

This interactive checklist provides a method to evaluate a P&T system's potential need for, and the benefits that could result from, an optimization review of the site's operating systems. It is intended to provide greater consistency in the evaluation of site status and uncertainties to determine a system's potential for optimization. The tool provides evaluation criteria, in the form of data gap analysis questions, based on specific project and site attributes common to systems that have previously benefited from optimization review.

This tool can be used to qualitatively evaluate whether a system may have a high, medium, or low need for, or potential benefit from, an optimization review. The first set of questions is aimed at categorizing this overall need for optimization. The tool will provide additional outputs based on answers to the second set of questions, including suggestions for the optimization themes that will best suit the system in question. The second set of questions also provide relevant links to sections of this document to help guide the user to supporting information within this technical/regulatory document. The tool is targeted for those who are in the O&M stage of their P&T system, although those in earlier stages of planning, design, and execution can use the tool as a helpful guide as well. Best professional judgment should be used to evaluate optimization potential, per the evaluation criteria indicated for each question set. In general, "Yes" answers to questions mean that the responder's system is functioning well with respect to the particular statement or theme. "No" answers mean that the system is not functioning well and could warrant optimization action with respect to the particular statement or theme. "Uncertain" answers mean that there may be a lack of data or information to support a yes or no answer, which means that optimization may be needed to gather the data to make an informed decision about performance. "N/A" answers mean that the question does not apply to the system—these answers will not affect the output of the checklist.

For those who would like to use other checklist tools and resources, the following reference may be useful:

USEPA Groundwater Stats Tool and User Guide (2018): <https://www.epa.gov/superfund/completing-groundwater-response>

Optimization Potential Questionnaire

Detailed Optimization Questionnaire

The USEPA's optimization program has continued to make cleanups more efficient and effective and has spurred the Superfund program forward by implementing recommendations provided in the Superfund Task Force Recommendations (USEPA 2017^[FGSYAG9V] USEPA. 2017. "Superfund Task Force Recommendations." U.S. Environmental Protection Agency. https://www.epa.gov/sites/default/files/2017-07/documents/superfund_task_force_report.pdf.), including Recommendation 7, which promotes the use of third-party optimization; implementing elements of the National Strategy to Expand Superfund Optimization Practices from Site Assessment to Site Completion ("the National Strategy"); implementing recommendations for individual optimization reviews and conducting site-specific technical support projects; and implementing innovative best practices throughout the Superfund pipeline.

The report provides updates on the status of optimization reviews conducted from FY 2015 through FY 2017 and includes optimization-related technical support projects that were substantially completed through 2018. Project highlights demonstrate results achieved from optimization reviews and optimization-related technical support projects and exemplify how the optimization program applies and promotes best practices to improve site cleanup.

Figure C-1, below, which is taken from the USEPA's Superfund Optimization Progress Report, tallies recommendations for key optimization results according to the best practice they are associated with in the report in Section 4.2.1, Smart Scoping; Section 4.2.2, Strategic Sampling; and Section 4.2.3, Data Management (USEPA 2020^[RLVPF7D5] USEPA. 2020. "Superfund Optimization Progress Report." U.S. Environmental Protection Agency, Office of Land and Emergency Management. <https://semspub.epa.gov/work/HQ/100002585.pdf>).

Number of Implemented Tools and Techniques

Total Number of Optimization Events = 80

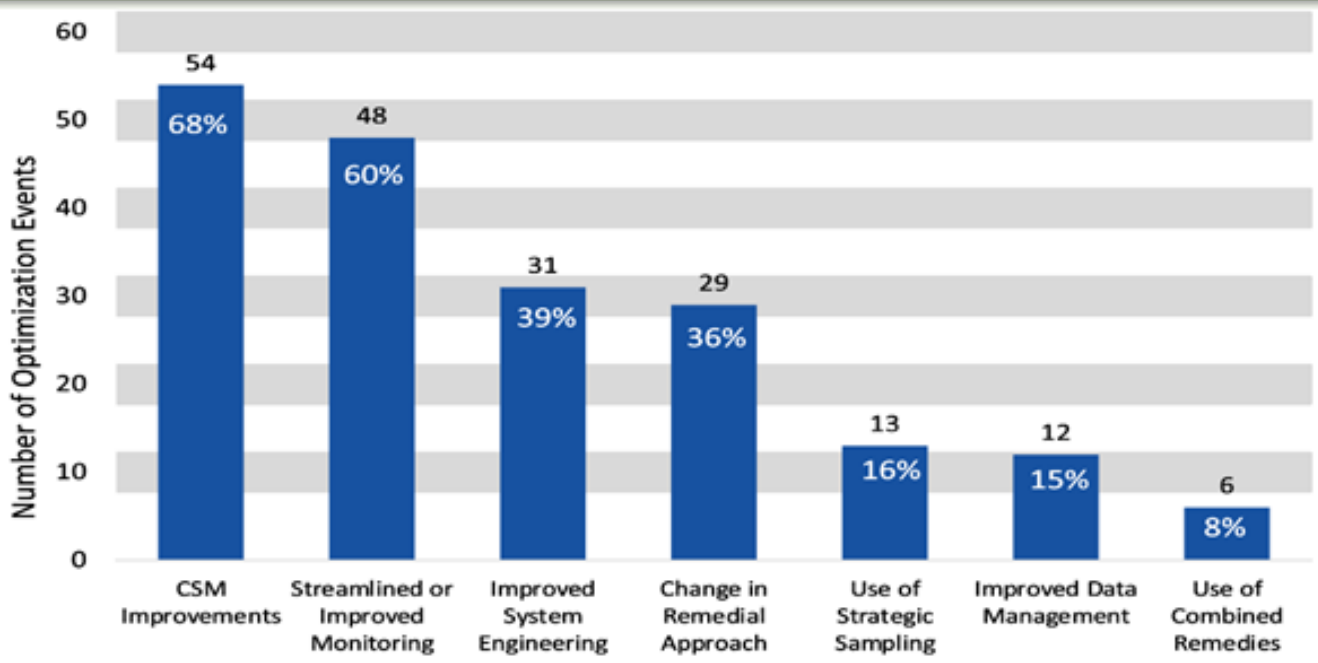


Figure C-1. Number of implemented tools and techniques.

Adapted from (USEPA 2020).