



**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.:** Onsite and Offsite Bioremediation Injections and Related Activities at the Pinellas County, Florida, Site, LM 21-14

**Location:** Largo, Florida

**Proposed Action or Project Description:**

DOE conducts clean up actions at the Pinellas site under the authority of the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments. DOE is proposing an interim corrective measure for source and plume treatment at the Building 100 Area of the STAR Center (Young - Rainey Science, Technology, and Research Center) at the Pinellas site in Largo, Florida. The proposed technical approach includes three bioinjection events: (1) Treatment of the onsite contaminant plumes using 62 onsite bioremediation injections; (2) Source treatment beneath Building 100 with bioremediation injections into eight horizontal wells; and (3) Treatment of the offsite contaminant plumes using 40 offsite bioremediation injections. DOE proposes to use a Geoprobe to inject an emulsified vegetable oil (EVO) and anaerobic microbial solution into the surficial aquifer for the onsite and offsite injections as well as into eight horizontal wells under Building 100. Contaminant degradation is maximized when *Dehalococcoides mccartii* (DHC), a naturally occurring microbe in the aquifer, is used in conjunction with EVO. No genetically engineered or synthetic biological organisms would be used in this project. Water tanks and other equipment would be staged at central locations, and hoses would convey the injection fluids as needed to each boring location. General surface disturbance of less than an acre is expected. Approximately 88,000 gallons of municipal water would be used for this project. The onsite downgradient injection event is proposed for fall 2014, and the horizontal well injection event beneath the building and the offsite injection events are proposed for spring 2015. 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. Similar projects were implemented in 2010 and 2013, resulting in minor environmental impacts and substantial decreases in contamination. Spill prevention, control, and countermeasure plans would be prepared in accordance with applicable regulations.

**Categorical Exclusion(s) Applied:**

- B3.1 Site Characterization and Environmental Monitoring
- B6.1 Cleanup Actions
- B6.2 Waste Collection, treatment, stabilization, and containment facilities

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:**