



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

February 16, 2024

Via Electronic Mail to Jonathan Erwin at ErwinRemediation@gmail.com

Mr. Jonathan Erwin
Erwin Remediation, Inc.
408 Ditmar Street
Pensacola, Florida 32503

Re: **Heated Air Sparge (Revised)**
The FDEP Innovative Technology Application Number: 1971

Dear Mr. Erwin:

The Florida Department of Environmental Protection's Division of Waste Management (Division) has reviewed the information provided on the Heated Air Sparge treatment technology. Per the provided information, the technology has not yet been field-tested, but the proposal is to perform multi-phase extractions simultaneously with injections of the air heated to high temperatures. The objective is to boil off the water present in the smear zone first, and then to flow hot air through the smear zone to volatilize any remaining contamination.

The Department has no objections to using the Heated Air Sparge for site remediation, as long as the detailed site-specific design and evaluation of its applicability, safety, compliance with the corresponding regulatory requirements, and cost-effectiveness are provided and approved in the site-specific Remedial Action Plan (RAP).

The RAP requirements related to vacuum extraction, air sparge and multi-phase extractions as detailed in Chapter 62-780.700, Florida Administrative Code (F.A.C.), will apply. Given the high air temperatures proposed, it is anticipated that safety protocols will be thorough and detailed.

The notification of air injections for sites impacted with any contaminants of concern is in the form of a memorandum that is required to be submitted to the Underground Injection Control Section. The form "In Situ Air Sparging Aquifer Remediation Well(s)

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Heated Air Sparge

at a Contaminated¹ Site. It is located at <https://floridadep.gov/waste/district-business-support/content/innovative-technology-acceptance-program>

Based on the description provided, there do not appear to be any specific, additional Underground Injection Control (UIC) requirement or monitoring parameters.

If you have any questions, contact Elena Compton at (850) 245-8911, through Mail Station 4535 at the letterhead address, or by e-mail at Elena.Compton@dep.state.fl.us.

Sincerely,

Elena Compton, M.S., P.E.
Professional Engineer III
District and Business Support Program
Division of Waste Management, FDEP

ec: File

¹ - "Contaminated" as defined per Rule 62-780.200 (10); "Contaminated" or "contamination" means the presence of free product or any contaminant in surface water, groundwater, soil, sediment, or upon the land, in concentrations that exceed the applicable CTLs specified in chapter 62-777, F.A.C., or water quality standards in chapter 62-302 or 62-520, F.A.C., or in concentrations that may result in contaminated sediment. At sites where alternative CTLs have been developed solely based upon intrinsic chemical properties that do not vary under different exposure scenarios (e.g., toxicity) or based upon a risk assessment where the exposure parameters have been demonstrated to be applicable throughout the study area, then such alternative CTLs are the applicable CTLs for evaluating "contaminated" or "contamination" and would supersede the CTLs specified in chapter 62-777, F.A.C. However, alternative CTLs cannot be substituted for water quality standards in chapter 62-302 or 62-520, F.A.C. This definition is solely for use within chapter 62-780, F.A.C., and pursuant to section 376.30701(1)(a), F.S., shall not be used to establish legal responsibility for conducting site."