

Global Landfill Old Bridge Township, Middlesex County

January 2012 Fact Sheet Update

Background

The Global Landfill Site is approximately 60 acres in size. The northeastern property line is also the municipal boundary between Old Bridge Township and the Borough of Sayreville. The Site is bordered by wetlands to the northeast, southeast, and southwest, in the drainage basin of Cheesequake Creek. Cheesequake Creek is located approximately 900 feet southeast. Residential areas of Old Bridge Township and the Borough of Sayreville are north and west-northwest of the Site, respectively, and include several apartment complexes, as well as single-family homes, located off of Westminster Boulevard and Ernston Road.

Global Landfill Reclaiming Corporation (GLRC) operated the landfill from approximately 1968 to 1984. In 1984 a slope failure occurred that was attributed to rapid filling of waste followed by periods of heavy rain and unusually high tides. Since April 27, 1984, when the NJDEP ordered the disposal operations to cease, the landfill has remained inactive, but has been the subject of various investigations and interim remediation measures. The site was placed on the National Priorities List in 1989 because of the presence of contaminated leachate and the discovery of buried drums containing hazardous waste in a portion of the landfill. During the late 1980s and 1990s, DEP and EPA conducted pollution containment activities, as well as soil, water and wetlands investigation and monitoring.

In 1993 a Consent Decree was entered between the NJDEP and certain parties (collectively referred to as the Global PRP Group) to perform additional investigations, interim measures to contain and stabilize the landfill waste materials, and ultimately implement the design and construction of the landfill remediation. These subsequent activities evaluated the geotechnical properties of the subsurface soils, investigated the nature and extent of contamination in the adjacent wetlands, and monitored the time-dependant improvement of slope stabilization measures. Studies showed that shallow ground water beneath the Global Landfill is contaminated with volatile and semi-volatile organic compounds, pesticides and metals. However, shallow ground water is non-potable due to natural conditions unrelated to the landfill (salt-water influence of the tidal Cheesequake Creek). Also, impacts to the wetlands were limited to a small area (about ¼-acre) bordering a portion of the landfill. There are no public wells in the vicinity of the landfill.

In 2008 the Consent Decree with the Global PRP Group was amended to include wetlands remediation and monitoring of the improvement of groundwater quality expected to occur after a low permeability cap

is constructed on the landfill. In 2009 and 2010, the remedy design was completed, permit equivalencies were obtained including those required for wetlands mitigation, and fill materials were delivered and stockpiled at the site in preparation for construction of the cap and landfill gas management system.

This Fact Sheet Update provides information related to the current status of the Global Landfill Site and updates information provided in the May 2010 Fact Sheet.

Current Status

Landfill remedy construction began in the summer of 2010 with the construction of a landfill gas management trench and venting system. This work was performed by WRS Compass under the management and oversight of the Global PRP Group and NJDEP. Fill materials used for cap construction were also delivered and stockpiled in approved areas at the site, until winter conditions caused a hiatus in the construction activities.

The Global PRP Group awarded a second construction contract in the fall 2010 to CETCO Contracting Services, Co. for construction of the landfill cap and other remedy components. CETCO's work is being managed by the Global PRP Group in coordination with NJDEP oversight. Beginning in the winter of 2010, CETCO placed approximately 150,000 cubic yards of stockpiled fill material to grade the top of the landfill in preparation for installation of the geosynthetic (low permeability geomembrane and leachate collection drainage layers) components of the cap. To date grading fill has been placed over approximately 95% of the landfill surface. Five leachate collection blankets have been constructed to intercept leachate that previously flowed from the slopes into a portion of the wetlands at the landfill perimeter. Leachate pump stations and conveyance piping installation commenced in the late fall of 2011. Leachate collection tanks and an equipment building are anticipated to be installed in the winter or spring of 2012. Leachate collected by the system will be transported by tanker truck for disposal at an off-site treatment facility. Twenty seven (27) deep gas wells have been installed through the waste in conjunction with twenty seven (27) shallow gas vents installed just below the grading fill layer in order to manage the landfill gas that will be trapped beneath the geomembrane cover in conformance with NJDEP air quality discharge requirements. Fifteen (15) additional vents will be installed in the spring/summer to complete the management system. The geomembrane (black polyethylene waterproof barrier layer) has been placed over approximately 75% of the landfill surface. The contractor will import approximately 35,000 cubic yards of additional protective cover soil which will be placed to cover and protect the geosynthetic cap components. Topsoil, which will be placed above the protective cover, will be planted with a mix of grass seed. To date protective cover soil has been placed over approximately 60% of the landfill surface. Topsoil has been placed over approximately 40% of the landfill surface.

Approximately 500 cubic yards of contaminated sediment was removed from the impacted portion of the adjacent wetlands, and placed in the landfill. The wetlands excavation area was backfilled with soil to promote restoration of the area with wetlands shrubs and trees native to the Cheesequake Creek area. This work was completed in September 2011. Work has also been completed at a nearby 5-acre wetlands site to enhance the vegetation and ecological habitat also required as a remedy component. That work was completed by AWT Environmental Services, Inc. in July 2011 and included the removal of marsh vegetation and soils and the installation of approximately 55,000 wetland plants and shrubs. The wetlands site will be monitored for a period of 3 years to assess plant growth. Soil that excavated from the wetlands enhancement project site is to be spread in an area adjacent to the landfill and seeded in early Spring.

The majority of the work at the landfill was scheduled to be completed by December 2011. However, due to a number of factors it will be necessary to curtail construction activities at the site through the winter, with the possible exception of installation of leachate collection system components, material deliveries and activities such as inspection of the site and maintenance of erosion and sediment controls. CETCO will resume work in the spring of 2012 and will complete placement of geosynthetic materials and soils, plant grass seed, complete cleanup activities, and startup of the leachate and landfill gas management systems and other miscellaneous tasks. The targeted completion date is August 2012.

Future Actions

After completion of construction activities the site will enter into a long-term monitoring and maintenance program. This program, which will be implemented by the Global PRP Group under NJDEP oversight, will include regular inspection of the perimeter security fence, collection and analysis of gas and groundwater samples, maintenance of the mechanical systems, collection and disposal of leachate at an off-site wastewater treatment facility, inspection of surface water drainage features, mowing grass and monitoring of ecology at pre-established locations in the surrounding wetland. Monitoring reports will be prepared and submitted to NJDEP during the maintenance period.

For more information on the Global Landfill Site visit the EPA Region 2 website at,

<http://www.epa.gov/region02/superfund/npl/globalsanitary/>

Additional information for the Global Landfill Site can be found on the NJDEP website at;

<http://nj.gov/dep/srp/community/sites/pi/g000003352.htm>

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