

Fenimore Landfill

Long-term Remedy Fact Sheet

December 2014



What is DEP's long-term remedy?

The goal of the DEP's long-term plan is to substantially reduce the moisture in the landfill, and thereby essentially "turn off" the sulfur-reducing bacteria. This will in turn substantially reduce production of hydrogen sulfide (H₂S) and any resulting odors.

How is the long-term abatement project progressing?

There are three phases to the closure plan.

DEP has completed Phase 1 – the installation of a comprehensive gas collection system. This included the installation of 21 additional, deeper gas collection wells to enhance the gas collection and treatment system. The wells were installed in May 2014, and a new, larger 2,000 CFM (cubic feet per minute) oxidizer and blower are currently being fabricated. Shortly after delivery in February 2015, DEP will be able to increase the gas flow from the collection system to double the previous capacity. The increased flow will begin the process to remove the moisture from the material which will "turnoff" the bacteria creating the H₂S gas.

Phase 2, which is currently ongoing, involves the installation of an impermeable barrier and a soil and vegetative cap over the SEP material. The barrier will prevent any further infiltration of rain water from adding to the moisture in the material and will trap any gases that are generated, allowing the collection system to capture and treat the H₂S gas. **The liner system is completely installed on the SEP fill material** and is being covered with the soil/vegetative layer. The contractor will return in the spring to reseed the cap, if necessary, and to perform any maintenance that may be required.

Phase 3 is the installation of a long-term gas treatment system to replace the oxidizer and scrubber system. The technologies being considered for the long-term treatment will remove the H₂S from the gas stream using either a biological process or a treated media (e.g., iron "sponge"). These technologies involve passing the gas through a filter that removes the H₂S. Data collected through the summer on gas production was insufficient to determine the appropriate long-term treatment technology. Additional data will be collected through the winter, now that the liner is complete.

Will there still be an odor?

With continued gas collection and treatment and installation of the liner, off-site odors have been virtually eliminated. Off-site odors in the future are expected to be minimal.

What will the truck traffic be like for the rest of the year?

Truck traffic is down significantly since October and daily traffic will average fewer than 30 trucks per day from now until the end of the year, when the importation of material for the project should be completed. However, occasionally there may be as many as 50 or more trucks per day, but those days will be few. When the contractor returns in the spring, they will only need to bring in material for minor repairs resulting from winter erosion.

Will the H2S monitors and the “Greenlight” system still be needed?

The H2S monitors were put in place to alert the public to releases of H2S that could prompt action according to Roxbury Township’s guidelines. The likelihood of an event that would trigger an alert under that system has been essentially eliminated. Changes to the system will be made shortly in cooperation with Roxbury Township and DEP.

Will there be money to fund the operation and maintenance of the project?

Funding will be available from the Sanitary Landfill Contingency Fund.

How long will the new oxidizer and scrubber be needed?

This is still being evaluated. Additional landfill gas data must be collected while the landfill cap is in place in order to determine which alternate treatment technologies are feasible. The oxidizer and scrubber systems will remain operational until an alternate remedy can be implemented.

What is the expected schedule for closure?

The cap construction contractor is required to complete the remaining landfill cap work by August 2015. However, the cap is expected to be completed shortly after the New Year. Touch-up work is expected to be performed in the Spring of 2015. The project is on schedule.

How many years of maintenance will be required to maintain the capped landfill?

The cap will need to be maintained indefinitely, but it does not require extensive care. Maintenance includes twice-a-year mowing of the grass, as well as periodic inspections of the cap to ensure that it is functioning correctly. The landfill gas collection and treatment system will continue to be monitored daily.

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