



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

February 13, 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) Comments and Concurrence:
Muddy River Work Plan, Administrative Order on Consent Activities,
NV Energy, Reid Gardner Station, Draft January 2015

Dear Mr. Rojo:

The NDEP has received and reviewed NVE's submittal of the DRAFT work plan titled *Muddy River Work Plan*. The work plan was received by the NDEP on January 20, 2015 and describes proposed activities that comprise the Muddy River investigation. The NDEP would like to compliment NVE on this work plan. It is comprehensive, well thought out, and includes all of the elements discussed and agreed upon at the December AOC meeting and workshop. Comments to the Draft work plan from NDEP are included in Attachment A. The NDEP concurs with the 2015 Draft Muddy River Work Plan once the comments in Attachment A are addressed.

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 (1)
Attachment A – NDEP Comments



- cc: 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
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Alan Tiney, Bureau of Water Pollution Control, NDEP
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- 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

Appendix A

General Comment:

1. The Muddy River Investigation Work Plan (Work Plan) should include a data management plan. The Work Plan calls for the collection of a significant amount of data including continuous monitoring data. The Work Plan should summarize how these data will be compiled, reviewed and reported. Additionally, NDEP recommends that the data management plan provide for an up-front streamlined sharing of the data with NDEP in the spirit of a dynamic work plan. Early and frequent review of the data will help ensure that the data collected are adequate and will support development of the conceptual site model. This will allow for a meaningful evaluation of the program as it progresses through the year and also allow for any adjustment to be identified and implemented early, if needed. These data should include monthly updates of all field measurements taken and downloaded as well as any draft analytical data.

Note: While an overall data management plan is preferable, alternate methods may be proposed to enable the exchange format in a less formal way if it gets to the endpoint more quickly.

Specific Comments:

1. Section 2.3.2, Page 2-4, Table 2-1:
 - a. As described in Section 2.3, plans for continuous groundwater elevation and water quality (temperature and conductivity) measurements using transducers in wells situated on the north and south sides of the Muddy River at transects T-1, 3, 5, 6, 8, and 11 are generally appropriate. However, to provide additional information to assess the potential for preferential flow in the area between Pond 4C-2 and the IMW-2.5 well cluster (i.e., underflow from the Pond 4C-2 area beneath and to the north of the Muddy River), please include a similar scope for continuous groundwater elevation and water quality monitoring at the T-2 transect location.
 - b. The area between planned continuous monitoring at transect T-8 and T-11 is rather large and contains several site features that may be contributing TDS to the Muddy River, including the SGSPR spring location and the coal pile areas on the north side of the Muddy River, and potential underflow from the EFG pond areas and the dairy property on the south side of the Muddy River. To provide better data resolution and assessment of potential contributions to the Muddy River in the area between transect T-8 and T-11, please include continuous monitoring of groundwater elevations and water quality at transect T-9.
2. Sec. 2.4.1, Page 2-6, Transducer Housings: – The PVC housings for river transducers need to be carefully installed so that they are very secure and vertical. Any shifts over time will jeopardize the water level readings recorded by the transducers, and if the transducers do not

hang freely in the PVC housing, the transducer may give erroneous readings by getting hung up against the PVC.

3. Sec. 2.4.1, Page 2-6, Transducer Sync: – It is critical that the transducers are synced and set so that they all collect simultaneous readings and each measurement has the identical time stamp as readings from all the other transducers. This is necessary for working with and interpreting the data. The internal clocks in the transducers have a tendency to wander over time, so they'll need to be re-synced during each monthly manual check/data download.

Note: NVE may want to consider having additional trolls available for the monthly events in the event equipment is lost or damaged, it can be replaced with the need for an additional field event, or a 1 month data gap in readings

4. Section 2.4.2, Page 2-6, Table 2-2:
 - a. Verify detection limit for cadmium using EPA method 6020. Our experience is that Method 6020 provides detection limits on the order of 0.5 ug/L (ppb), which is in the same order of magnitude of the aquatic life criteria for cadmium.
 - b. Verify detection limit for alkalinity. The detection limit listed in the table seems to be too high. Detection limits of 1 to 5 mg/L are routinely achieved by standard alkalinity analytical methods.
5. Section 5: – The work plan does not present information regarding laboratory analyses of groundwater samples that may be collected from the newly installed and existing monitoring wells located at the transects along the Muddy River. Section 5 indicates that water quality data collected during quarterly monitoring events and the pond area investigations will be used for estimating TDS mass flux to the Muddy River and to address geochemical data gaps. It is assumed that the forthcoming Pond Area work plans will include details regarding specific analytes that will be collected during the quarterly monitoring events and the Pond Area investigations to support these evaluations, but this information should be explicitly stated in this work plan.