Please complete the following questions to view your optimization potential results. Note, results will not generate unless all questions have been answered.

|    | Optimization Potential Questionnaire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                       |  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--|
| #  | Questions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Responses                                             |  |
| 1  | Have remedial alternatives other than pump and treat been ruled out as potential alternatives or additions to the remedial strategy?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 2  | Have regulatory drivers or exposure scenario changed and is pump and treat necessary to achieve the revised RAOs?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 3  | " Is the CSM for the site current with respect to any of the following:  - New/Different COPCs/COCs  - Presence/absence of NAPL  - Reduced or increased source mass  - New source(s) (on-site or upgradient)  - New or significantly changed plume characteristics (location, extent, morphology, bulk plume behavior/metrics/stability)  - Contaminant fate and transport (COPC/COC concentrations, mass transport properties, biodegradation rates, diffusion-back-diffusion; etc.)  - Hydrogeologic conditions (groundwater elevations; flow direction, gradient, horizontal and/or vertical components of gradient; gaining/losing stream conditions)  - Receptors (private, municipal, and/or industrial water supply wells)  - Potential exposure pathways" | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |  |
| 4  | Are the flow rates, concentrations, pressures, drawdown, etc. consistent with the values expected in design?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 5  | Is the system currently achieving ROD objectives (i.e. source reduction or containment )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 6  | For mass recovery remedies, has optimization been conducted to maximize recovery rates?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |  |
| 7  | For cases where all source areas have been defined and eliminated/isolated from downgradient portion of plume, is the downgradient portion of plume on track for ROD restoration RAOs?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 8  | For cases where all source(s) have not been defined or have not been eliminated/isolated from downgradient portion of plume, is the downgradient portion of plume on track for ROD restoration RAOs?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 9  | (For Superfund Sites): Is the anticipated transition from EPA to state ownership (or federal ownership to state/private ownership) of the project more than 10 years from now, or if less, has the remedy been declared Operational and Functional (O&F)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 10 | For mass recovery remedies, are unit costs for recovered mass acceptable to operators and regulators?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ○ Yes or N/A<br>○ No/Uncertain                        |  |
| 11 | All other technical considerations aside, are estimated, current or projected costs of the system acceptable to all stakeholders and sustainable for the life cycle of the project?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |  |
| 12 | Have remedy O&M costs been decreasing?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |  |
| 13 | Has an independent review of operating costs and performance been performed?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |  |
| 14 | Is the pump and treat system operation consistently compliant with applicable permits and requirements?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ○ Yes or N/A<br>○ No/Uncertain                        |  |

| 15 | Is the pump and treat system operating safely and without health and safety incidents?         | ○ Yes or N/A ○ No/Uncertain                           |
|----|------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 16 | Is the equipment well maintained in accordance with manufacturer's recommended O&M procedures? | <ul><li>○ Yes or N/A</li><li>○ No/Uncertain</li></ul> |