Del. Sand & Gravel Landfill

Delaware Sand and Gravel Landfill
Grantham Lane
New Castle, DE 19720

Site Category:
Superfund National Priorities List, 1982

The Delaware Sand and Gravel site covers 27 acres and is located about two miles from the City of New Castle, Delaware.

Formerly, a sand and gravel quarry, the site is now an inactive industrial waste landfill. Portions of the site are currently used as a salvage yard and a propane supply business.

Landfilling operations started at the quarry in 1968. Industrial waste and construction debris, including thousands of drums of hazardous material, were landfilled in the quarry. The site was closed as a landfill in 1976, following an enforcement action by the State. It received Superfund National Priorities List status in 1982.
Site Details

This Superfund Site includes: a 3-acre Drum Disposal Area where at least 13,000 drums of liquid sludge from chemical production, manufacturing and petroleum refining were disposed; a half-acre Ridge Area of hot spots of contaminated surface soil due to chemical spills; a 2-acre Grantham South Area and 11-acre Inert Disposal Area where mixed chemical wastes were buried 20 to 40 feet thick.

Effects on Drinking Water

Hazardous substances from the site have migrated into the underlying groundwater of the shallow Columbia Aquifer and the deeper Upper Potomac Aquifer which is currently used as a drinking water source. Even though this site has been covered by layers of gravel and sand, hazardous chemical are still able to permeate into groundwater.

In the early 1970s nearby residents who had private water supply wells were put on the public water supply from the Artesian Water Company. In 1971 contamination was found in a private well near the adjacent Army Creek Landfill.

Contaminants found in groundwater include benzene, 1,2-dichloroethane and ethylbenzene. Contaminants found in soil included benzene, polychlorinated biphenyls (PCBs), arsenic, antimony and lead.

Groundwater Contaminants and Induced Health Effect

<table>
<thead>
<tr>
<th>1,2 dichloro-ethane</th>
<th>Ethyl-benzene</th>
<th>Benzene</th>
<th>PCB’s</th>
<th>Arsenic</th>
<th>Antimony</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>narcosis, nausea, vomiting</td>
<td>dizzy, light headed</td>
<td>skin and eye irritations, drowsiness and vomiting</td>
<td>nausea, lethargy, skin pigmentation</td>
<td>digestive tract pain, nausea</td>
<td>irritation of eyes and lungs</td>
<td>lead toxicity can effect the nervous system</td>
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<tr>
<td>liver and kidney effects; weakens immune system; can increase colon cancer if found in drinking water</td>
<td>can cause liver damage</td>
<td>as a carcinogenic, it can cause Leukemia</td>
<td>visual and gastrointestinal disturbances, and decreased lung function in those who work with PCB’s</td>
<td>decrease the production of white blood cells and induce damage to blood vessels</td>
<td>prolonged exposure can cause heart and lung problems, stomach pain/ulcers</td>
<td>especially effects young children in their mental and physical growth</td>
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</tbody>
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http://delaware.sierraclub.org