

South Street Site PARM Workplan

This plan outlines the Post Action Remediation Monitoring (PARM) to be completed at the South Street site to comply with Chapter 62-780.750 F.A.C.

Monitoring Wells to be Sampled

The following eight monitoring wells will be included in the monthly and quarterly monitoring program: MWR-1, MWR-5, MWR-6, MW-7, MW-8, MW-9, MW-10, and MW-12. MW-12 was installed in October 2019 on the south side of South Street to monitor groundwater conditions between the source wells and MW-10. Figure 1 shows the locations of the monitoring wells.

MWR-5 and MWR-6 are source area wells; MW-7 and MW-9 are background wells; and the remaining wells are considered perimeter wells.

Analytical Parameters and Frequency

All eight monitoring wells will be analyzed for arsenic monthly for a minimum of one year after the completion of the lime residual removal (July 2019) until concentrations in all wells are below the action level for two subsequent sampling events (e.g., 2 months).

All eight monitoring wells will be monitored for the following parameters quarterly for a minimum of one year (July 2020) until concentrations in all wells are below applicable action levels for two subsequent sampling events (e.g., 2 quarters):

- Gross Alpha
- Uranium
- Aluminum
- Molybdenum
- Iron
- Manganese
- Total Dissolved Solids

If concentrations increase above the applicable action levels listed below, the well or wells will be resampled no later than 30 days after the initial positive results are known. If the results of the re-sampling confirm the initial sampling results, then the monitoring report will include a recommendation as described in the rule.

Action Levels

The water monitored by site monitoring wells is very shallow and not used as a drinking water source. All residents receive potable water via the public water supply. There are no existing permitted irrigation wells in the site vicinity. Both Lee County Code Section 32-95 and Lee County Ordinance 16-06 require private residential wells to contain at least 30 feet of casing with water extracted below this depth. Site wells are screened between 2 and 12 feet below ground surface. It is not expected that any future irrigation wells would be installed across the same interval as monitored by site wells.

The presence of iron, manganese, and total dissolved solids at concentrations consistently greater than the Secondary Standards of Chapter 62-550 F.A.C. suggest that the shallow groundwater monitored at the site is of poor quality.

Application of primary and secondary drinking water standards to the shallow groundwater monitored on site is not appropriate based on the current and any possible future use of the water. Secondary standards apply to aluminum, iron, manganese, and total dissolved solids; the shallow water is not used as a drinking water source. While these parameters will be monitored, no action will be taken based on levels measured in the groundwater. Based on the non-use of the shallow groundwater monitored by site wells, the natural attenuation cleanup target levels are the appropriate action levels for arsenic and molybdenum.

The following table outlines the action levels for the parameters to be monitored as part of the PARM.

PARM Analytical Parameters	Action Levels
Arsenic	0.1 mg/L
Gross Alpha minus Uranium	150 pCi/L
Uranium	0.21 mg/L
Molybdenum	0.35 mg/L

After one year of PARM, if the applicable No Further Action criteria of Chapter 62-780 F.A.C. are met at the end of the monitoring period for at least the last two events for each parameter, a Site Rehabilitation Completion Report with a No Further Action Proposal will be prepared. The report will summarize the monitoring program and contain documentation to support the opinion that the cleanup objectives have been achieved. If the applicable No Further Action criteria are not met, then the monitoring report will include a recommendation for additional monitoring.



- - - - - Fence Line
- - - - - Sanitary Sewer Line
- Tele-communication Line

Legend



- Monitoring Well Location

Approximate Scale:
1" = 50'



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 Drawn By: EJJ

Project:
 South Street Site
 3348 South Street
 Fort Myers, FL 33902

Well Location Map

