



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

October 6, 2015

Jason Reed
Senior Environmental Advisor
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 Comments to: *Groundwater Monitoring
Program Changes Response to Comments*

Dear Mr. Reed:

The Nevada Division of Environmental Protection (NDEP) received and reviewed NV Energy's (NVE's) electronic mail, dated May 14, 2015, that contain response to comments to NDEP's November 26, 2014 letter on Groundwater Program Changes at the RGS. The electronic mail responses are attached in Attachment A. The NDEP **concurs** with the response to comments provided by NVE.

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

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- cc: Jeff Collins, Nevada Division of Environmental Protection (NDEP) (jrcollins@ndep.nv.gov)
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Darren Daboda, Moapa Band of Paiutes, Environmental Director, P.O. Box 340, Moapa, NV 89025
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Anitha Rednam, Department of Water Resources, 1416 9th Street, Room 1140, Sacramento CA 95814

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Attachment A

Electronic Mail with Response to NDEPs Comments (4 pages).

Alison Oakley

From: Reed, Jason <JReed@nvenergy.com>
Sent: Thursday, May 14, 2015 4:20 PM
To: Alison Oakley
Cc: Cross, Brad; John Kivett; Garcia, Tony; Rojo, Michael; sergio.escobar@water.ca.gov; pmesard@exponent.com; Scott.Dethloff@CH2M.com; Svatos, Becky; EspinaAfrica@stanleygroup.com; Bill Carrig (CarrigBill@stanleygroup.com); Todd Knause (KnauseTodd@stanleygroup.com); Casey, Ann; __AOC
Subject: NV Energy Reid Gardner - Groundwater Monitoring Program Changes Response to Comments
Attachments: P-10_AOC-391.pdf; KMW-9_AOC-061.pdf; P-11_AOC-060.pdf; P-12_AOC-391.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Dear Ms. Oakley,

Per our March 4, 2015 AOC meeting, below are responses to your letter on the Groundwater Monitoring Program Changes dated November 26, 2014. The NDEP concurred with a limited amount of requested changes and asked for additional information on other changes as stated below. Please contact me if you need additional information.

NDEP Comment #1

"KMW-1S: The NDEP sees this as a critical well for the Hogan's Wash area and the NDEP does not want a well in this location removed from the monitoring program. If this well is removed from the sampling program and/or abandoned, the NDEP would like to see a replacement well installed in a timely fashion so it can continue to provide data to the monitoring program"

NV Energy Response

NV Energy kept KMW-1S in the sampling program and will reevaluate a replacement in a future Hogan Wash Work Plan

NDEP Comment #2

"KMW-19: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only at this time. Monitoring requirements for this well may be revisited when the investigation of Hogans Wash begins."

NV Energy Response

NV Energy removed KMW-1S from the sampling program and will gauge for groundwater elevation only. NV Energy will reevaluate the monitoring requirements in a future Hogan Wash Work Plan.

NDEP Comment #3

"CMW-1D: The NDEP would like this well to remain in the sampling program because we have limited deep monitoring points. We can revisit the need for this well when the new wells are installed as part of the Pond 4A investigation."

NV Energy Response

NV Energy kept CMW-1S in the sampling program and will reevaluate monitoring requirements after the new well data in the PA3 Former Pond 4A Work Plan implementation is received.

NDEP Comment #4

“CMW-1S: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only.”

NV Energy Response

NV Energy removed CMW-1S from the sampling program and will gauge for groundwater elevation only.

NDEP Comment #5

P-4: The NDEP sees P-4 as a critical monitoring point in the downgradient direction of Pond E-1, and therefore important for trend analysis. This well has the highest TDS in a line that decreases towards the Muddy River from P-4 to P-22 to P-19AR. This well may be part of multiple lines of evidence that point towards attenuation.

NV Energy Response

NV Energy kept P-4 in the sampling program and will reevaluate monitoring requirements after the new well data in the PA5-7 Former Pond D, Pond E, and Former Ponds F/G Work Plan implementation is received.

NDEP Comment #6

“P-6R: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only at this time. The NDEP may request that this well be reinstated as a monitoring point if P-7R becomes erratic in trend evaluations.”

NV Energy Response

NV Energy removed P-6R from the sampling program and will gauge for groundwater elevation only. NV Energy acknowledges there may be a future reinstatement request.

NDEP Comment #7

“P-8R: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only at this time. The NDEP may request that this well be reinstated as a monitoring point if P-7R becomes erratic in trend evaluations.”

NV Energy Response

NV Energy removed P-8R from the sampling program and will gauge for groundwater elevation only. NV Energy acknowledges there may be a future reinstatement request.

NDEP Comment #8

“KMW-9: The NDEP would like some detail about KMW-9 before agreeing to abandonment. KMW-9 is 61 feet deep and is labeled as a medium or deep well. P-10 is a 68 feet deep well that is labeled as a shallow well. Please provide a basis for the different labels (shallow or not). The NDEP would like the well construction logs or confirmation of the screened interval for these two wells. Note that the NDEP may ask for a medium and/or deep well as part of the Pond F investigation work.”

NV Energy Response

NV Energy kept KMW-9 in the sampling program and will reevaluate monitoring requirements after the new well data in the PA5-7 Former Pond D, Pond E, and Former Ponds F/G Work Plan implementation is received. The well log for KMW-9 is attached and shows the total well depth is 60 feet. The medium and deep well labels, as well as the shallow designation, are based on the *Screened Interval Evaluation and Recommendations Memo* approved by the NDEP on January 4, 2013. The memo states that KMW-9 is a medium zone well. The screened interval memo also states that P-10 is 14 feet deep and monitors the shallow water zone. A well log for P-10 is attached that confirms this information. As you may recall, there has been some discussion about the integrity of the KMW-9 well construction since the analytical results are not consistent with the adjacent shallow well P-9. A video camera was lowered into KMW-9 to evaluate the condition of the screen and casing. The results of the video were inconclusive.

NDEP Comment #9

"P-12: This well may be removed from the sampling program and used a groundwater elevation monitoring point only at this time. Additionally, the NDEP would like to confirm the screen intervals for P-11 and P-12."

NV Energy Response

NV Energy removed P-12 from the sampling program and will gauge for groundwater elevation only. The well logs for P-11 and P-12 are attached and show the screen intervals from 20 to 65 and 66 to 81 feet below ground surface, respectively. The monitoring zone for these wells is discussed in the *Screened Interval Evaluation and Recommendations Memo* approved by the NDEP on January 4, 2013.

NDEP Comment #10

"P-14R: This well is in a down gradient line towards the Muddy River from P-13R to P-15AR for trend monitoring. The NDEP would like to keep this well in the program, but agrees that frequency of monitoring can be reduced to annual."

NV Energy Response

NV Energy kept P-14R in the sampling program and will reevaluate monitoring requirements after the new well data in the PA5-7 Former Pond D, Pond E, and Former Ponds F/G Work Plan implementation is received. Since changing the monitoring frequency to once a year for select wells can be logistically difficult for the field team, NV Energy will keep P-14R as a semi-annual monitored well.

NDEP Comment #11

"P-17A: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only at this time."

NV Energy Response

NV Energy removed P-17A from the sampling program and will gauge for groundwater elevation only.

NDEP Comment #12

"P-18A: This well may be removed from the sampling program and used as a groundwater elevation monitoring point only at this time."

NV Energy Response

NV Energy removed P-18A from the sampling program and will gauge for groundwater elevation only.

NDEP Comment #13

"P-20A: The NDEP would prefer to keep P-20A because of the spikes on TDS trends, but would allow P-20B to be removed from the monitoring program."

NV Energy Response

Since NV Energy is installing new wells near P-20A and P-20B as stated in the PA- 5 Pond Characterization Work Plans, NV Energy will retain both wells for the time being and will reevaluate these wells in the future.

NDEP Comment #14

"HM-19: This well may be removed from the sampling program and used as a groundwater elevation/free product monitoring point only at this time. The NDEP would like an oil/water interface probe used to monitor this well during gauging."

NV Energy Response

NV Energy removed HM-19 from the sampling program and will gauge for groundwater elevation/free product only. As seen in the *Second Semi-Annual 2013 Groundwater Monitoring and Remediation Report*, Table 1A, HM-19 is gauged for product. An oil/water interface probe is used to gauge the well.

NDEP Comment #15

"HM-20: This well may be removed from the sampling program at this time, but should be re-evaluated when free product is no longer present in the well."

NV Energy Response

NV Energy removed HM-20 from the sampling program and will gauge for groundwater elevation only. NV Energy will reevaluate the monitoring requirements when free product is no longer present in the well.

NDEP Comment #16

"HM-24: This well may be removed from the sampling program and used as a groundwater elevation/free product monitoring point only at this time. The NDEP would like an oil/water interface probe used to monitor this well during gauging".

NV Energy Response

NV Energy removed HM-24 from the sampling program and will gauge for groundwater elevation/free product only. NV Energy will use an oil/water interface probe to monitor this well during gauging.

NDEP Comment #17

"Parameter Reduction: The NDEP concurs with the reduction of all parameters requested except for phosphate. It should be noted that, based on historical data tables for the site, phosphate has not been routinely include in the analyte list for groundwater. Rather total phosphorous as P appears to be the parameter that has been routinely measured. Phosphorous is a parameter that is shown to have higher concentrations in surface water at the downstream Muddy River sample location (MR-4) than at the upstream Muddy River sample locations (MR-UP, and MR-1-3). Given that there appears to be a data gap for phosphorous, it is recommended that it is sampled for in all monitoring wells, including Pond wells where it is has not previously been sampled. Additionally, the upcoming work plans for pond assessment should incorporated speciation of phosphorus in soil and groundwater"

NV Energy Response

While phosphorous may have higher concentrations at the downstream Muddy River sample location (MR-4) than at the upstream Muddy River sample locations (MR-UP, and MR-1-3), phosphorous is also increasing at upgradient locations of Reid Gardner Station as reported by the Southern Nevada Water authority, therefore a correlation of site related phosphorous impacts to the Muddy River cannot be made. However, NV Energy will add total phosphorous analysis in all monitoring wells to fill the data gaps as noted.

Regards,
Jason Reed

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Senior Environmental Adviser



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