HAR 11-55 Appendix D

Treatment System Operations Plan Requirements

July 13, 2018

General Information

The treatment system operator is the organization or person who is conducting the remedial activities at the leaking underground storage tank(s).

Treatment System Operations Plan

The treatment system operations plan shall specify the treatment system to be used and describe its operation in detail. If any treatment technology is being considered other than the Granular Activated Carbon Process or the Air-Stripping Process, then additional technical information on the technology which is consistent with the General Permit shall be submitted to the Director for review as soon as the decision for its use has been made. The treatment system operations plan shall be modified as required by the Director. The plan shall describe accepted engineering practice of how the process and physical design of the treatment facilities will ensure compliance with the General Permit.

a. *Treatment System to be used*

   Provide the type of the treatment system to be used. Include the following:

   i. *Detailed description of the treatment system operation (method of treatment of the effluent);*

   ii. *Maintenance procedures;*
   iii. *Testing schedules, and;*
   iv. *Instruction manuals for the operating personnel.*

b. *Discharge Schedule*

   Provide the best estimate of the date(s) on which the facility will begin and terminate the discharge.

c. *Effluent Discharge Information*

   i. *The average daily flow rates and the maximum daily flow rates are based on the Treatment System Operations Plan for the facility.*
   ii. *Frequency of Discharge*
   Indicate how often the discharge into receiving State waters will occur, as applicable.

(1) *"Continuous discharge" means a "discharge" which occurs without interruption throughout the operating hours of the facility, except for infrequent shut-downs for maintenance, process changes, or other similar activities.*

(2) *"Intermittent discharge" means a discharge that is not continuous.*

d. *Contingency plan to be activated in the event of an emergency*

e. *Provisions for system shut-down and any other measures for the protection of health and safety of employees and the public*

f. *Sampling plan, including the following for the treated groundwater:*

i. *Sampling procedures;*
ii. *Location of sampling;*
iii. *Person/position responsible for sampling;*
iv. *Flow estimation period;*
v. *Laboratory that will analyze samples;*
vi. *Test methods and detection levels for each parameter;*
vii. *Quality Assurance/Quality Control; and*
viii. *Chain of custody of samples.*

g. *Certification of the Treatment System Operations Plan*

The proposed treatment system shall be certified by the design engineer with a signature, the professional engineering license number, and expiration date in a report or letter. The report or letter may be included in the Treatment System Operations Plan and shall also certify that:

i. *All of the treatment system's startup and operation instruction manuals are adequate and available to operating personnel.*
ii. *All treatment system maintenance and testing schedules are included in the Treatment System Operations Plan.*
iii. *Effluent sampling locations and ports are located in areas where samples representative of the waste stream to be monitored can be obtained.*