

# WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

---

December 3, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Gregg A. Galecki, Reclamation Specialist III

RE: 2003 Second Quarter Water Monitoring, Nevada Electric Investment Co.,  
Wellington Prep Plant, C/007/0012-WQ03-2, Task ID #1778

- 1. Was data submitted for all of the MRP required sites?** YES [  ] NO [  ]  
*Identify sites not monitored and reason why, if known:*

Data was submitted for all surface-water, groundwater, and UPDES sites.

- 2. On what date does the MRP require a five-year resampling of baseline water data.**  
*Renewal of the permit is December 10, 2004. The MRP commits to sampling  
baseline water parameters one year prior to the renewal date.*

Resampling due date 12/10/04

- 3. Were all required parameters reported for each site?** YES [  ] NO [  ]

At Well GW-13, only depth to water was collected. GW-13 has very slow recovery. When initially pumped, the well produces less than a liter of water; barely enough to collect field parameters since August 2000. When allowing a day to recover, the well still does not produce any measurable water. GW-13 is located in a non-essential water monitoring area since the surface facilities no longer exist in the area. It is recommended that the site be removed from the Water Monitoring Plan.

All other parameters were reported at the remainder of the sites.

**4. Were irregularities found in the data?** YES [ x ] NO [ ]

Previously observed apparent drops in the potentiometric surface in wells located east-northeast of the Price River have apparently stabilized. No distinct changes have occurred in the last two quarters. No changes in water quality have been observed with the exception of Well GW-4 where the TDS values have declined from approximately 4850 mg/l to 4370 mg/l (~10 % decrease) in the last two years.

At Well GW-7, located in the southwest portion of the permit area, shown a marked improvement in the amount of sulfate (SO<sub>4</sub>) and total dissolved solids (TDS) since 1998. Both SO<sub>4</sub> and TDS have decreased by approximately 43 percent from approximately 2300 mg/l to 1300 mg/l SO<sub>4</sub>, and approximately 4300 mg/l to 2400 mg/l TDS, respectively.

At Well GW-1 the Specific Conductivity value was 3,500 mohms, which is approximately 60 percent of the average values observed over the past two years, with no other corresponding improvements in other parameters. Confirmation of the field noted indicates the value was genuine. The condition will continue to be monitored in the future.

Well GW-3 illustrated abnormally good quality and it is postulated that the better water quality is associated with high quality water from the Price River. Often, higher quality water is associated with higher water levels (lower depth to water) in the well. The attached graph supports this in some cases, but not consistently. The condition will continue to be monitored in the future.

No other irregularities were found in the first quarter data.

**5. Were DMR forms submitted for all required sites?**

1<sup>st</sup> month, YES [ x ] NO [ ]  
2<sup>nd</sup> month, YES [ x ] NO [ ]  
3<sup>rd</sup> month, YES [ x ] NO [ ]

Sites 003 through 008 had documentation for a site visits every month.

**6. Were all required DMR parameters reported?** YES [ x ] NO [ ]

All sites were dry so no parameters were submitted

**7. Were irregularities found in the DMR data?** YES [ ] NO [ x ]

All sites were dry so no parameters were submitted

Page 3  
C/007/0012-WQ03-2  
Task ID #1778  
December 3, 2003

**8. Based on your review, what further actions, if any, do you recommend?**

No further action is necessary for the 2003 03-2 (2<sup>nd</sup>) Quarter Water Monitoring data.

an  
O:\007012.WEL\WATER QUALITY\GAGWQ\_03-2.DOC