



New Mexico Environment Department

Overview of Regulation of Radioactive and Hazardous Materials
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Radioactive and Hazardous Materials Interim Committee





Radioactive and Hazardous Materials Topics

Summary of the New Mexico Environment Department's authorities at higher-profile facilities

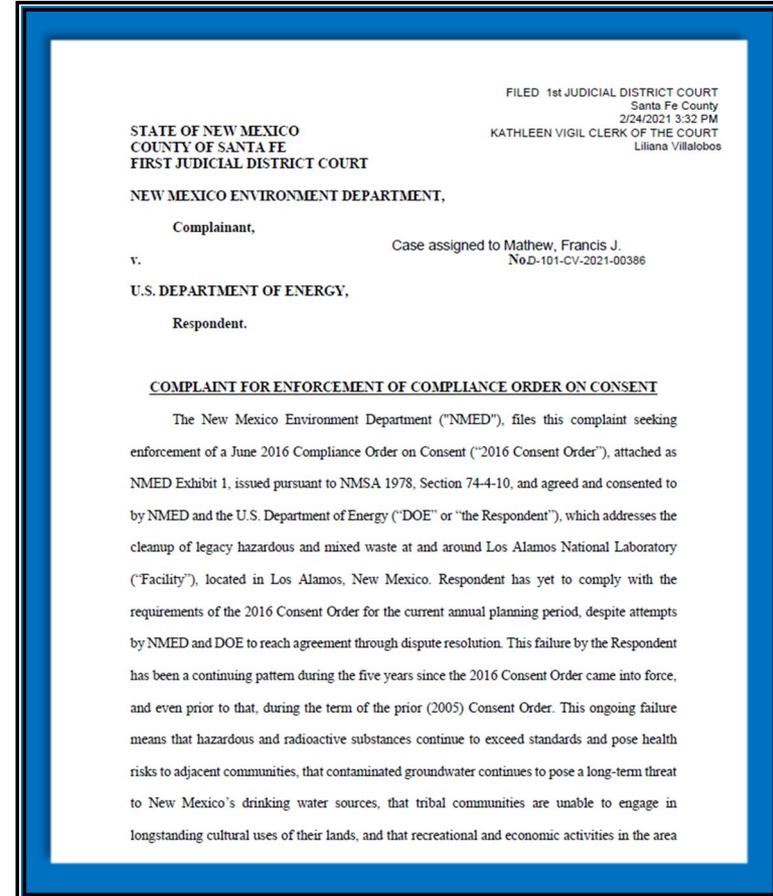
Facility	Hazardous Wastes	Radioactive Wastes
Upstream oil and gas	Not regulated	Regulated
Los Alamos National Lab	Regulated	Not regulated*
Sandia National Labs	Regulated	Not regulated*
Waste Isolation Pilot Plant	Regulated	Not regulated*
Holtec CISF/Spent Nuclear Fuel	Not regulated	Not regulated

*When a radioactive waste is mixed with a hazardous waste, we call that a mixed waste, and NMED does have some jurisdiction related to mixed wastes



Los Alamos National Laboratory 2016 Consent Order

- **Compliance Order on Consent (Consent Order) was signed by NMED and the U.S. Department of Energy (DOE) in June 2016**
- **Most corrective action for releases of hazardous waste at LANL are conducted under the Consent Order, not under the facility's Hazardous Waste Permit**
- **The Consent Order is an “enforceable document” pursuant to federal and state law; With few exceptions, it is the sole mechanism for enforcing corrective action activities at LANL**
- **DOE and NMED agreed on 19 milestones for Federal Fiscal Year 2022; milestones are subject to stipulated penalties**





Los Alamos National Laboratory 2016 Consent Order

Example: LANL did not commit to enforceable milestones to install and monitor wells in 2020-21



- **NMED considered DOE proposed FY2021 milestones/targets as deficient due to a lack of substantive and appropriate clean-up targets for coming years**
- **Mandated dispute resolution ended in January 2021 without agreement between NMED and DOE**
- **In February 2021, NMED filed a civil complaint in District Court, seeking to terminate the 2016 Consent Order and negotiate new terms that expedite cleanup of legacy waste**



Los Alamos National Laboratory Middle Delta Prime ("DP") Road

1940s disposal practices at LANL



Debris found by DOE in 2020



- Nearby Material Disposal Area (MDA) B was used for disposal of hazardous and radioactive waste in mid-1940s
- MDA B was remediated in 2011 and land parcels were transferred from DOE to Los Alamos County
- Potentially hazardous and radioactive debris discovered near Middle DP Road in February 2020
- LANL is implementing NMED-approved Solid Waste Management Unit assessment work plan; Scope of work increased with discovery of additional contamination
- Assessment report due from LANL six months after field activities are complete



Waste Isolation Pilot Plant Operating Permit Renewal

- **Renewal application submitted to NMED March 31, 2020**
- **Class 3 Permit Modification for New Panels 11 and 12 was submitted to NMED in July 2021**
- **NMED Requested this Class 3 Permit Modification be combined with Permit Renewal Application in order to focus on one public hearing addressing both items**
- **NMED reviewed the combined package and issued a Technical Incompleteness Determination, requesting additional technical information**



Image credit: Associated Press News



Kirtland Air Force Base Bulk Fuels Facility Spill

Granulated carbon filtration tanks
inside the Interim Measure
groundwater treatment system



- Progress continues toward the Resource Conservation and Recovery Act (RCRA) Phase II Facility Investigation with anticipated Kirtland Air Force Base draft submitted to NMED in Fall 2022.
- Groundwater and soil-vapor monitoring is on-going at both KAFB and offsite locations.
- The off-site pump and treat system continues to operate to prevent the lead scavenger compound EDB (ethylene dibromide) from migrating toward the Ridgecrest municipal well field
- The two northern most extraction wells currently pump water that meets the cleanup standard. This is necessary to maintain hydraulic conditions to extract EDB from the other wells in the interim measures treatment system



RCRA Regulations for Dry Cleaning Facilities

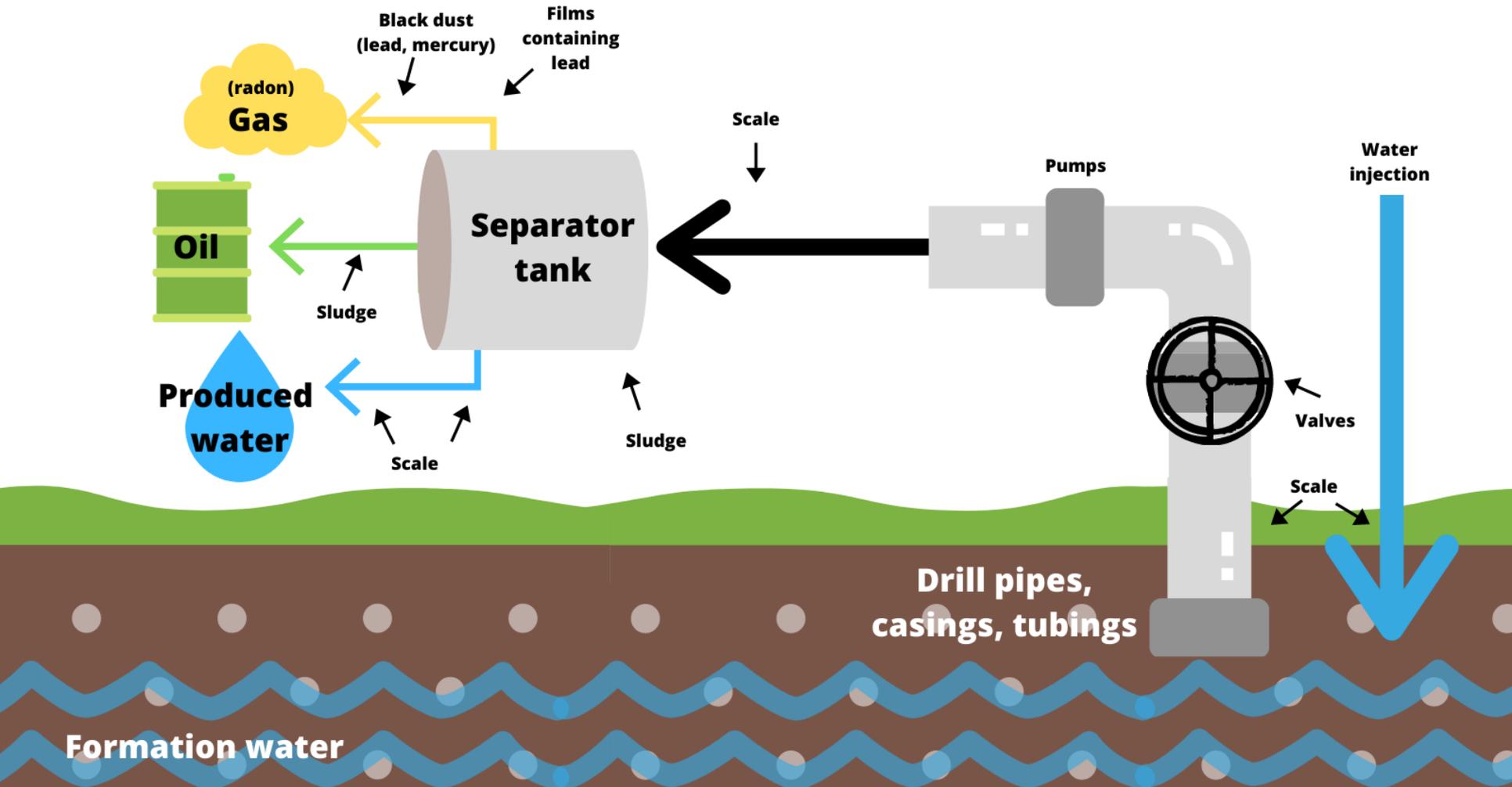


- **Dry Cleaners are generators of hazardous waste in the form of spent solvents**
- **Spent solvents have historically included halogenated compounds such as tetrachloroethylene (PCE) and trichloroethylene (TCE) and also nonhalogenated petroleum-based compounds**
- **Spent solvents are classified as listed hazardous waste from non-specific sources**
- **Dry cleaners must comply with the hazardous waste management requirements for hazardous waste generators**
- **Regulations include time limitations for hazardous waste storage and specific requirements for record-keeping and manifesting for transport of spent dry cleaning fluids to RCRA-permitted hazardous waste treatment, storage, or disposal facilities**



Radiation Control Act and Upstream Oil and Gas Industry

Naturally Occurring Radioactive Material (NORM)





Radiation Control Act and Upstream Oil and Gas Industry

- February 2021 – NMED sent 20 letters to the largest oil and gas operators in New Mexico concerning regulated NORM
- As of June 2022 - Responses and additional documentation from the 20 oil and gas operators has been received
- Preliminary survey results indicate that several oil and gas operators will require specific licenses as generators of NORM





Upstream Oil and Gas Industry

NMED field activities include:

- **Deploy a portable radiological lab to identify radioisotopes at various operations and determine if licensable NORM activity is present**
- **Conduct field verifications of industry survey results with confirmatory laboratory analysis where appropriate**



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