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Jm 3/1/2018

Meeting Notes
Technical Team Meeting
Chromium Interim Measures Performance Monitoring Work Plan
Held on November 30, 2017
DOE/LANS Pueblo Complex, Los Alamos

38450

Meeting Notes: Technical Team Meeting - Chromium Interim Measures Performance Monitoring Work Plan (Work Plan), due January or February 2018

Meeting Date and Location: November 30, 2017; DOE/LANS Pueblo Complex, Los Alamos

Attendees:
DOE EM-LA: Cheryl Rodriguez
LANS: Danny Katzman
NMED-HWB: Michael Dale, Dane Andersen

1. *Introduction from DOE/LANS presenting a draft outline of the Work Plan (see attached document)*

   DOE/LANS presented the overall objectives of the Work Plan which include:

   a. Reducing chromium concentrations at R-50 to 50 ppb,

   b. Controlling the plume boundary,

   c. To collect data to assess interim measures performance and make applicable adjustments.

   DOE/LANS also discussed an additional tracer injection study at CrIN-4 and CrIN-5 in the future.

2. *NMED comments on the Work Plan*

   In addition to NMED's Recommendations for Performance Monitoring Work Plan Content (see attached document), NMED suggested adding a summary of ongoing Operational Testing in the Work plan including monthly water level data and analytical data, and recommended quarterly sampling of CrEX wells. NMED also inquired about geologic cross sections or fence diagrams of the chromium plume wellfield. DOE/LANS stated that cross-sections will be submitted as part of the March 30, 2018 Consent Order Milestone deliverable "Compendium of Cr related technical reports".

   Action Items

   NMED will provide additional comments on the draft Work Plan outline as soon as reasonably possible.

   DOE/LANS will evaluate NMED's suggestions and recommendations, submit an updated version of the outline as soon as possible. DOE/LANS suggests meeting in mid-December to incorporate additional suggestions from NMED and finalize the Work Plan outline.

NMED Recommendations for Performance Monitoring Work Plan Content:

1) Provide an overview of the timeline for:
    a. installation and testing of the IM infrastructure,
    b. operational activities conducted to date,
    c. performance monitoring conducted to date.

2) Describe that the IM will be phased in. Injection into CrINs-3,4, and 5 will constitute the first phase and actions in CrINs-6, 1, and 2 will follow from the recommendations in the March 2018 report.

3) Provide a table with performance monitoring wells, suite, and frequency:

    a. monitoring wells R-50 S1 and S2, R-45 S1 and 2, R-44 S1 and S2, SIMR-2, R-61 S1, CrPZs, and CrEXs,
    b. for monitoring wells: monthly for metals and general inorganics (offsite laboratory) and tracers, quarterly for tritium at monitoring wells,
    c. for CrPZs and CrEX wellhead samples: quarterly for metals, general inorganics, and tritium,
    d. include time-series curves with water-levels for performance monitoring wells.

4) Provide a water-table map that represents non-pumping/non-injection "baseline" conditions (for future comparison to IM extraction/injection conditions).

5) Commit to provide semi-annual reports that include:

    a. time-series plots for Cr, CLO4, NO3, and H3 concentrations from performance monitoring wells and piezometers,
    b. assessment of rate-of-change in performance monitoring wells to guide adaptive management of water distribution into injection wells,
    c. cumulative Cr mass removal estimates for extraction wells,
    d. water-table map (same map as provided for DP-1835),
    e. data on tracer concentrations in performance monitoring wells from injection-well tracer deployments,
    f. table of steady-state heads at extraction and injection wells.

6) Key objective for semi-annual IM performance reporting: use observations for adaptive management (i.e., strategic distribution of available volume of treated water) to achieve hydraulic control.