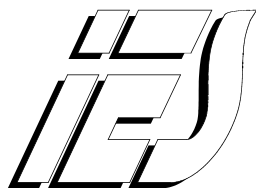


Project Description



Description: RCRA Post-Closure Part B Permit

Site: National Manufacturer of Auto Parts

Location: Indiana

IES was retained to complete a post-closure part B permit application for a closed RCRA landfill in accordance with the EPA and Indiana Department of Environmental Management (IDEM) requirements. The application included a thorough discussion of the facility operations, post-closure plan, contingency plan, groundwater monitoring program, corrective action program for the RCRA regulated unit and corrective action for the solid waste management units at the facility.

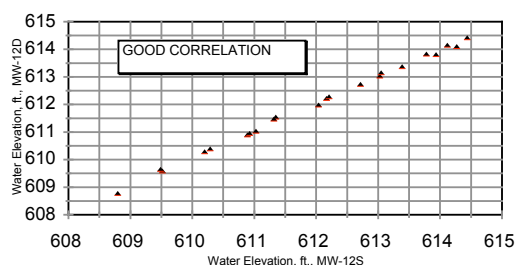
The facility layout was combined (using AutoCAD) with a topographic map, which showed the facility as well as the surrounding area within 1,000 feet of the facility boundaries. As part of the post-closure plan, IES prepared a cost estimate for the remaining post-closure care period, which included groundwater monitoring and analysis, landfill inspections, and corresponding reports.

In order to minimize the frequency of modifications to the permit, IES developed a contingency plan addressing accidental releases of hazardous constituents within the area of the regulated unit. By structuring the contingency plan in such a manner, revisions to the overall facility's emergency response/contingency plan would not trigger a modification to the permit.

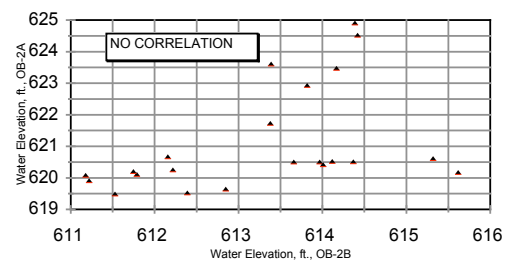
To support development of the groundwater monitoring program, a comprehensive evaluation of the hydrogeology and geology of the facility and surrounding area was conducted. Identification of the uppermost aquifer was established by preparing stratigraphic cross sections and the detailed evaluation of groundwater level fluctuations. This analysis included an assessment of barometric efficiency, a master hydrograph, and X-Y plots of water level data to evaluate hydraulic continuity between various nested pairs of monitoring wells.

Linear regression analysis was utilized to quantitatively demonstrate which well pairs were

Water Level Correlation
MW-12S and MW-12D



Water Level Correlation
OB-2A and OB-2B



hydraulically connected, and thereby the lateral and vertical extent of the uppermost aquifer. Since some concentrations of hazardous constituents were present in the facility groundwater, a groundwater monitoring program was developed by IES in accordance with the compliance monitoring and corrective action programs described in 40 CFR '264.99 and '264.100, respectively. With the assistance of a recognized expert in the field of statistics, an appropriate statistical program was developed to evaluate groundwater data using the preferred method of confidence intervals.

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