-5 pond solution.
- D. The original target of 15% increase in mass removal was determined to be unfeasible to achieve without incurring additional expense that would not have led to any additional information gathering for the RI/FS process. NERT, US EPA and NDEP agreed to suspend additional activities in October of 2016.

## **NERT's Goals and Priorities for 2017**

- 1. Conduct Value Engineering evaluations for the implementation of Treatability / Pilot Studies or other remedial efforts costing greater than \$2M consistent with US EPA and/or Army Corps of Engineers guidance. This task will begin with all reports submitted after July 1, 2017.
- 2. Continue optimizing GWETS system through the COP with comprehensive considerations of mass removal, hydraulic capture/Northshore Rd perchlorate mass loading, and GW-11 levels targeting the removal of 400,000 pounds of perchlorate from the environment in 2017;
- 3. Submit recommendation and budget to upgrade various segments of the effluent pipeline to enable greater flow by June 30, 2017.
- 4. Begin monthly sampling at some/all USGS gauging stations by June 30, 2017.
- 5. Submit Phase III RI work plan for the Eastside Study Area by June 30, 2017 and initiate sampling program by November 30, 2017<sub>1</sub>.
- 6. Summarize the results from first 3 months of operation IX at Lift Station #1 and prepare a cost evaluation of multiple scenarios for treating SWF groundwater by June 30, 2017.
- SNWA Weir Dewatering Treatment Project, ready to receive water by July 31, 2017 as ordered by NDEP. 2,3
- 8. Submit water management plan (includes GW-11 replacement; AP-5 treatment and continued implementation of COP) by September 30, 2017;
- 9. Submit Unit Buildings 4 and 5 Investigation Second Mobilization Technical Memorandum (including total mass and distribution of COPCs and third mobilization work plan) by May 30, 2017.
- Perform first injection for Seep Well Field Area Bioremediation Treatability Study by September 30, 2017.
- 11. Complete Phase II RI field work by December 31, 2017.
- 12. Submit HLC Mass Estimates and Performance Metrics Technical Memorandum by September 30, 2017.
- 13. Submit Las Vegas Wash Bioremediation Pilot Study by September 30, 2017.
- 14. Initiate treatment of AP-5 decant in FBRs by July 31, 2017.
- 15. Submit AECOM Technical Memorandum on the initial borings/wells by December 31, 2017 (NDEP managed). <sub>3</sub>
- Submit AECOM Technical Memorandum for full-scale geophysical field work and by December 31, 2017 (NDEP managed). 3
- 17. Begin interview process for additional NERT and/or Le Petomane employee by July 31, 2017.
- 18. NERT will begin use information gathered during the Environmental Footprint Analysis to apply the BMP Checklist from the ASTM Standard Guide for Greener Cleanups by June 30, 2017, and implement selected BMPs in the July 1, 2017 – June 30, 2018 performance reporting period.

<sup>&</sup>lt;sup>1</sup> Field mobilization schedule dependent upon the issuance of work plan comments by NDEP, USEPA and/or NERT Stakeholders, implementation budget approval and an access agreement with study area land owner(s).

 $_2$  Weir treatment system readiness date dependent upon granting of access by US Bureau of Reclamation (BOR). With the current BOR estimate of access by June 1, 2017, a system readiness date of October 1, 2017 should be expected.

<sup>3</sup> All work on US Bureau of Reclamation property will be contingent on access being granted by US BOR.