



# FLORIDA DEPARTMENT OF Environmental Protection

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## Memorandum

**To:** Petroleum Restoration Program Stakeholders

**From:** John F. Wright, P.E., Chief Engineer *JFW*  
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**Subject:** Clarification to Petroleum Restoration Program  
Closure Sampling Guidelines for Groundwater

**Date:** January 12, 2022

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This replaces the November 29, 2018 memorandum of the same name and is a clarification of the January 27, 2014, "Petroleum Restoration Program Closure Sampling Guidelines for Groundwater" memorandum as is a discussion of issues/questions that may arise when determining when a Site Rehabilitation Completion Order (SRCO) can be issued at a petroleum site. Any issues not addressed in this memorandum will continue to follow the guidelines in the January 27, 2014, memorandum.

### **Issue: Sampling frequency of Monitoring Wells (MWs) to obtain closure.**

Sampling for Post Active Remediation Monitoring (PARM) or Natural Attenuation Monitoring (NAM) may include representative monitoring points to document and track concentrations in the source area(s), in areas where active remedial action (RA) was performed, and at the site perimeter in order to track contaminant attenuation and plume size/stability to satisfy closure requirements per Chapter 62-780, Florida Administrative Code (F.A.C.). The approved monitoring network should be discussed with the Florida Department of Environmental Protection (FDEP) and approval must be documented through a NAM/PARM Plan or deliverable approval letter, as appropriate. The Contractor and FDEP should review the data during this transition stage to ensure that all historical and current wells with documented contamination above cleanup target levels (CTLs) have been evaluated and will be addressed prior to requesting SRCO and/or abandoning wells.

The first sampling event should be performed at least 90 days after cessation of active remediation to count as the first sampling event of approved NAM or PARM. FDEP may allow a sampling event less than 90 days after cessation of active remediation to count as the first sampling event of approved NAM or PARM; however, permission should be requested and approved in writing from FDEP prior to sampling ahead of this 90 day period. After cessation of active groundwater remediation, a minimum of four groundwater sampling events of representative wells is required and site rehabilitation can only be

considered complete when the No Further Action criteria of subsection 62-780.680(1), 62-780.680(2), or 62-780.680(3), F.A.C., have been met for at least the last two sampling events. Injection technologies may require additional time following cessation of onsite injection activities to allow subsurface reactions to be considered completed, and should be discussed with, and approved by, FDEP accordingly.

Individual wells that are not part of the approved monitoring network do not need to be sampled for four quarters of PARM or NAM. However, all site monitoring wells not included in the PARM or NAM monitoring network with previously documented contamination should have had a clean sampling event the last time the well(s) was sampled for the site to meet SRCO criteria. If a well with documented contamination was destroyed or abandoned before having a clean sampling event, then one of the following options should be utilized to meet SRCO criteria.

- The FDEP professional may allow data from an existing representative well with similar construction to satisfy SRCO criteria if it had similar or higher historic concentrations and is in close proximity to the destroyed or abandoned well.
- A replacement monitoring well may be installed and sampled to satisfy SRCO criteria.
- A grab groundwater sample may be collected and used to satisfy SRCO criteria.