



# FLORIDA DEPARTMENT OF Environmental Protection

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## MEMORANDUM

**TO:** Petroleum Restoration Program Stakeholders

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**SUBJECT:** Clarification to Petroleum Restoration Program Closure Sampling Guidelines for Groundwater

**DATE:** November 29, 2018

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The following 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 and Chapter 62-780, Florida Administrative Code (FAC).

### **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, FAC. 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 Agency Term Contractor (ATC) 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.

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 from FDEP prior to sampling ahead of this 90 day period. Please bear in mind that a minimum of four groundwater sampling events 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 with documented contamination must have two consecutive clean sampling events separated by a minimum of 3 months for the site to meet SRCO criteria. If any wells with documented contamination have been destroyed or abandoned, and have not met the two consecutive clean sampling events criteria, then a replacement monitoring well should be installed and sampled to satisfy SRCO criteria. If the monitoring well cannot be replaced due to subsequent construction/structures at the location, then the following options are available.

- A grab groundwater sample may be collected and used to satisfy SRCO criteria.
- If there is another well in close proximity to the missing well with similar historic concentrations, the FDEP professional may allow data from that location to satisfy SRCO criteria.
- If the location of the missing well cannot be accessed for any sampling and there are no nearby monitoring wells, the FDEP professional may allow one clean sampling event to satisfy the SRCO criteria.