

PRP Project Managers Guide – Remediation System Runtime Evaluation

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A. What Is System Runtime?

System runtime is the ratio of the actual operating hours of a remediation system to the design runtime hours and is expressed as a percent. Petroleum Restoration Program (PRP) Agency Term Contractors (ATCs) are required to calculate and document system runtimes for each major system component and operate each component at a minimum runtime of 80% in order to receive full system runtime payment. Documentation is to be provided in quarterly reports and/or field notes submitted to the PRP or local program site manager. Many systems are designed for continuous operation. However, it is not uncommon for systems to be designed to operate in zones or operate on shorter cycles. The most common remedial system package used to address contaminated soil and/or ground water include two major components, air sparging (injection of compressed air below the water table) and soil vapor extraction (removal of soil vapors using a vacuum system).

B. What Are the System Runtime Reporting and Performance Requirements?

1. Tables 2, 3A, 3B and 3C of the PRPs RA Summary Report are to be used by ATCs to report and calculate system runtime. Each table is a spreadsheet which calculates runtimes for each component by entering site visit dates and hour meter readings collected during the visit. Any approved down time (see section C below) can be entered into the appropriate column in Tables 3A-3C and is not counted against the runtime.
2. ATCs are required to achieve at least 80% runtime on all remedial system components to receive full compensation for the pay items in Section 17 of Attachment A of their Agency Term Contract (monthly system O&M packages), Section 18 (monthly system equipment use packages) and pay item 21-8 (monthly P.E. oversight of O&M). For the purpose of determination of remedial system runtime, the system is defined as the sum of all component parts of the remedial system. Further, each component must operate at least 80% of the design runtime in order for the ATC to receive full payment for the pay items cited above.
3. Payments for system operation tasks for which the runtime is less than 80% for the month will be reduced in proportion to the runtime achieved for the three pay items listed above. As an example, if a remedial system package has an air sparging system and a soil vapor extraction system and the air sparging system achieved 65% runtime during the month and the soil vapor extraction system achieved 90% runtime, the invoiced amounts for O&M of the entire system, equipment lease, and P.E. oversight of O&M would be reduced to 65% of the rate specified in the ATC's rate schedule.
4. In addition to system runtime, maintaining system operation parameters such as flows, vacuums, and pressures as close as possible to either the design values or established optimal values is also critical to the operation of a remedial system. ATCs should promptly report any field conditions that may result in reduced performance and recommend system changes and/or a RAP Modification when warranted.

C. What Situations Can Be Considered Approved Down Time?

1. Shutdown of system prior to sampling.
2. Loss of electric power to remedial system for reasons beyond the control of the ATC. This is defined as interruption of power to the electric meter supplying the remedial system.
3. Severe adverse weather (e.g., tornado, hurricane, flood). This exclusion does not include lightning.
4. Fire (not originating within treatment system enclosure.)
5. Operating schedules less than 24 hours/7 days a week. The basis for calculating system runtime in this case is the total number of hours per month that the system is intended to be operated. Operating schedules that are less than 24/7 must be approved by PRP prior to an ATC claiming this downtime as approved.
6. Electrical power supplied to system by the utility is considered to be unsuitable for continuous operation of the remedial system. The ATC must document irregularities or deficiencies in electrical power supplied to remedial system.
7. Events outside of the control of the ATC (e.g., vehicle strike, damage from vandalism, theft) may be approved in part if the ATC can demonstrate that reasonable and appropriate steps were taken to prevent the event.
8. Delays caused by utilizing outside parties (e.g., electric utilities, building inspectors) to perform needed actions prior to restart may be approved in part if the ATC can demonstrate that a comprehensive, good faith effort was made to have the services performed in a timely fashion.
9. Delays in performing repairs to DEP-owned remedial systems that are the result of PRP time required to process and approve requests for change (RFC). In order to claim this exemption to downtime calculation, the ATC must submit complete and properly prepared RFCs, and must make use of the option of using the “in field” RFC whenever possible.

D. What Situation Should Not Be Considered Approved Down Time?

1. Failure of a remedial system component or control element resulting from wear, mechanical failure, or other failure of internal component(s) of the remedial system. Downtime is calculated from the hour meter reading beginning at the time of shutdown.
2. Delays in obtaining replacement parts from suppliers. ATCs are responsible for restoring remedial systems to proper operation within the time allowed under the 80% runtime requirement (approximately 6 days of downtime allowed per month).
3. Exceedances of discharge limits or emissions limits. ATCs are responsible for operation of remedial systems in a manner that complies with all discharge and emissions limits.
4. Damage due to lightning strikes. ATCs are responsible for equipping remedial systems with protective devices to mitigate or eliminate the effects of lightning.