



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

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

August 10, 2015

Michael Rojo
Environmental Services, Supervisor
NV Energy
6226 W Sahara Ave M/S 30
Las Vegas, NV 89146

Re: **NV Energy (NVE)**
Reid Gardner Station (RGS)
NDEP Facility ID #H-000530
Nevada Division of Environmental Protection (NDEP) Review of:
Former Pond 4A Solids Data Validation/Soil Sampling Concurrence Request, June 2015

Dear Mr. Rojo:

The NDEP has received and reviewed NVE's submittal of the DRAFT report titled *Former Pond 4A Solids Data Validation/Soil Sampling Concurrence Request* (Report). The Report was received by the NDEP on July 7, 2015 and provides a summary of pond solids data and the data validation report, performed by a third party contractor. The Report also includes a proposed list of laboratory parameters to be used for future sampling of pond soils that are left after pond solids removal. The NDEP's comments are included as Attachment A. A review of the data validation reports produced by the third party data validation company was completed by Amy Goldberg Day with ARCADIS-US. Ms. Day's review is included in Attachment B.

The NDEP **concurs** with the proposed list of parameters with the addition of the parameters listed in Attachment A. Please contact me 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

Attachments (2)
Attachment A – NDEP Comments
Attachment B – Data Validation Report Review letter

- ec: Jeff Collins, Nevada Division of Environmental Protection (NDEP)
Scott Smale, Bureau of Corrective Actions, NDEP Carson City
Todd Croft, Bureau of Corrective Actions, NDEP Las Vegas
Bill Campbell, Tribal Liaison, NDEP
Alan Tiney, Bureau of Water Pollution Control, NDEP
Ebrahim Juma, Clean Water Team (ejuma@cleanwaterteam.com)
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Andrea Issod, Sierra Club, (andrea.issod@sierraclub.org)
Robert Wiygul, Counsel Sierra Club and Moapa Band of Piutes, (Robert@waltzerlaw.com)
Ranajit Sahu, Consultant, (sahuron@earthlink.com)
- cc: Alteha Tom, Moapa Band of Paiutes, Chairperson, P.O. Box 340, Moapa, NV 89025
Darren Daboda, Moapa Band of Paiutes, Environmental Director, P.O. Box 340, Moapa, NV 89025
Clark County Emergency Management, 500 S. Grand Central Parkway 6th Floor, P.O. Box 551713, Las Vegas, NV 89155-1713
Anitha Rednam, Department of Water Resources, 1416 9th Street, Room 1140, Sacramento CA 95814

Attachment A

Former Pond 4A Solids Data Validation/Soil Sampling Concurrence Request

1. The NDEP recommends the addition of thallium, chloride, fluoride, and phosphorous to the list of analytical parameters for underlying soil. Thallium was included as an indicator constituent of concern (COC) in the NV Energy April 22, 2015 *Request for Approval of Indicator Constituents of Concern for Reid Gardner Station AOC*. Phosphorous and fluoride were included in the April 22 list because they are constituents for which the Muddy River is listed by NDEP Bureau of Water Pollution Control as being “impaired” in the reach that flows through the Station. This April 22 list of indicator COCs was approved by NDEP on May 6, 2015 with the addition of phosphorus and fluoride. Inclusion of these parameters to the analytical parameter list for underlying soil will provide a data set that encompasses all of the groundwater indicator COCs for the site. Chloride is requested because it is a significant component of total dissolved solids.

Mr. Mike Rojo
Pond 4A Parameter Reduction/Data Validation
August 10, 2015
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Attachment B

Letter Review of Data Validation Reports for Pond 4A Soil Samples



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San Rafael,
California 94903
Tel 415 491-4530 x 19
www.arcadis-us.com

Alison Oakley, CEM
Bureau of Corrective Actions
Nevada Division of Environmental Protection
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701-5249

Environment

Subject:

**Review of Data Validation Reports
NV Energy**

Reid Gardner Station

NDEP Facility ID # H-00530

Review of Data Validation Reports for Pond 4A soil samples collected on July 7 and 8, 2014.

Date:

August 5, 2015

Contact:

Amy Goldberg Day

Phone:

415.491.4530 x19

Email:

Amy.GoldbergDay@Arcadis-us.com

Dear Ms. Oakley:

ARCADIS reviewed the data validation reports prepared by Ordway on behalf of Stanley Consultant for the Nevada Department of Energy RGS Site. Data validation reports were reviewed for the soil data generated from the Pond 4A July 7 and 8 2014 sampling events.

ARCADIS reviewed the technical approach and professional judgment applied in performing the data validation. ACRADIS then evaluated the results based on the analytical chemistry data package provided by the laboratory.

The validator used the US EPA data validation guidance and analytical chemistry guidance documents as the foundation for the review. Data were evaluated for US EPA Level IV. Soil samples were analyzed for ammonia, anions, SVOCS, hexavalent chromium, mercury, metals, PAHs, pH, total dissolved solids, total phosphorous, and silica. A data validation report was prepared for each method per sampling day.

The reports were very detailed and the data validation strictly followed the guidance in the US EPA document SW-846 without exception. SW-846 is the technical document presenting the analytical methodology and data quality controls for each method.

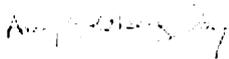
Imagine the result

A high percentage of the analytical results from each method were qualified to “estimated concentration” based on various deviations from the methods in SW-846. However, the US EPA data validation guidance documents allow the use of professional judgment during the data validation process. Based on ARCADIS’ review, Ordway appears to adhere to the SW-846 methodology without exception. Professional judgment as to whether the slight deviations from SW-846 affected the analytical results does not appear to have been applied.

The data validation is extremely detailed and impeccably performed. At times, the laboratory deviated from exactly following written procedures as presented in SW-846. These deviations were noted by the data validator and the data were qualified. However, regardless of the data validation results, the data are sufficient for their intended purpose.

If you have any questions regarding the data validation review, please feel free to contact me.

Sincerely,



Amy Goldberg Day
Principal Toxicologist

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EC: John Kivett, ARCADIS

Imagine the result