

Coakley Landfill Update
US Environmental Protection Agency (EPA)
NH Department of Environmental Services (NHDES)
May 25, 2017

1. **Status of water supply sampling (residential well monitoring)**

A total of seventy-nine (79) private wells around Coakley Landfill have been sampled for per- and polyfluoroalkyl substances (PFASs), volatile organic compounds (VOCs) and 1,4-dioxane. All results received have been reported to property owners. Additional requests to sample private wells in the area around Coakley Landfill have been received and the agencies are currently reviewing these requests in light of data collected thus far to determine if extended sampling is warranted. The purpose of these sampling efforts was to insure the continued safety of area groundwater for drinking water purposes. There have been no cases where a private well result has exceeded the 70 parts-per-trillion (ppt) Public Health Advisory or equivalent NHDES ambient groundwater quality criteria for PFASs (otherwise known as PFCs). Private well sampling/testing will be repeated on a subset of the 79 wells previously sampled and will be performed by the Coakley Landfill Group (CLG) in August 2017 and February and August 2018.

2. **Status of Spring/Fall Site Monitoring**

The CLG conducted the Spring Site-wide sampling event during the weeks of April 24th and May 1st. The event included groundwater samples from monitoring wells, leachate seep samples, and co-located sediment/surface water samples; validated results are expected in mid-June. The next sampling (Fall) event is scheduled for mid-August 2017.

3. **Status of additional bedrock monitoring wells**

As summarized in the April Community Update, the CLG is proceeding with a phased approach for the installation of two new well couplets in the north/northwest GMZ area. The CLG has completed Phase I and is scheduled to begin Phase II the week of May 29, 2017 (see summary below for further details). The pending installation (summer 2017), technical evaluation, and sampling of the four new wells will provide more localized groundwater and bedrock data at the Landfill compliance boundary. NHDES and EPA are also reviewing the monitoring network on all sides of the GMZ to ensure compliance. More wells will be installed if determined to be necessary.

The following is a summary of the ongoing and pending work per Phase:

Phase 1. On April 26, data loggers were installed in six existing site monitoring wells (overburden and bedrock) and in an existing bedrock well located within the proposed 10-lot subdivision off of Breakfast Hill Road. The data loggers have been running continuously since then and shall be removed within the next week. Data gathered from this effort will identify potential overburden and bedrock groundwater influences near the site resulting from the pumping of area residential and irrigation wells.

Phase 2. The borehole geophysics study at the existing bedrock well located within the proposed 10-lot subdivision off of Breakfast Hill Road, is tentatively planned for May 31st, and is anticipated to be completed in one day. Results will be evaluated by the agencies and their technical consultants, resulting in recommendations for specific fracture zone sampling location recommendations to the CLG. The purpose of this phase of work will be to learn more about bedrock composition, fracture characteristics, hydraulically active fracture zones and contaminant transport mechanisms.

Phase 3. Based on the information gathered in the foregoing studies, the locations and depths of the proposed GMZ compliance wells will be refined and finalized prior to installation, anticipated during summer 2017.

4. **Surface Water Quality**

EPA, in consultation with NHDES, will continue to direct the CLG's monitoring work for PFASs in surface waters on-site, as well as downgradient of the Site to determine if additional corrective actions are required to protect human health and the environment.

EPA will use the additional Site data recently collected, the information provided by the New Hampshire Fish and Game Department, observations in the field, and other fishery information to be gathered, to determine whether further investigations and/or risk evaluations are needed and whether it is necessary to implement Site-specific fish consumption screening levels.

5. **NHDES/EPA plan moving forward**

The agencies, with the assistance of their technical consultants, are continuing to review private well sampling data, private well and site monitoring well construction details, surface water and groundwater interactions and site and regional hydrogeological information to better evaluate groundwater fate and transport, and the need to further investigate the off-site migration of contaminants that may present unacceptable risks to human health and the environment.

EPA and NHDES plan to continue providing community email updates on a regular as-needed basis.

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