



STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
Colleen Cripps, Ph.D., Administrator

January 4, 2013

Michael Rojo
Environmental Services, Supervisor
NV Energy
PO Box 279, MS 77
501 Wally Kay Drive
Moapa, NV 89025

Re: **NV Energy (NVE)**
Reid Gardner Station (RGS)
NDEP Facility ID #H-000530
Nevada Division of Environmental Protection Response (NDEP) to:
Second Semi-Annual 2012 Groundwater Monitoring and Remediation Report
Dated: November 14, 2012

Dear Mr. Rojo:

The NDEP has received and reviewed NVE's above-identified document dated November 14, 2012. The subject document contains the semi-annual groundwater monitoring results for RGS. Please review and address the comments from NDEP included in Attachment A.

Please contact the undersigned with any questions or comments about this letter at (775) 687-9396 or aoakley@ndep.nv.gov.

Sincerely,

Alison Oakley, CEM
Environmental Scientist III
Bureau of Corrective Actions
NDEP-Carson City Office
Fax: 775-687-8335



cc: Greg Lovato, Bureau of Corrective Actions, NDEP
Shannon Harbour, Bureau of Corrective Actions, NDEP
Scott Smale, Bureau of Corrective Actions, NDEP
Todd Croft, Bureau of Corrective Actions, NDEP Las Vegas
Bill Campbell, Tribal Liaison, NDEP
Jeryl Gardner, Bureau of Water Pollution Control, NDEP
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cc: William Anderson, Moapa Band of Paiutes, Chairperson, P.O. Box 340, Moapa, NV 89025
Ian Zabarte, Moapa Band of Paiutes, Environmental Director, P.O. Box 340, Moapa, NV 89025

Attachment A

- 1) **General Comment, Diesel Recovery System:** In past reports NDEP has commented about the length of time the diesel recovery system has not been operational. For the previous semi-annual report, NDEP requested a more detailed summary, including a list of the options being evaluated and a proposed plan moving forward. The current semi-annual report discusses a pilot test that was conducted in October that was not successful in resolving the issues and proposes an additional pilot test during the first quarter of 2013. A couple of potential alternative options are listed to be evaluated if the second pilot test does not produce the desired results. At this point, NV Energy's detailed summary and proposed plan consists of another pilot test conducted as much as six months after the previous failed pilot test, and then evaluation of alternatives if that pilot test also fails to resolve the problem. The system has not operated in over two years and there does not appear to be a realistic timeframe for when free product recovery will resume. NV Energy needs to accelerate their evaluations and make free product recovery a priority. A more concerted effort that includes concurrent evaluations of options and a timeframe for completion and startup of a robust diesel recovery system is needed. NV Energy may consider the Interstate Technology & Regulatory Council's (ITRC), Evaluating LNAPL Remedial Technologies for Achieving Project Goals (December 2009; <http://www.itrcweb.org/Documents/LNAPL-2.pdf>) guidance in developing a plan to support diesel recovery.

- 2) **General Comment, Monitoring Well Network Update:** Numerous issues regarding the existing monitoring well network have been raised with each monitoring report, including silt in wells and turbid samples, roots and obstructions in wells, well yield issues, and inconsistent laboratory analytical results. Considering that the conceptual site model (CSM) has not been finalized, and that further delineation of sources, critical flow paths, and potential receptors needs to be completed, the monitor well network remains a work in progress. It may be useful to evaluate and prioritize existing wells based on how critical they are to monitoring the extent of groundwater impacts, and determine which wells are adequate, which are problematic but critical and need to be rehabilitated, and which can be abandoned. Once the CSM is more formally defined, the overall monitor well network can be updated incorporating such things as well spacing and location and appropriate screen interval design.

- 3) General Comment, Dissolved Constituent Concentration Maps (figures 3-9): Pending completion of the background conditions evaluation, the current methods to depict concentrations of constituents in groundwater is adequate, but can be improved. Contour intervals are somewhat arbitrary, vary greatly, and do not necessarily reflect the extent of impacts associated with known sources. This will have to be resolved at some point once background conditions are determined and the monitor well network is established.

- 4) General Comment, Concentration Trend Graphs: The concentration trend graphs provided are useful in evaluating long-term concentration trends at monitoring wells, as well as identifying potential data outliers. A review of critical monitor well locations should include an assessment of which wells should be used to prepare concentration trend graphs to adequately monitor the extent of groundwater impacts and the fate of contaminants over time.