

Navajo Uranium Workshop Tuba City Open Dump (TCOD) Monitoring Well (MW)-07 Waste Characterization Project Update

> November 4, 2009 Gallup, New Mexico Carl Warren – EPA

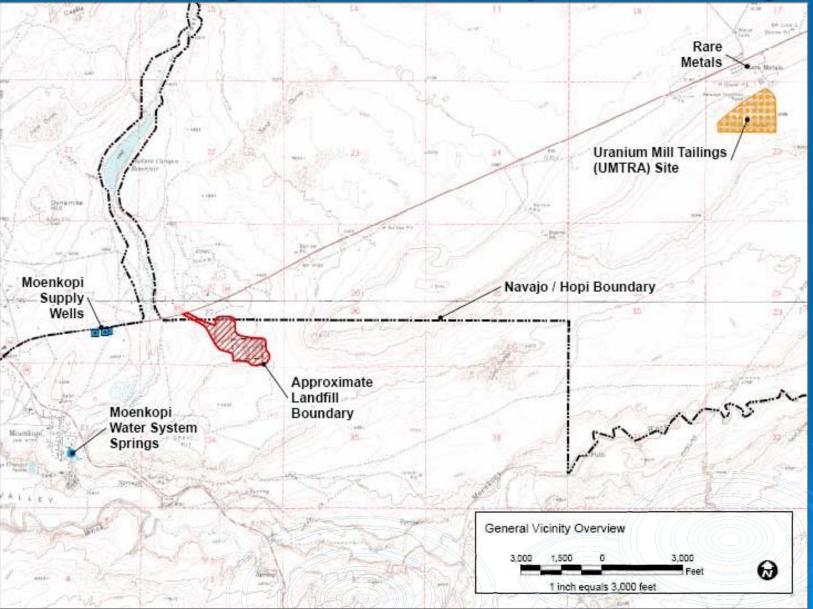
### **Background/Updates**

- 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 ongoing 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

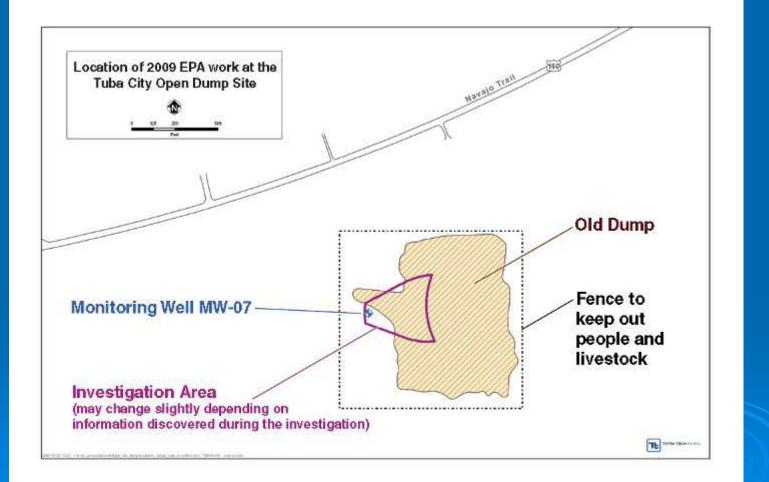
Field work started in September 2009.

### **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.

# MW-07 Project Area



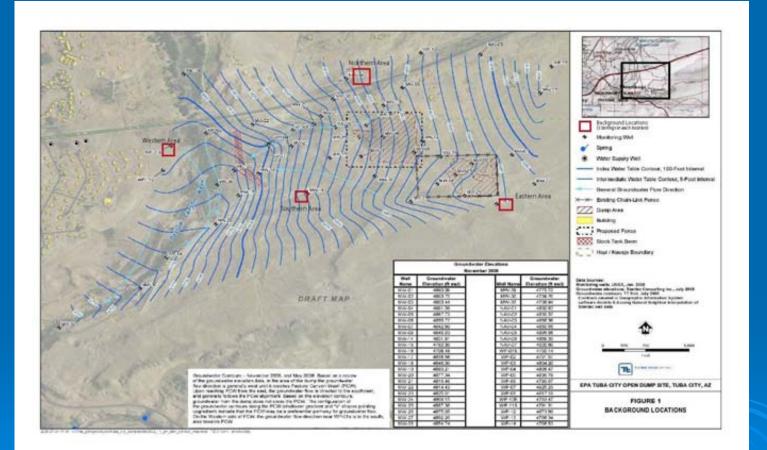
#### **MW-07 Project Objectives**

Characterize the waste material and identify the potential source(s) of uranium contamination in the vicinity of MW-07 (2+ acre area);

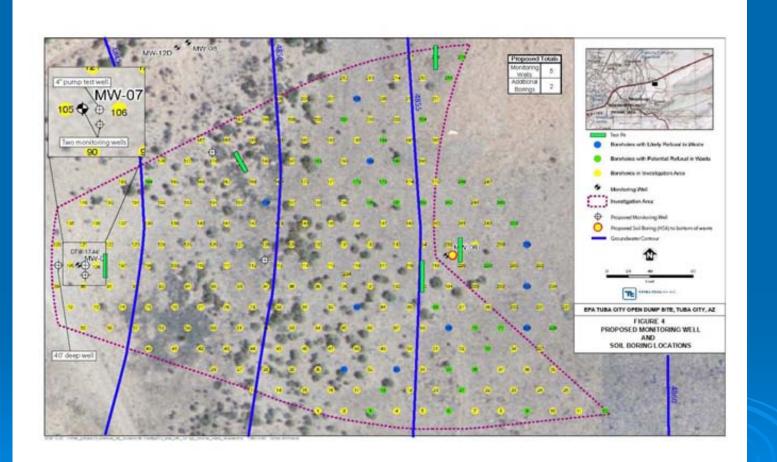
Properly Manage Investigation-Derived Waste; and

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























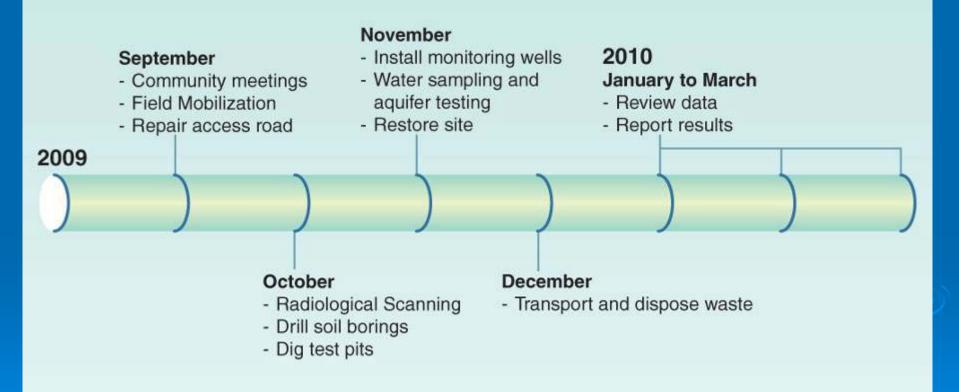








#### **MW-07 Project Timeline**



# **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.

#### 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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