




Department of Energy
Office of Legacy Management

MAY 23 2007

Mr. Gary Janosko, Chief  → Bill
Fuels Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
Mail Stop T-8A33
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Transmittal of May 2007 Monitoring Results for the Salt Lake City, Utah, UMTRCA
Title I Processing Site

Dear Mr. Janosko:

The purpose of this letter is to inform you that the U.S. Department of Energy (DOE) has completed the agreement reached with the State of Utah Department of Environmental Quality, Division of Radiation Control (Utah DEQ/DRC), in December 2005 to conduct additional reduced scope ground water monitoring at the Salt Lake City processing site. The results demonstrate the agreed-upon criteria for discontinuing all monitoring at the site have been satisfied. Therefore, DOE will conduct no further monitoring and will decommission the remaining monitoring wells at the Salt Lake City processing site. DOE would appreciate written confirmation from the NRC regarding this matter.

In correspondence dated February 13, 2007, the NRC directed DOE to conduct an additional round of reduced scope ground water monitoring at the subject site. The additional round of reduced scope ground water monitoring was conducted on May 1, 2007.

The results reported from this additional round of ground water monitoring continue to demonstrate that the criteria for discontinuing ground water monitoring at the site, as specified in the *Ground Water Compliance Action Plan for the Salt Lake City, Utah, UMTRA Project Site* (GCAP), have been satisfied. Per direction provided in the February 13, 2007 correspondence, the results have also been evaluated using the criteria specified in the NRC's December 15, 2005 correspondence.

Reduced scope ground water monitoring consisted of sampling on-site monitor well MW-0144 for molybdenum and collecting water-level measurements from all four remaining on-site monitoring wells (MW-0134 and MW-0144 completed in the shallow aquifer, and MW-0143 and MW-0145 completed in the deeper aquifer). A site map is enclosed for reference.

19901 Germantown Road, Germantown, MD 20874

3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507

1000 Independence Ave., S.W., Washington, DC 20585

1103 Oakridge Drive, Uno Bldg., Harrison, OH 45030

232 Energy Way, N. Las Vegas, NV 89030

REPLY TO: Washington Office

2597 B 3/4 Road, Grand Junction, CO 81503

626 Cochran's Mill Road, P.O. Box 10940, Pittsburgh, PA 15236

11025 Dover St., Suite 1000, Westminster, CO 80021

955 Mound Road, Miamisburg, OH

The May 1, 2007 ground water monitoring results reported the molybdenum concentration in on-site monitor well MW-0144 (completed in the shallow aquifer) at 0.076 mg/L. Again, this concentration is below the maximum concentration limit (MCL) of 0.1 mg/L presented in Table 1 of 40 CFR 192, which is the applicable ground water protection standard for UMTRCA Title I sites. A time-concentration plot is enclosed for the results of monitoring performed since 1999 for this constituent in monitor well MW-0144. As shown on this plot, a negative slope (e.g., decreasing trend line—Criterion 2) continues to occur for the concentration of molybdenum in this monitoring well when applying the May 1, 2007 sampling result to a linear regression analysis of the complete data set (that also includes the results reported for the first two rounds of samples collected during the additional 2-year period of reduced monitoring, 0.0850 mg/L in December 2005 and 0.0466 mg/L July 2006).

Ground water level measurements collected during the May 1, 2007 monitoring event continue to indicate an upward hydraulic gradient in the deeper uncontaminated confined aquifer (Criterion 1). This continued upward hydraulic gradient in the deeper aquifer is consistent with historical data, including the additional 2-year period of reduced ground water monitoring. An updated hydrograph is enclosed that displays the ground water level data collected since 1999 from the four remaining monitoring wells at the site (MW-0134 and MW-0144 completed in the shallow aquifer and MW-0143 and MW-0145 completed in the deeper aquifer); the upward hydraulic gradient in the deeper aquifer is evident. This continued upward hydraulic gradient in the deeper aquifer prevents constituents from migrating from the overlying shallow unconfined aquifer downward into the deeper uncontaminated confined aquifer; most likely of particular concern would be the regional elevated arsenic concentrations that occur in the shallow aquifer (that are unrelated to DOE's former activities at the Salt Lake City processing site).

Mr. Reed Fisher, the CVWRF Manager, verified that during the past year there have been no unauthorized excavations within the areas at the site where contamination with residual radioactive material remains in subsurface soils and, also, that no unauthorized withdrawals or use of ground water from the shallow aquifer occurred. This demonstrates that the institutional controls in place at the site continue to remain protective.

The results from these three rounds of additional reduced scope ground water monitoring (Criteria 1 and 2), along with the information received from the current property owner that indicates no unacceptable risks related to pumping of ground water by CVWRF or the storm drain sump have occurred (Criterion 3), satisfy all the criteria for discontinuing monitoring at the site as stipulated in the NRC's December 15, 2005 correspondence and as agreed to by the Utah DEQ/DRC in the GCAP. Therefore, no further monitoring will be performed at the site, and the remaining four monitoring wells at the site will be decommissioned. DOE will proceed immediately with well decommissioning unless NRC directs otherwise.

Mr. Janosko

-3-

DOE would appreciate written consent (instead of confirmation) from the NRC regarding this matter.

Sincerely,



Jagdish Malhotra
Site Manager

Digitally signed by Jagdish L.
Malhotra
Date: 2007.05.23 10:13:47 -04'00'

Enclosures

cc w/enclosures:

P. Goble, UDEQ

P. Michalak, NRC

L. Morton, UDEQ

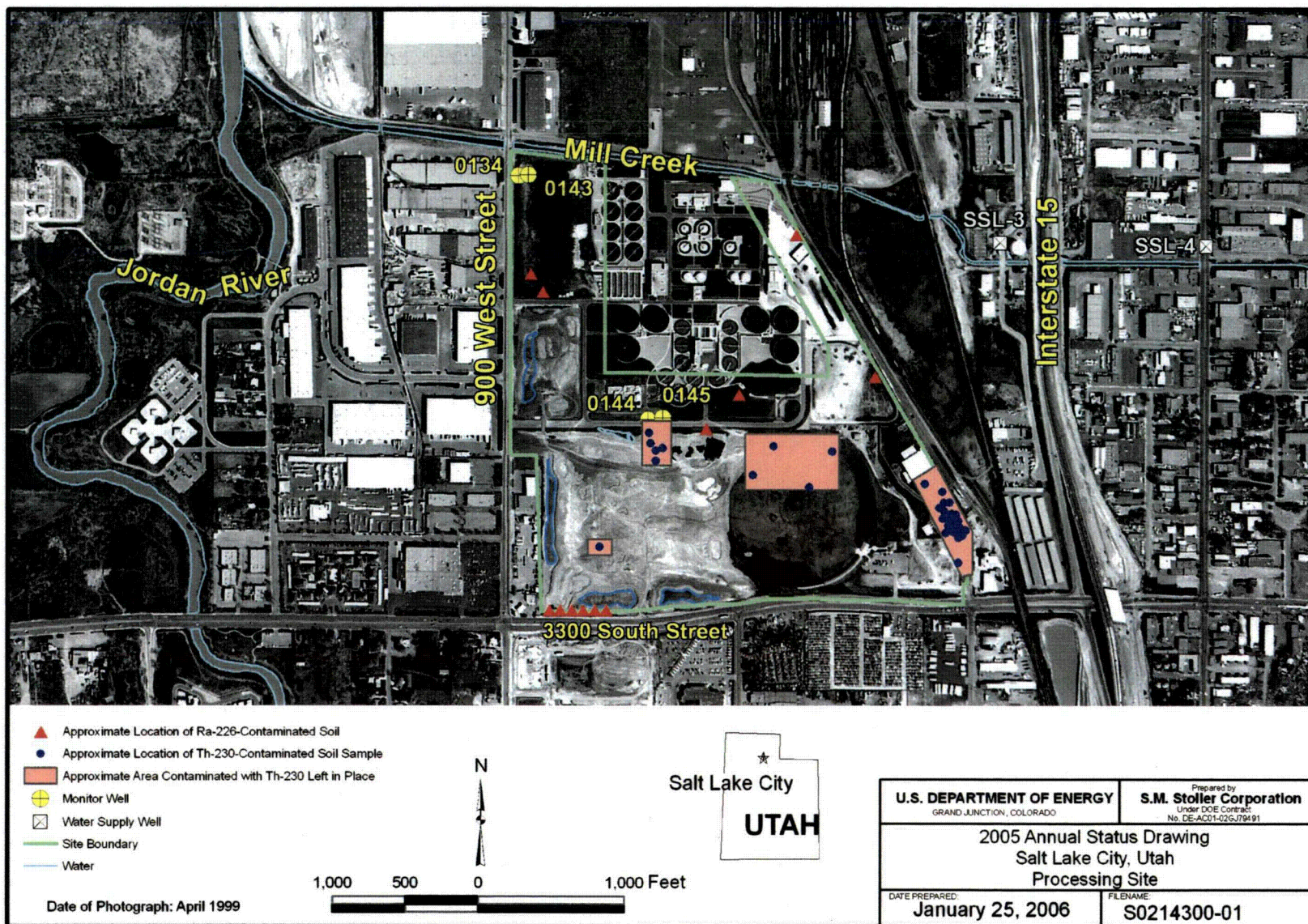
R. Fisher, Central Valley Water Reclamation Facility

T. Pauling, DOE\LM-20

C. Carpenter, Stoller

S. Hall, Stoller

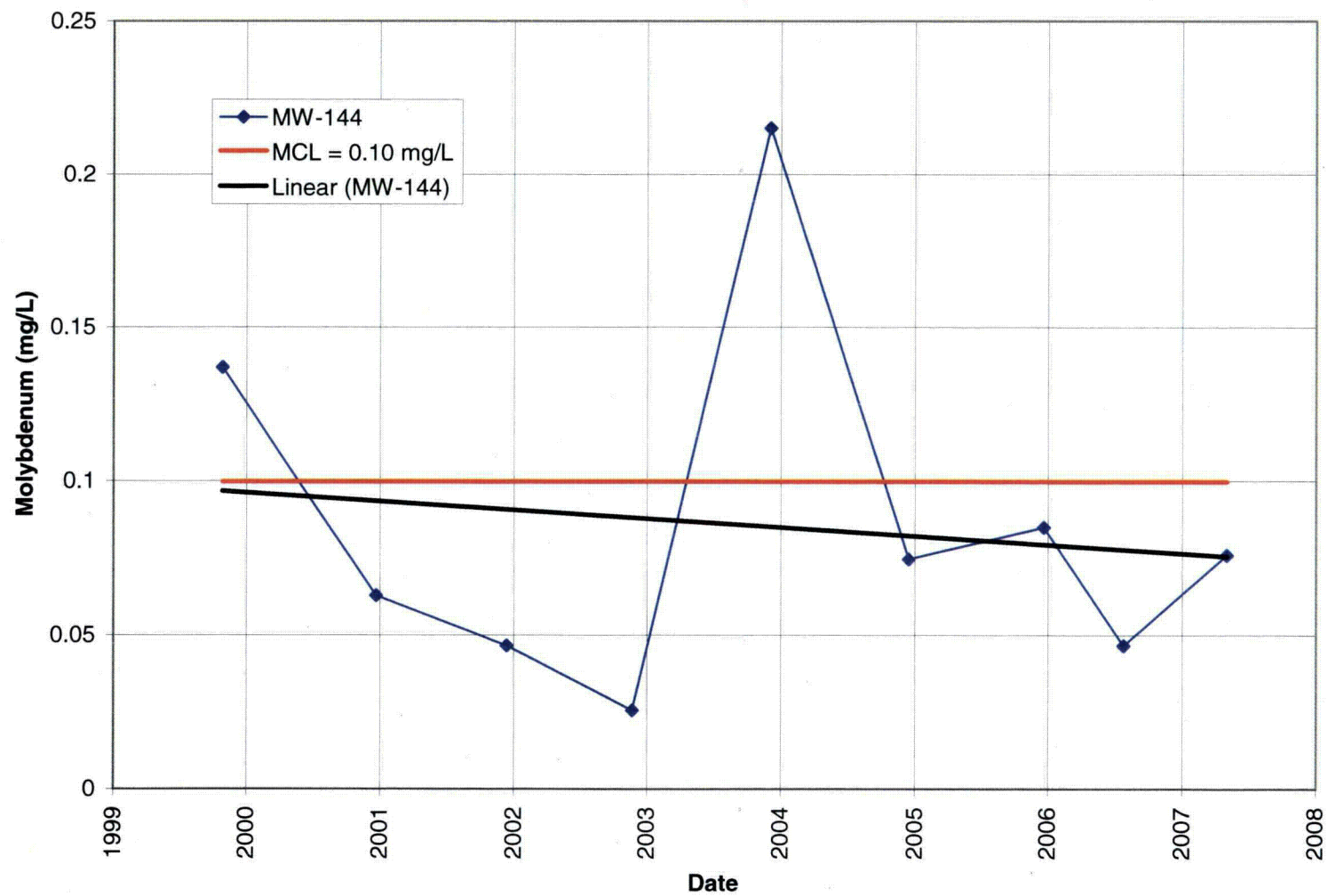
Records File: SLP 535.10 (D. Roberts)



M:\LTS\11110053\01\IS02143\IS0214300.mxd carverh 1/25/2006 9:53:33 AM

Salt Lake City, Utah, Processing Site

Time-Concentration Plot
Linear Regression
Molybdenum Concentrations
MW-144 (Onsite, Shallow Aquifer)
Salt Lake City Processing Site



Hydrograph Salt Lake City Processing Site

