

Fenimore Landfill

Long-term Remedy Update

June 2014



Long-term Remedy

DEP's long-term remedy is designed to treat the H₂S gas that has already built up in the landfill and to change the conditions in the landfill that allow H₂S to be generated. The goal of the long-term remedy is to substantially reduce the moisture in the landfill, and thereby essentially "turn off" the sulfur-producing bacteria. This will in turn substantially reduce production of H₂S and the resulting odor problem.

Status of Closure

Phase 1 has begun. A total of 21 new, larger and deeper gas extraction wells were drilled and piping to connect them to the oxidizer has been installed. Flow from this enhanced system will eventually be increased to 2,000 cubic feet per minute (cfm) from the original maximum of 500 cfm.

Phase 2 is the installation of an impermeable liner and vegetative cap, which will begin this summer. The contract for this work is expected to be awarded in July. Allowing time for mobilization and preconstruction approvals, the contractor would be expected to begin actual construction in mid- to late August. DEP previously expected that construction materials would be brought onto the site and stockpiled over the summer for when work began in September. However, the current timing of the contract award (necessitated by the public procurement process) does not provide any benefit for stockpiling material, so the contractor will bring materials on-site as needed for the closure construction.

The impermeable liner will be installed across the 19 acres where SEP materials were deposited. Construction of the cap will take place in the fall, when temperatures in and around the landfill are cooler. The cap consists of several layers. Clean soil will be placed on the SEP material to act as a cushion for the placement of the impermeable liner. A synthetic drainage net will be placed on the liner to allow rainwater to drain off of the liner. Manholes will be installed on the 21 wells to provide access for maintenance. Eighteen inches of clean, imported soil will be placed on top of the drainage layer to allow for a vegetative final layer on top. This will most likely be a hardy grass mixture.

Phase 3 is the installation of a long-term gas treatment system to replace the current oxidizer and scrubber. This is likely to occur next year. The technologies being considered for the long-term treatment would remove the H₂S from the gas stream using either a biological process or a treated

media (i.e., iron “sponge”). These technologies involve passing the gas through a filter that removes the H₂S. Data is being collected now to determine which system is best for Fenimore.

Closure Schedule/Future Work

Construction of the additional gas extraction wells and piping began in March. The contract for the cap is expected to be awarded in July. Actual cap construction will start in August. Liner installation will be completed by the end of the year. The soil portion of the cap will be completed by June 2015. The long-term treatment system should be determined by October 2014 and designed and implemented in the months thereafter.

Air Monitoring

The nine H₂S and three SO₂ air monitoring stations continue to operate 24/7. To date, all SO₂ levels have been well within air quality standards except for a single one-hour incident. Live data for both the H₂S and the SO₂ monitors is available at <http://54.235.249.118/guests/greenlight.get.live.data.2a.php>.

Fenimore Call Center

DEP has established a call center to assist with resident questions. If you wish to file an odor complaint, call 1-877-WARN-DEP, 24/7. If you wish to ask questions without filing an odor complaint, call DEP at (609) 341-2875 during regular business hours (9:00 a.m. – 5:00 p.m., Monday through Friday). On weekends, evenings and holidays, callers can leave a message and their calls will be returned. Questions may also be emailed to RoxburyTwpFenimoreQuestions@dep.state.nj.us.

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