

Navajo Uranium Workshop

Tuba City Open Dump (TCOD)

Monitoring Well (MW)-07 Waste Characterization Project Update

November 4, 2009
Gallup, New Mexico
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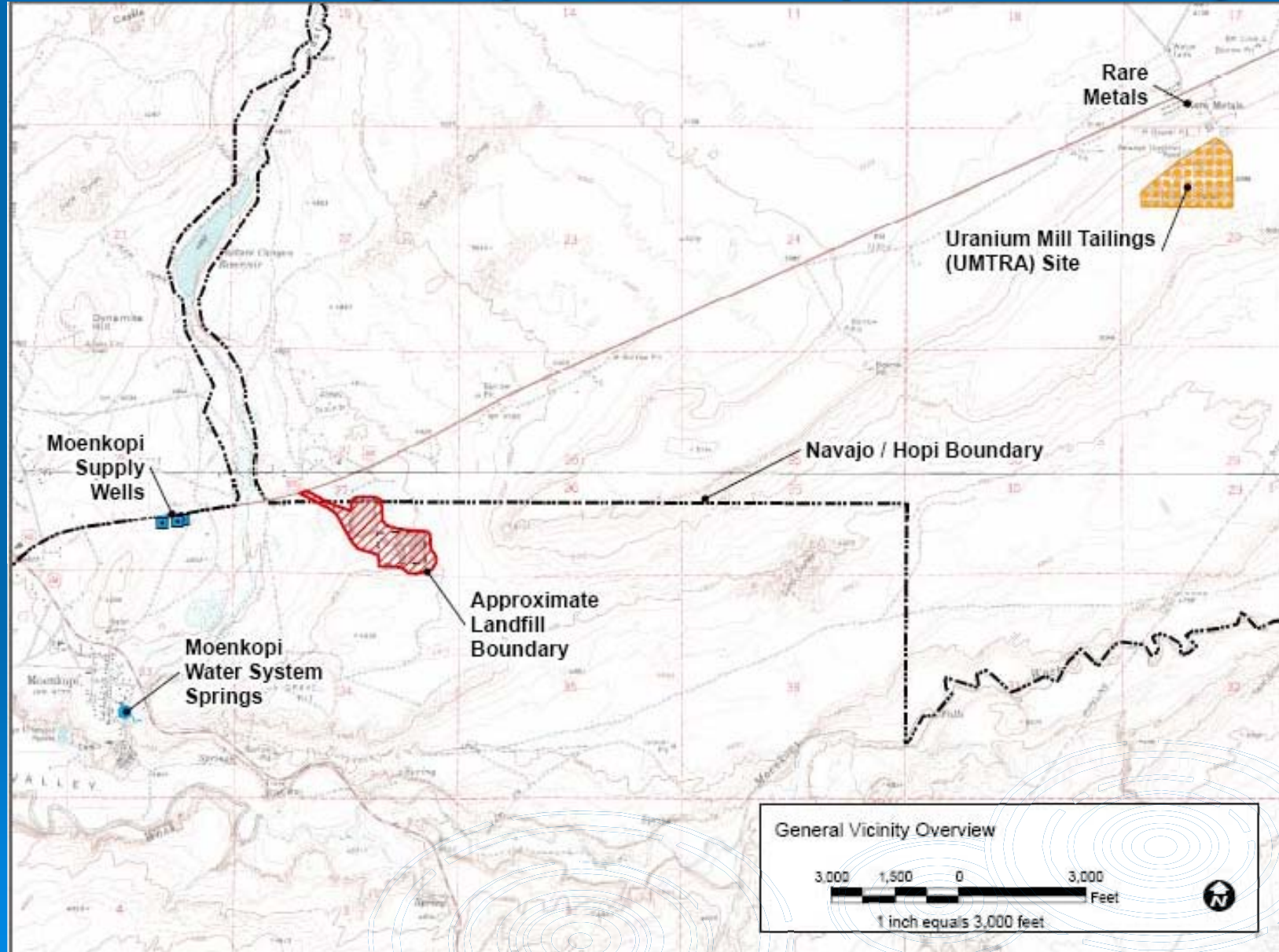
Background/Updates

- The TCOD (30 acres) is located on the lands of the Hopi Tribe and the Navajo Nation.
- The site was an unregulated solid waste dump that received waste from the 1940s to 1997.
- Shallow groundwater below the dump contains elevated levels of uranium.
- BIA is the lead federal agency responsible for closing the site and closure investigations have been on-going for the past several years.
- Tribes want BIA to take immediate action to address the uranium contamination and are pushing for clean closure of the dump at an estimated cost of \$40 million.
- Existing data indicates that drinking water wells and springs are not currently impacted by uranium.




Tuba City Dump

Tuba City Open Dump & Vicinity



BIA and EPA Interagency Agreement

- BIA provided approximately \$1.7M to EPA via an Interagency Agreement to implement the MW-07 project (source investigation) Spring 2009;
 - EPA contractors are implementing the work with EPA oversight and Tribal participation; and
 - Field work started in September 2009.
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MW-07 Project Rationale

- The MW-07 area shows the highest concentration of uranium in the shallow groundwater;
- Contaminated groundwater could migrate from this location; and
- Waste or material in this area may be contributing to the elevated uranium concentrations in the groundwater.

Location of 2009 EPA work at the Tuba City Open Dump Site

Navajo Trail

0 125 250 500 Feet

Monitoring Well MW-07

Investigation Area
(may change slightly depending on information discovered during the investigation)

Old Dump

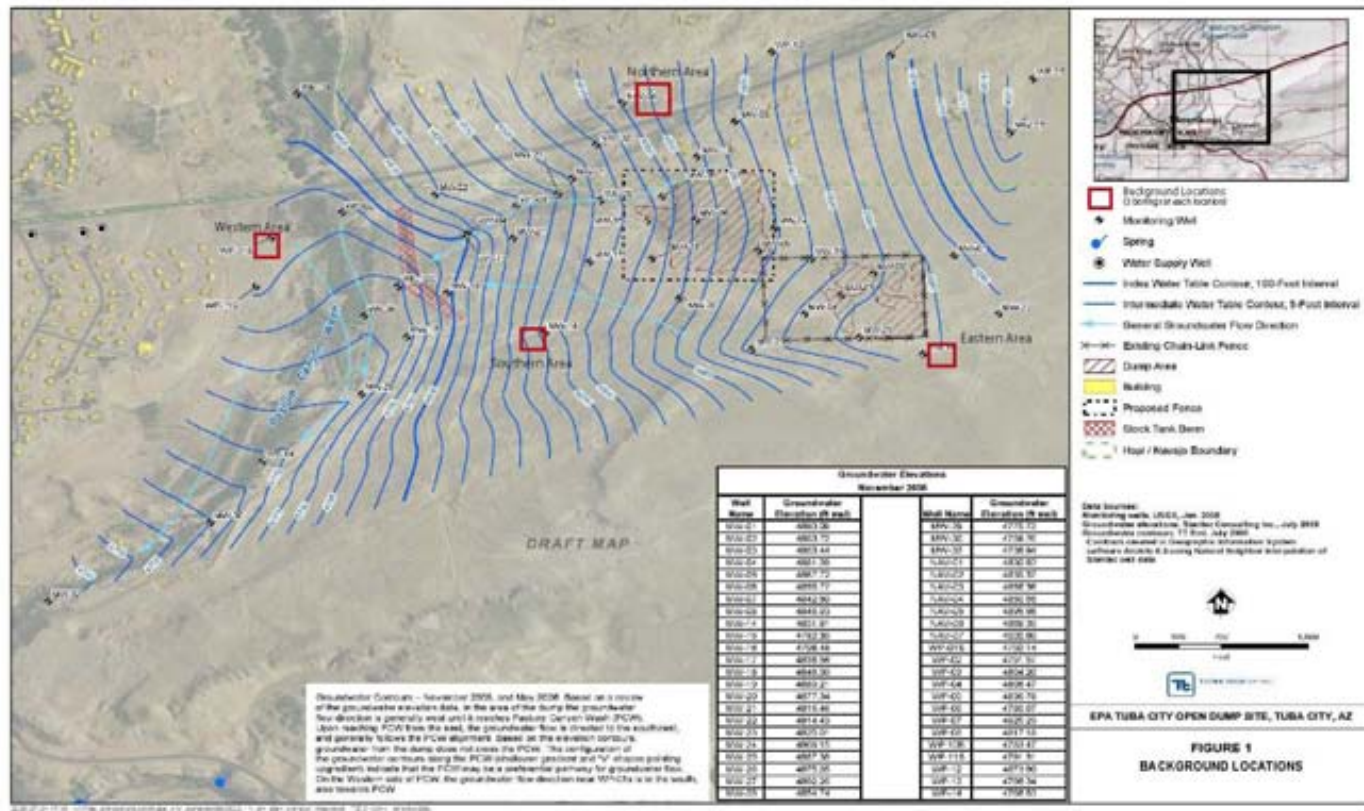
Fence to keep out people and livestock

TE TETRA TECH, INC.

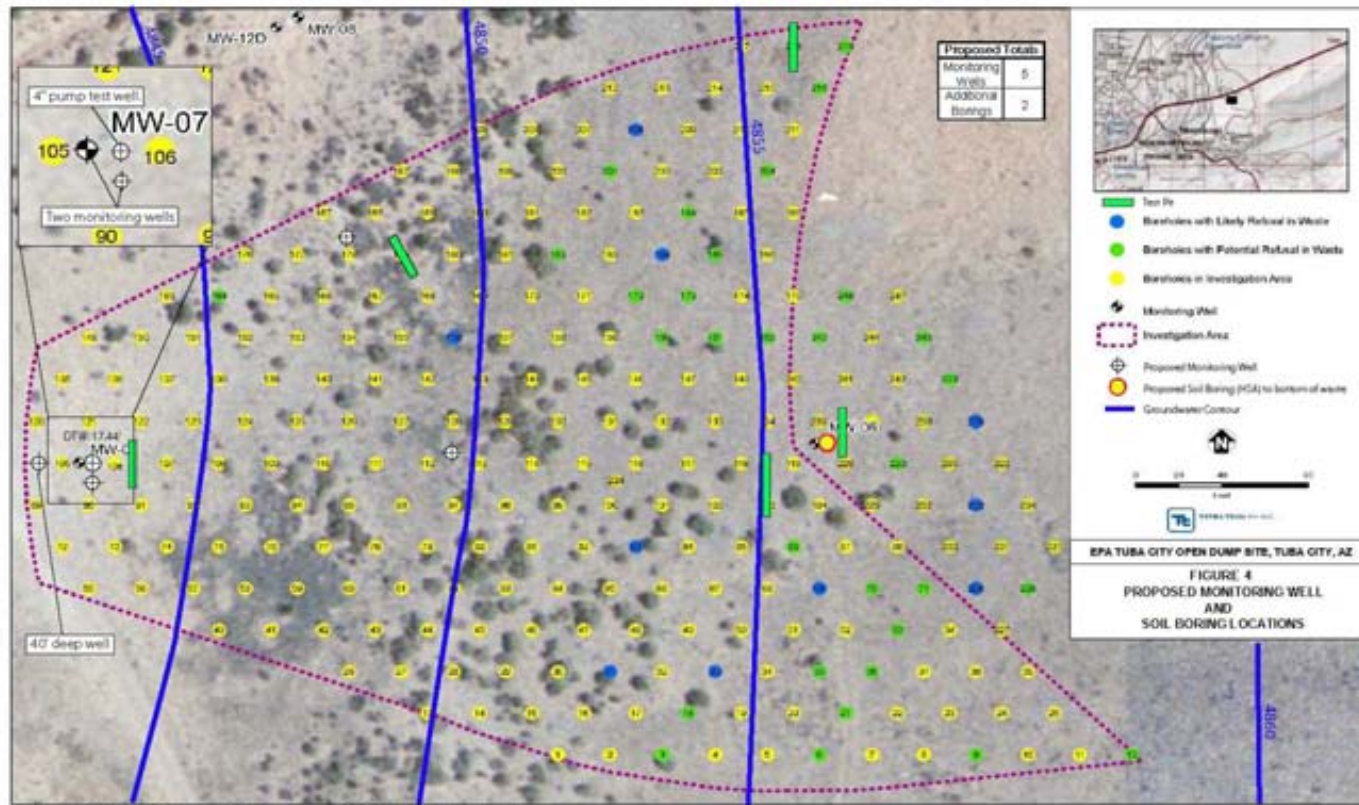
MW-07 Project Objectives

- Characterize the waste material and identify the potential source(s) of uranium contamination in the vicinity of MW-07 (2+ acre area);
- Properly Manage Investigation-Derived Waste; and
- Collect information about the groundwater that will be used to evaluate potential options for addressing contaminated groundwater in the MW-07 area.

TCOD Groundwater Contour Map



Borehole, Test Pit and GW Locations



Site Photos



Site Photos



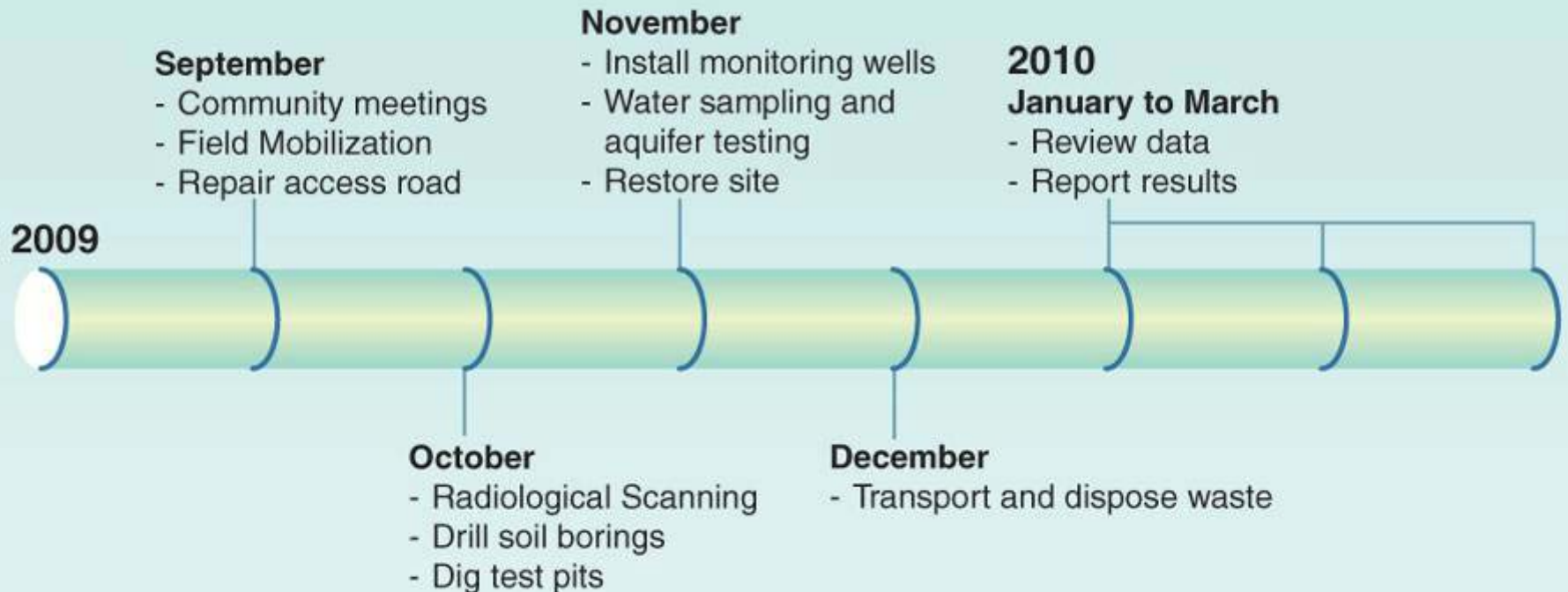
Site Photos



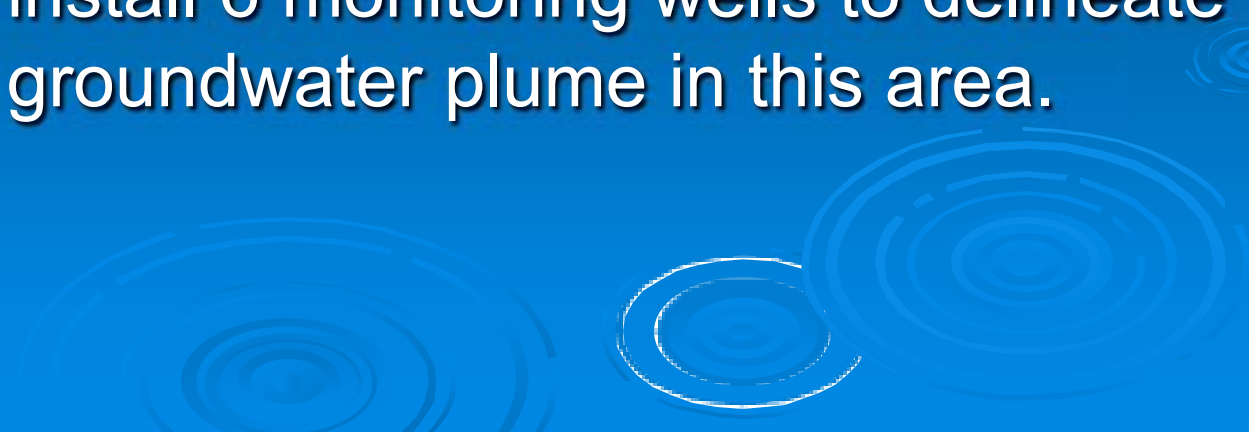
Site Photos



MW-07 Project Timeline



MW-07 Project Updates

- Completed 247 direct push borings;
 - Completed 5 test pits, which generated approximately 250 cubic yards of material;
 - Planning to install up to 5 hollow stem augers (deep borings) to further characterize the waste in the investigation area; and
 - Planning to install 6 monitoring wells to delineate the shallow groundwater plume in this area.
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Administrative Order on Consent

- EPA and BIA are working on an Administrative Order on Consent (AOC) for performance of an Investigation/Feasibility Study (RI/FS), which will have a predictable schedule and will be enforceable;
- Under the AOC, BIA would perform the RI/FS with EPA oversight;
- The AOC is expected to be completed in the spring of 2010; and
- Following completion of the RI/FS, EPA will select the final remedy in conjunction with BIA and with input from the Tribes and the public.

Summary

- Preliminary results from the first three phases of the MW-07 project has not identified any elevated levels of gamma “uranium” in the old cell investigation area from;
- Final MW-07 project analytical results/report are expected in early 2010;
- BIA is planning a comprehensive investigation and development of cleanup and site closure alternatives as part of the RI/FS; and
- The RI/FS process will be conducted under an enforceable agreement between BIA and EPA with an established scope and schedule.

Thank You

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