



U.S. Department of Energy
Office of Legacy Management
Categorical Exclusion Determination Form



Program or Field Office: Office of Legacy Management

Project Title and I.D. No.: Bioremediation Injection and Related Activities at the Pinellas Site, Largo, Florida, LM 13-13

Location: Largo, Florida

Proposed Action or Project Description:

DOE proposes to use a Geoprobe to inject emulsified edible soybean oil (EEO) and anaerobic microbial solution into the surficial aquifer at the 4.5 Acre Site adjacent to the DOE Young - Rainey STAR Center (Pinellas Site) in Largo, Florida. The proposed action would enhance naturally occurring anaerobic biodegradation, thereby reducing vinyl chloride contamination along the southwest boundary of the 4.5 Acre Site. *Dehalococcoides ethenogenes* (DHE) is a type of microbe that occurs naturally in the aquifer. Bioaugmentation with a commercially available DHE culture used in conjunction with the EEO would maximize the efficiency of contaminant biodegradation. No genetically engineered or synthetic biological organisms would be used in this project. Water tanks and equipment would be staged at a central location on the 4.5 Acre Site, and hoses would convey the injection fluids and move only as needed to access each boring location. It is expected that there would be some vegetation clearing and that general surface disturbance would occur over 50 square feet per borehole location for a total of 43 boreholes, with a total surface disturbance of less than one acre. Approximately 30,000 gallons of municipal water would be used for this project. The project is proposed for July 2013 with an expected duration of 3 weeks. The enhanced natural fermentation processes resulting in bioremediation would continue for a few years. DOE plans to procure a subcontractor to provide the specialized Geoprobe drilling and microbial solution injection services. The DOE Legacy Management Support contractor would provide project direction and oversight to the subcontractor. A similar project was implemented in 2010 resulting in minor impacts to the affected area and substantial decreases in contamination.

Categorical Exclusion(s) Applied:

B3.1 Site Characterization and Environmental Monitoring
B6.1 Cleanup Actions

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 1021.

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

Date Determined: