Community Relations Team

The Diamond Shamrock Community Relations Team is a responsive community team dedicated to communicating information and addressing public concerns regarding the investigation of the Diamond Shamrock Painesville Works Site.

Issue 2, November 1996

Clean-up Timeline

Orders Signed (9/95)

Public Meeting (11/95)

Work Plan Approved by Ohio EPA ← WE ARE HERE

Collect Samples

Results Reported to Ohio EPA

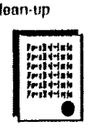
Public Meeting About Sample Results

Researching Clean-up Methods

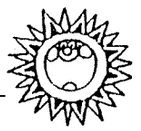
Clean-up Methods Recommended to Ohio EPA

Public Comments on Clean-up Methods

Ohio EPA Selects Clean-up Method



Orders Signed for Clean-up



Clean-up

CURRENT HAPPENINGS

Radiation Survey of the One Acre Landfill (Study Area 3):

On June 24, 1996, the Ohio EPA, Ohio Department of Health (ODH), Bureau of Radiation Protection (BRP), and the Painesville PRP Group performed surface radiation monitoring and sampling of leachate for radioactive materials at the One Acre Landfill. Surface monitoring and leachate analysis did not reveal any elevated levels of radioactivity at the site. These results relieved concerns that the Ohio EPA had regarding the potential disposal of radioactive-contaminated materials in the One Acre Landfill.

Remedial Investigation/Feasibility Study Work Plan:

The Painesville PRP Group submitted the revised RI/FS Work Plan on August 14, 1996. This document outlines the investigations that will be performed at the site to determine if and where contamination exists. The Ohio EPA is currently reviewing the document and will provide comments and/or approval to the Painesville PRP Group as soon as is reasonably possible. The Ohio EPA and Painesville PRP Group anticipate field work to begin in 1997.

Well Replugging Operations:

During the course of the Remedial Investigation/Feasibility Study (RI/FS) at the Diamond Shamrock Painesville Work site, a variety of activities may be performed which are outside of the scope of the RI/FS. One such activity is the well replugging that recently occurred on the former chromate lagoon (Study Area 6). Two wells, which currently belong to Chemical Land Holdings, had been leaking small amounts of gas. During August and September, 1996, Chemical Land Holdings and their contractors worked to replug these wells in order to stop the gas leaks. Well plugging operations were performed with oversight by the Ohio Division of Natural Resources, Division of Oil and Gas, and the Ohio EPA. All work is expected to be completed by the end of November.

Radiation Survey of Waste Lake #4 (Study Area 7):

On September 10 and 11, 1996, the Ohio EPA, ODH/BRP and the Painesville PRP Group performed surface radiation monitoring of the former 450 acre waste lake located south of the Grand River. This survey did not reveal any elevated levels of radioactivity on this portion of the site. The Ohio EPA had concerns that wastewater, contaminated with radioactive materials, may have been deposited within the basin from the former Diamond Magnesium facility (currently Uniroyal). Additional work may be performed in the future to confirm this finding; however, results did establish that no risk currently exists to local residents from radioactivity at the site.

QUESTION: Is it dangerous to enter the Diamond Shamrock site?

ANSWER: There should be no one entering onto the site except for authorized personnel. Until the remedial investigation process is complete, there is potential for both chemical and physical dangers. If someone were to enter the property and injure themselves, it is unlikely that anyone would hear a distress call. The public is urged not to enter the site under any circumstances. This is private property and there should be no trespassing.

BRINE AT THE PAINESVILLE PLANT

The Diamond Alkali Company was incorporated in 1910 and the company built its first plant, the Painesville Plant, on the shores of Lake Erie near Painesville, Ohio. A major reason for building the plant at that location was that several million years ago, nature laid down a 125 foot thick bed of solid rock salt, fairly pure, that was 2000-2500 feet below the surface of the ground. This salt formation underlies and reaches beyond all of the area that was included in the 1100 acre Diamond Shamrock Painesville Site. Another reason that the Painesville Plant was located here was the fact that Lake Erie provided a large source of fresh water for the many needs of the plant. One need was to supply water to dissolve the salt under the ground and to remove it by wells as brine for the Plant.

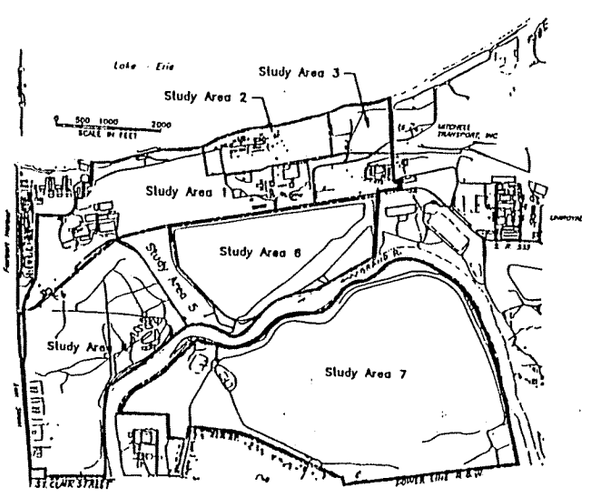
During the early days of mining the brine, beginning in 1912, the wells were located on the main plant property next to Lake Erie. These wells produced brine from the top layer of the salt formation, and as a result created cavities nearer the ground surface. The brine removed from the wells was used as a feed stock to produce mostly inorganic chemicals, including sodium bicarbonate, soda ash, sodium hydroxide, sodium silicate, hydrochloric acid, muriatic acid and chlorine. The organic chemicals produced from the salt included chlorowax and carbon tetrachloride. All of the production operations of the Plant ceased in 1976. There was some limited settling or subsidence in areas of the main plant during this time.

The practice of solution mining became very common (there are more than 329 similar salt formations in the U.S.). The mining techniques improved, so that enough salt remained in the formation to allow the cavity to be supported by the overlying geological structure of 2500 feet of soil, clay, shale, limestone and salt. Data was carefully recorded on the size and location of the cavities created by the brine wells and there are no known ground or settling problems in the area. When the Diamond wells were exhausted, the wells were plugged and abandoned according to the rules of the State. The last of the solution mining wells was shut down about twenty years ago, and none of these wells were used by Diamond for injection or hydrocarbon storage purposes.

The practice of using the salt cavities to store hydrocarbons (natural gas, propane and oil) is quite common in the world, and this practice was tried by others in the Painesville area. In addition, oil well drilling waters have been disposed of in injection wells (not to be confused with brine solution mining wells) in the Painesville Area.

Map Showing Site Divided Into Study Areas

Study Area 1 - Main Production Area, about 166 acres
Study Area 2 - Coke Production Area, about 41 acres
Study Area 3 - Mainly undeveloped land with small closed drummed waste disposal area (One Acre Site), total about 39 acres
Study Area 4 - Soda Ash Production Process Effluent Settling Basin No. 3 (closed), about 185 acres
Study Area 5 - Main Works Effluent Settling Basin (Hydroretention Basin - closed) about 29 acres
Study Area 6 - Contains Soda Ash Production Process Effluent Settling Basin No. 2 (closed) and closed Chromium Chemicals Production Area, total about 149 acres
Study Area 7 - Soda Ash Production Process Effluent Settling Basin No. 4 (closed), about 520 acres



The D.S.C.R.T. welcomes your comments and concerns. Please send to D.S.C.R.T.; c/o Lake County Health District, P.O. Box 490; Painesville, Ohio 44077