



U.S. Department of Energy

Grand Junction Office
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Grand Junction, CO 81503

MAR 15 2002

Madeline Roanhorse, Director
Navajo Nation UMTRA Program
Division of Natural Resources
P.O. Box 1875
Window Rock, AZ 86515

Subject: Trip Report-Tour of the Shiprock, New Mexico, UMTRA Project Site,
March 5, 2002

Dear Ms. Roanhorse:

Enclosed are two copies of the subject report for the site tour. The purpose of the tour was to view the main site features associated with the compliance strategies in the draft *Groundwater Compliance Action Plan*. The tour also served as an introduction to the site for Mr. Bill Von Till of the Nuclear Regulatory Commission in Washington, D.C., and Mr. Larry Arnold of the DOE-GJO, both of whom had not been there before.

Please contact me at 970/248-7612 if you have any questions.

Sincerely,

Donald R. Metzler
Program Manager

Enclosures

cc w/enclosure:

S. Austin, Navajo Nation EPA
L. Benally, Navajo UMTRA
B. Von Till, NRC
Project File GWSHP 3.5 (DOE)

cc w/o enclosures:

L. Arnold, DOE-GJO
C. Goodknight, MACTEC-ERS
S. Marutzky, MACTEC-ERS

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WM-58*



CONTRACT NO.: DE-AC13-96GJ87335
TASK ORDER NO.: MAC02-05
CONTROL NO.: N/A

MEMO TO: S. Marutzky
FROM: C. Goodknight *C. Goodknight*
DATE: May 14, 2001
SUBJECT: Tour of Shiprock, NM, UMTRA Ground Water Site for NRC, DOE, and Navajo Nation EPA, March 5, 2002
Attendees: Craig Goodknight and Sam Marutzky (MACTEC-ERS), Bill Von Till NRC, Washington, DC, Hydrogeologist/Project Manager, and Larry Arnold (DOE-GJO, Site Coordinator)

From 8:30 am to 3:00 pm on March 5, 2002, five participants toured the Shiprock, NM, site. The purpose of the tour was twofold: (1) an introduction to the site for Mr. Bill Von Till and Mr. Larry Arnold, both of whom had not seen the site, and (2) to see the main site features involved with the compliance strategies for remediation of contaminated ground and surface waters as proposed in the draft GCAP. The tour progressed as shown in the following bullets, with appropriate comments/concerns listed for each feature.

- NECA gravel pit, disposal cell and LTSM site property on terrace surrounding the cell

The presence of saturated tailings in the northeast part of the disposal cell was discussed.

The locations of filled drainages on the terrace, believed to be pathways for ground water migration to the floodplain, were shown as well as locations of escarpment seeps.

An overview of the floodplain area was made and the contaminant plume extending to the San Juan River was discussed.

Flood damage from July 14, 2001, was observed at the northwest end of the rock-lined dissipation area, and planned repairs were discussed.

Discussion was made of the possible weir to measure flow in the drainage channel planned to direct flow off the disposal cell into Bob Lee Wash.

- Sites of planned extraction wells in terrace east area, area of proposed evaporation pond in the radon cover borrow pit, and upland Mancos Shale area

S. Austin discussed adding another extraction well west of US Highway 666 in the area of well 841.

MACTEC responded by proposing to add another extraction well just east of US Highway 666 north of the old Navtec building.

- Many Devils Wash area

Erosion damage to interim actions from the July 14, 2001, flood was viewed. Seeps, exposed pools, the location of the ISCO surface water sampler, the proposed french drain location, and loess pillars that could pose a collapse hazard were viewed.

- Bob Lee Wash, San Juan River floodplain area, and artesian well 648

Erosion damage from the July 14, 2001, flood in Bob Lee Wash was viewed, and proposed erosion control along the floodplain access road was discussed. Sites of planned extraction wells in the contaminant plume on the floodplain near well 854 and the surface water sample location 940 on the San Juan River were visited.

Seep 426 along the escarpment was observed.

- Areas west of US Highway 666

The distributary channel of the San Juan River and 1st and 2nd Washes that flow into it were observed, and ecological concerns with exposed slightly contaminated water were discussed.

Observed in the terrace west area were well 841, the outlet for the Helium Lateral Canal system, well 1060, areas around the proposed Dine College site and elementary and high school to the west, and the flushed low terrace area north of US Highway 64.

Bill Von Till indicated that contingency plans should be stated in the GCAP to back up proposed compliance strategies. MACTEC-ERS response was that the observational approach would be used to evaluate the effectiveness of remediation after 3 to 5 years and that alternate remediation methods would be evaluated and implemented, if necessary.

A report of this trip prepared by Larry Arnold is attached.

CG/ld
Attachment

cc w/att: L. Arnold
M. Kautsky
D. Metzler
M. Madril
R. Richardson
File Project GWSHP 4.2 thru K Sutton

Trip Reports

Date: 3/5/02

Purpose: Site tour and Orientation for Bill VonTill (NRC) and Larry Arnold (DOE-GJO) accompanied by Steve Austin (NNEPA) and Craig Good Knight (Mactec) and Sam Marutsky (Mactec)

Brief Summary: Discussed extent of surface and GW contamination, remediation plan (per the GCAP), viewed erosion caused by flooding on July 14, 2001 and proposed siting of french drains and pumping wells.

Safety Issues: many debris wash - possible collapse of loess pillars, construction of shoring wall (near escarpment), dehydration & heat-related stress, potential thunderstorms, dust (summer weather)

Actions: need to review Navaho comments to the GCAP; fence repairs, gates & locks that have been removed (vandals)

Larry Arnold
3/5/02