

Hexavalent Chromium Project Expert Technical Review

Ellie Gilbertson, Acting Manager, Department of Energy,
Environmental Management Los Alamos Field Office

John Rhoderick, Director, Water Protection Division, New
Mexico Environment Department

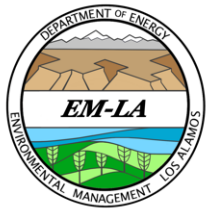
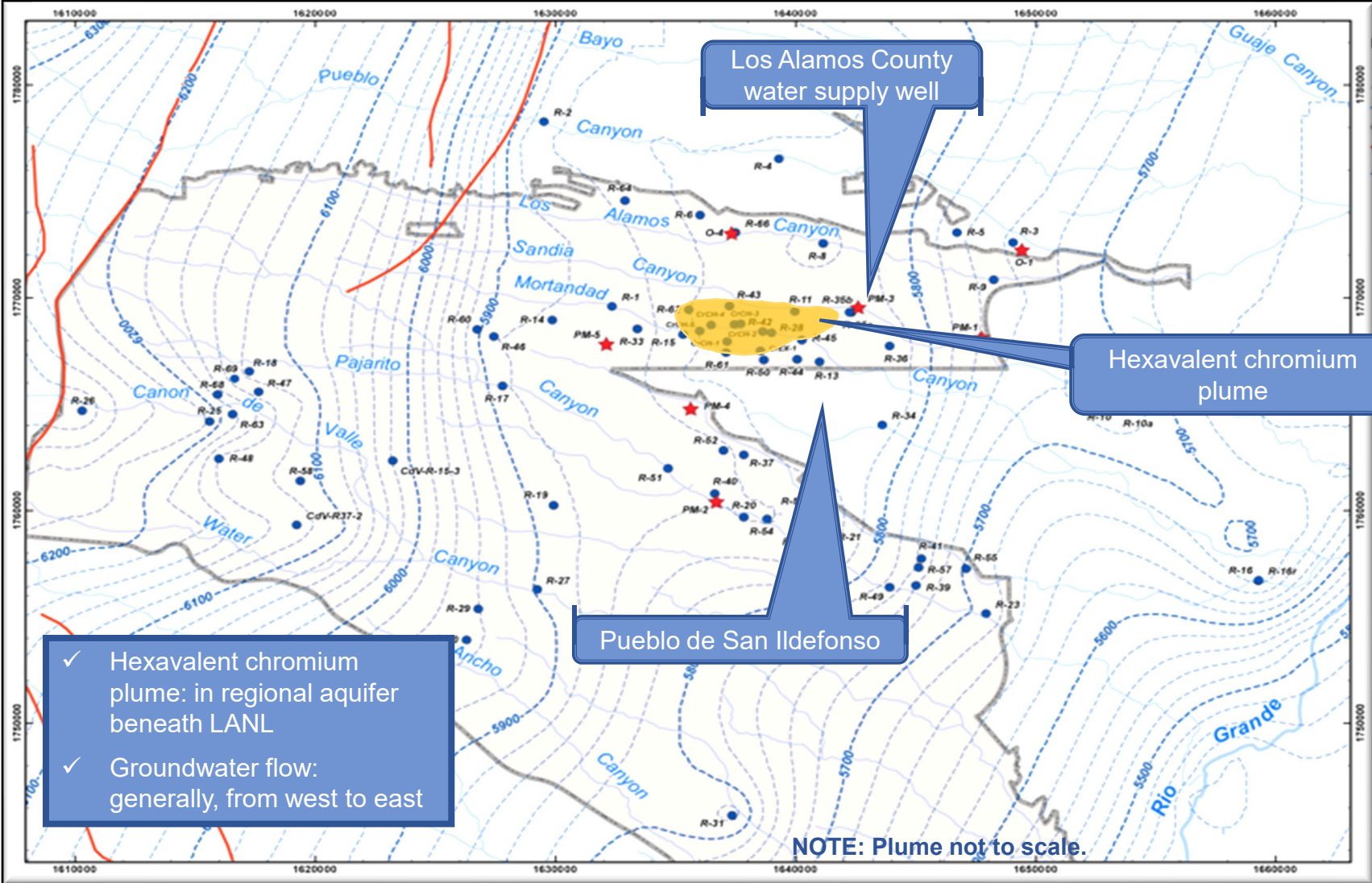


Origin of Hexavalent Chromium Plume

- Source of plume was a non-nuclear power plant at Los Alamos National Laboratory (LANL)
- Water containing potassium dichromate was periodically flushed from plant's cooling towers into Sandia Canyon from 1956-1972
- Up to 160,000 lbs. of hexavalent chromium was released during this period, a fraction of which migrated into the regional aquifer
- Current measurements estimate plume is ~1 mile long x ½ mile wide

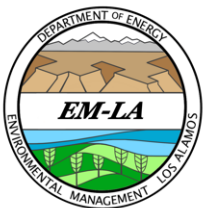


Protecting Los Alamos County & Pueblo de San Idefonso Water Quality

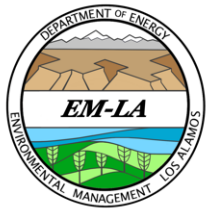
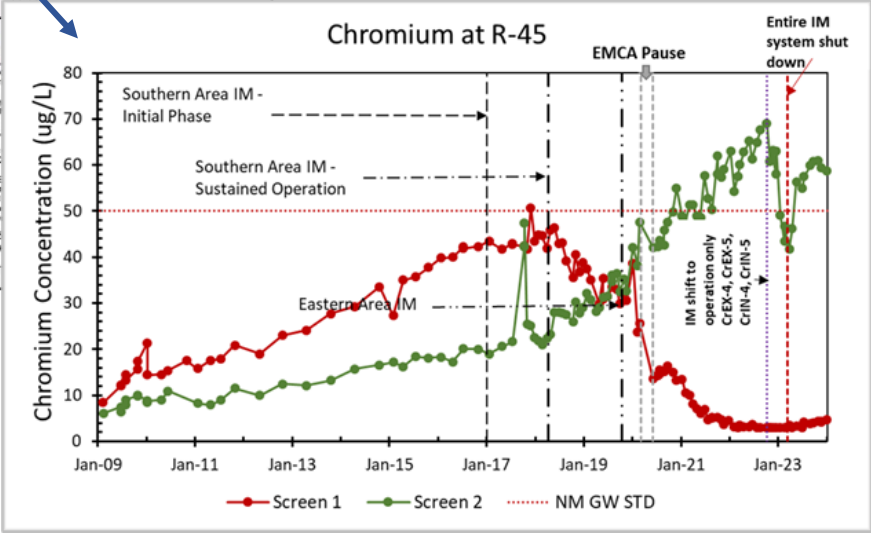
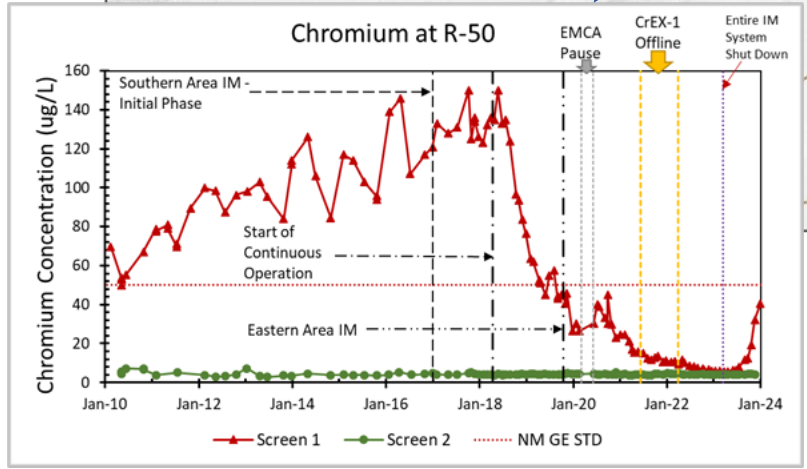
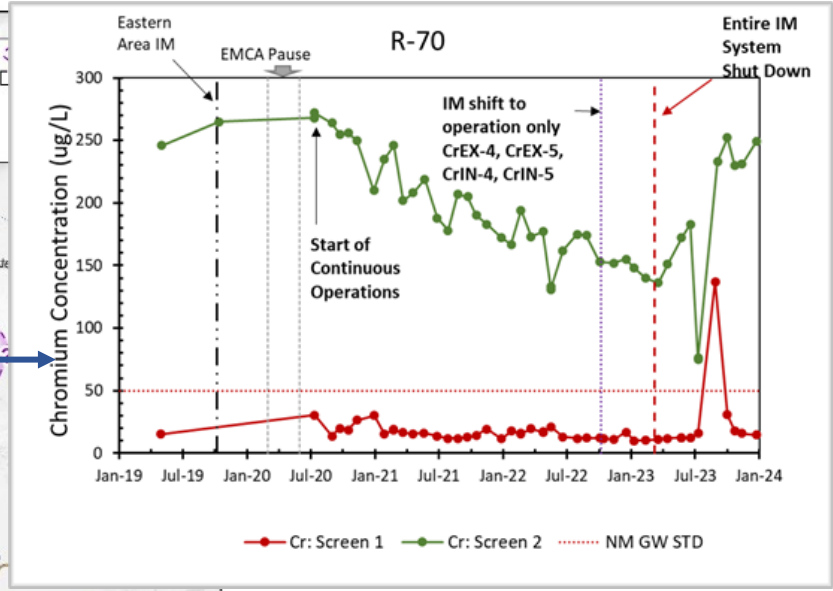
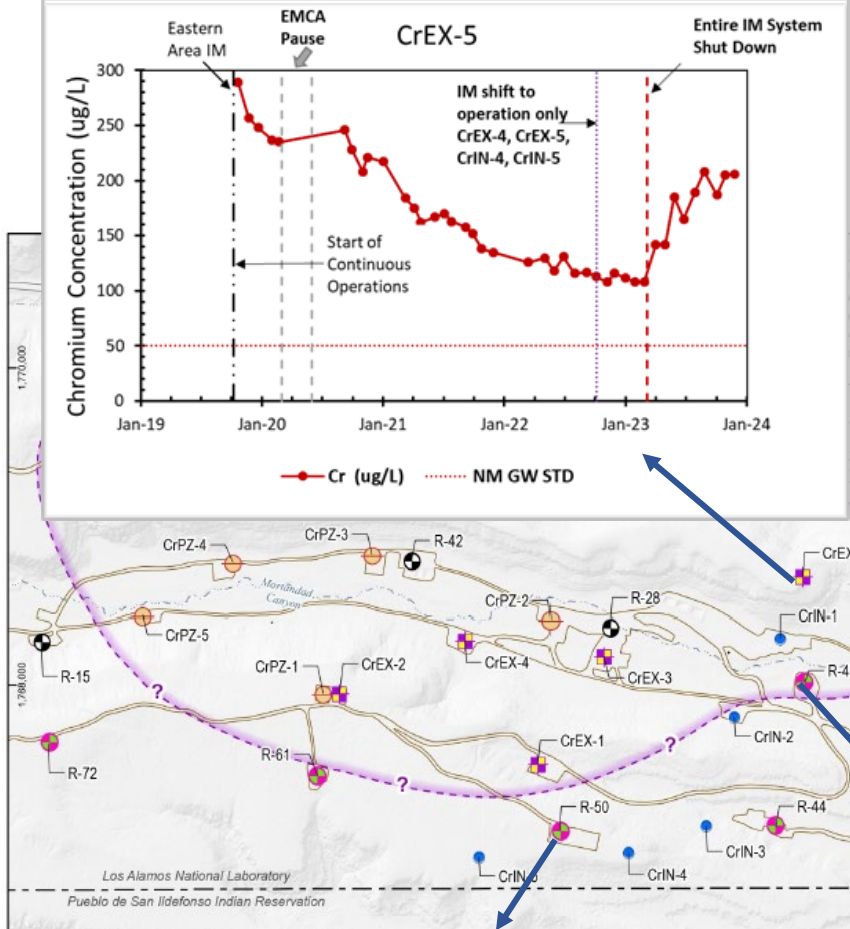


Status of Chromium Interim Measures (IM)

- December 2022, NMED directed EM-LA to cease injection
- March 2023, EM-LA ceased injection per regulatory direction and thus operation of the IM
 - Extraction not feasible without injection
- Monitoring and extraction well data shows increasing chromium concentrations since IM was shut down
- EM-LA conducting three-party technical meetings with EM-LA, NMED, and Pueblo de San Ildefonso



Chromium Concentration



Expert Technical Review

- Acting on recommendation from New Mexico Radioactive and Hazardous Materials Committee in August 2023 meeting
- EM-LA and NMED engaging experts to conduct technical review of scientific assumptions for operation of the IM
- Environmental impacts of prolonged system shutdown present urgent need to resume partial operations during technical review
- Experts will share their conclusions with EM-LA and NMED after the review to help the agencies determine a path forward

