

SUBPART D
CATEGORICAL EXCLUSION (CX) DETERMINATION RFO/CX10-94

Proposed Action: Background Soils Characterization

Location: Within the West Half of the Buffer Zone and on Public and Private Land Outside the Boundaries of Rocky Flats Plant, Golden, CO

Proposed by: U.S. Department of Energy, Rocky Flats Office

Description of the Proposed Action:

Rocky Flats Office proposes to characterize soils in areas within the vicinity of RFP which would be designated as background areas in terms of soil parameters and concentration of selected analytes. Soil sampling would occur in the West Buffer Zone of Rocky Flats Plant (RFP) and in off-site locations along the foothills west of RFP bordered on the north by South Boulder Creek and on the south by Ralston Creek drainage. The data generated by the project would determine the validity of background soil sampling previously logged in the Rock Creek drainage as part of the Operable Unit (OU)1 Remedial Investigation, supplement soils investigation work done in OU's 2 and 3, and would provide a baseline for future soils remediation work at RFP. Potentially affected areas are shown in Figure 1. Some soil sampling sites may be located near the West Spray Field, Individual Hazardous Substance Site (IHSS) 168, but no samples will be taken from within IHSS boundaries. Offsite sampling is contingent upon obtaining landowner permission.

Phase I of the field work would require the collection of soil samples by scraping the surficial soil using the RFP Geotechnical Operating Procedures Manual, 5-21000-OPS-GT.8, Surficial Soil Sampling. The procedure requires laying out a 1 meter square template at each site. Within that template, a 10 centimeter (cm) by 10 cm steel sampling jig would be driven 5 cm into the ground at the corners and in the center of the template. The vegetation would be clipped from the area within the steel jig and soil will be removed to a depth of 5 cm from each of the five jig positions within the template. Total soil removed from each sampling location is 2500 cubic centimeters (5 positions x 500 cc) or 3.75 kilograms of material. The location of each site would be marked with a steel stake to pinpoint its location for future reference. Approximately 120 surficial sampling sites would be located, of which approximately 20 (15%) would be located in wetlands or floodplains. Sampling would be performed by a crew of two persons, using a field vehicle where access permits, or on foot in less accessible areas.

Phase II would require the selection of approximately forty pit sampling sites. Approximately five of these sites would be located within jurisdictional wetlands, while the remaining sites would be located on dry upland terrain. The total wetland area temporarily affected by test pit trenching is approximately 225 square feet. The exact locations of all test pits have not yet been selected; but it is likely that sampling sites will be located on a systematic grid (see figure 2). Test pit sampling would be performed in accordance with RFP Geotechnical Operating Procedures Manual, 5-21000-OPS-GT.7, Logging and Sampling of Test Pits, Trenches, and Construction Excavations. The test pits would be dug by a crew of three using a backhoe and other field equipment, including a field vehicle and backhoe delivery vehicle. Soil characterization pits would be approximately 9 to 15 feet long, 3 to 5 feet wide, and 4 feet or less deep. Excavated material would be selectively stockpiled near the excavation to allow backfilling of the material in the general order in which it was removed. Pits would be backfilled immediately after sampling and data logging and would be covered with mulch to promote regrowth of native flora. A minimal amount of vegetation would

be compressed at each site due to vehicle maneuvering.

Soil samples that meet Department of Transportation (DOT) shipping guidelines would be sent for analysis to licensed laboratories authorized to handle and dispose of samples that potentially contain radiological and hazardous constituents. Samples that contain background levels of contaminants or below, and secondary waste generated by sample testing, would be disposed of by the labs. Samples containing higher than background levels of contaminants, or levels above that allowed by the lab license, would be returned to Rocky Flats for storage pending disposal. Samples that exceed DOT shipping limits would be analyzed by onsite labs.

Sampling activities are scheduled to begin in 1994. Total project cost is estimated at \$1.95 million.

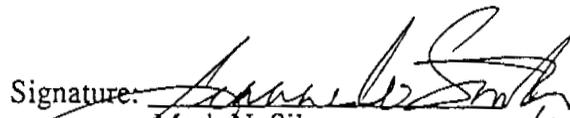
Categorical Exclusions to be applied:

B3.1 Site characterization and environmental monitoring, including siting, construction, operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, and radar), geochemical, and engineering surveys and mapping, including the establishment of survey marks; (b) Installation and operation of field instruments, such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools; (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants; (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities, including assessment of potential wind energy resources; (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

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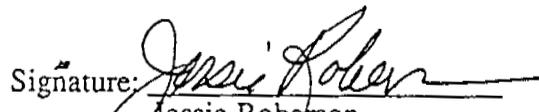
I have determined that the proposed action meets the requirements for a categorical exclusion as defined in the Subpart D of 10 CFR 1021. Therefore, I approve the categorical exclusion of the proposed action from further NEPA review and documentation.

Date: May 9, 1994

Signature: 
Title: Mark N. Silverman
Manager, Rocky Flats Office

RFO Project Sponsor:

Date: May 4, 1994

Signature: 
Title: Jessie Roberson
Acting Assistant Manager for
Environmental Restoration

I have reviewed this determination and find that a categorical exclusion is the appropriate level of NEPA documentation.

Date: April 28, 1994

Signature: 
Title: Patricia M. Powell
NEPA Compliance Officer