



U.S. POST OFFICE PROCESSING & DISTRIBUTION CENTER • Pontiac, Michigan

CHALLENGES

- Develop an air-monitoring plan that meets USEPA requirements
- Varying site conditions with excessive settlement concerns

SOLUTIONS

- Collaborate with GM's environmental consultants to provide a win-win plan for the community and our client
- Placement and monitoring of settlement plates on large structural fill areas to alleviate concerns of future unsuitable settlement of the new structure

SERVICES

- Geotechnical engineering
- Environmental services
- Construction engineering services

Monitoring air quality and soil compaction for U.S. Post Office facility

G2 Consulting Group helped the United States Postal Service (USPS) redevelop an obsolete manufacturing site into a new postal distribution center that created jobs, generated tax revenue and moved mail more efficiently.

The 840,000-square-foot USPS Northeast Regional Processing and Distribution Center was built on 80 acres of land in Pontiac, Mich., that housed a General Motors Corp. manufacturing plant, foundry and other operations dating back to the early 1900s. GM demolished the above-grade structures, but significant below-grade structures remained, including basements, foundations and utilities.

A U.S. Resource Conservation and Recovery Act (RCRA) closure agreement between GM and the U.S. Environmental Protection Agency (USEPA) dictates the ongoing environmental remediation work necessary to get the land ready for the new USPS facility.

GM selected Cunningham-Limp Company to perform site improvements for the project's first phase. It involved demolition and removal of all below-grade structures, crushing concrete from the demolition on site, and placing crushed concrete and soil as a "pre-load" to consolidate underlying fill and soft soils to create a more stable surface for future construction.

General contractor Cunningham-Limp chose G2 to provide environmental and geotechnical engineering services in the site preparation phase. G2's environmental services included development of a government-mandated Site Specific Health & Safety Plan and an Air Monitoring Plan that met the requirements of the RCRA closure agreement, GM and the USPS, and that also served the local community's public interest. The plans incorporated site perimeter air monitoring to protect adjacent neighborhoods, worker protection air monitoring in the work zone, utilization of photoionization detectors and gas meters, and establishing lines of communication with the construction manager. Throughout the project, G2 also sampled and analyzed suspect soils and groundwater.

G2's geotechnical engineers installed settlement plates in the pre-load area to monitor consolidation of the underlying fill and soft soils. Soil borings were performed to assess on-site soils and provide pavement design recommendations. On-site construction engineering services detailed compactive effort and density of the numerous engineered fill areas.