

PRELIMINARY ASSESSMENT/SITE INVESTIGATION REPORT (PAR/SIR)

Former Connelly GPM, Inc.
Block: 17, Lots: 1-29, 31, 33, 35, 37 and 39
(Former Block: 2, Lots: 98.A-J; and 943.A-O)
200 South Second Street
Elizabeth, Union County, New Jersey 07206
NJDEP SRP PI# 012298

Prepared For:



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4.0 Conclusions and Recommendations

General

The 2.056 -acre former Connelly GPM, Inc. property is vacant and undeveloped. Buildings were demolished after equipment were dismantled and disposed. The residual materials were also disposed based on waste classification analysis.

Analytical results of two soil stockpiles identified metals and PAHs above the New Jersey Residential Direct Contact Soil Remediation Standards. The levels of PCBs, EPH, VOCs, and pesticides were within the regulatory standards. Based on the analytical results, both stockpiles would be managed as regulated soils.

A 6” to 8” thick concrete slab covers a majority of the site. Concrete slab should be excavated during redevelopment, sampled and evaluated for reuse in accordance with the NJDEP’s “Guidance for Characterization of Concrete and Clean Material Certification for Recycling”.

The site is in compliance with applicable regulations. Previous and recent site investigations identified soil and groundwater contamination related to the presence of historic fill at the site. The issues related to the site-wide soil contamination have been resolved by institutional and engineering controls, i.e. cap and deed notice. Prestige Environmental submitted “Remediation Action Permit Application-Soil” and “Remedial Action Protectiveness/Biennial Certification-Soil” to NJDEP in February and March 2015 to meet the regulatory requirements. (Ref. Appendix H and Appendix I). Applicable regulations require submission of Biennial Certification and applicable forms to ensure the integrity of engineering controls and protection of human health and the environment.

Groundwater at the site has a no further action approval from the NJDEP as the underlying aquifer is considered unsuitable for drinking and potable uses.

Redevelopment

It is anticipated that the proposed future development for the Site will consist of buildings, landscaped areas, paved parking lots and concrete sidewalks. The entity responsible for redevelopment will be required to obtain an approval for the modification to the remedial action soil permit from NJDEP due to changes to the exhibits in the existing deed notice, including changes in ownership, land use, and engineering controls.

The entity responsible for the remediation will always be a co-permittee. Its name and address will remain on the permit for the life of the engineering and institutional controls. Property owners who are not responsible for the remediation are required to notify NJDEP of changes in ownership. The new owner is required to sign on as a co-permittee before the former owner is removed from the permit.

Financial Assurance is required when a Remedial Action Permit includes engineering controls, as defined in N.J.A.C. 7:26E-1.8 (any physical mechanism to contain or stabilize contamination or ensure the effectiveness of a remedial action).

The following forms are acceptable as financial assurance:

- A remediation trust fund agreement in accordance with N.J.A.C. 7:26C-5.4
- An environmental insurance policy in accordance with N.J.A.C. 7:26C-5.5
- A line of credit agreement in accordance with N.J.A.C. 7:26C-5.6
- A letter of credit in accordance with N.J.A.C. 7:26C-5.7

The LSRP is required to determine the amount of funds needed to maintain the engineering control as long as the control is needed, up to a maximum period of 30 years. The calculation is based on the yearly cost of maintaining the system including labor, power, sampling parameters and permit costs based on present value, which is multiplied out over the duration of the engineering control, up to 30 years.

Soil Remediation

Analytical results of soil samples identified PAHs and metals above the RDCSRS throughout the site. The elevated levels are attributable to the site-wide historic fill.

The remedial action selection for soil will be based on the future use, remediation goals and objectives, and protection of the public health and the environment. Active remedial measures such as excavation and offsite disposal should be minimized to establish engineering and institutional controls, i.e. site-wide cap and deed notice.

Soil Conservation Plan

A Soil Erosion and Sediment Control Plan pursuant to N.J.S.A. 4:24-39 will be required as the proposed disturbance would be greater than 5,000 square feet.

Dewatering and Shoring

During the course of excavation, groundwater encountered may be contaminated. Excavation of contaminated soils below the water table may require dewatering procedures, including collection, analysis and proper disposal of the dewatered fluids.

Management of Surplus and Excavated Soils

The quantity and location of any areas of excavation or surplus soil for offsite disposal will depend upon the site plans and foundation design. Excavated soils should be segregated based on the known or suspected levels and locations of the contamination. Segregation will facilitate soil reuse and will minimize the offsite disposal of soils. Contaminated soils should be temporarily staged on an impervious surface and covered with a waterproof material prior to disposal at a licensed facility. The containment will be maintained for the duration of the staging period to prevent volatilization, runoff, leaching, or dust emissions. Contaminated soils should not be stockpiled for more than six months pursuant to the Solid Waste Regulations, N.J.A.C.7:26-1.1;1.4.

Backfilling

After the completion of the soil remediation activities, the excavation areas will be backfilled with either on-site generated crushed concrete that is classified and approved for on-site re-use and/or imported clean fill material as needed. Any imported clean fill material will be evaluated according to the NJDEP "Fill Guidance at SRP Sites." The LSRP retained for the Site will be making the determination whether any proposed fill may be imported to or moved around the site, or meets the regulatory requirements for the clean fill.

Engineering and Institutional Controls (Cap and Deed Notice)

Upon completion of the site development, the soil remedial action at the Site should be confirmed by establishing engineering and institutional controls, i.e. cap and deed notice. The surface conditions should be flat graded, wherein the soil conditions will be consistent with the RDCSRS and/or the historic fill.

The entire Site should be capped with asphalt, clean fill under the grass, and the building floors. The construction and development at the Site will start and will be completed with an impervious cap.

Constructing the cap after the development is the least invasive and most cost efficient method for an effective engineering control for the soil contaminants that will remain at the Site. Upon completion of the redevelopment, the revised deed notice and soil remedial action permit including the type, size and thickness of the cap, and cross section of the improved areas should be completed and submitted to the NJDEP.

Upon completion of the site development including remedial activities as required, and once the LSRP has determined that the Site conditions are protective of the public health and the environment, the LSRP will issue a Restricted Use RAO. The LSRP will make this determination based on the site history, investigations, remediation, using independent professional judgment.

Groundwater Remedial Action

The recent site investigation identified PAHs and metals above the GWQS at the Site. No PCBs, VOCs, or pesticides above the GWQS were detected. Earlier groundwater investigations by Whitman Companies in 1991-1992 had also identified similar contamination, i.e. PAHs and metals which would be expected as these contaminants are present in the soils at or below the groundwater table. Establishment of a permanent site-wide Classification Exception Area/Well Restriction Area (CEA/WRA) for groundwater impacts due to historic fill is recommended.