



EPA

Waste Disposal, Inc (WDI) Superfund Site

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 9 • SAN FRANCISCO, CALIFORNIA • AUGUST 1997

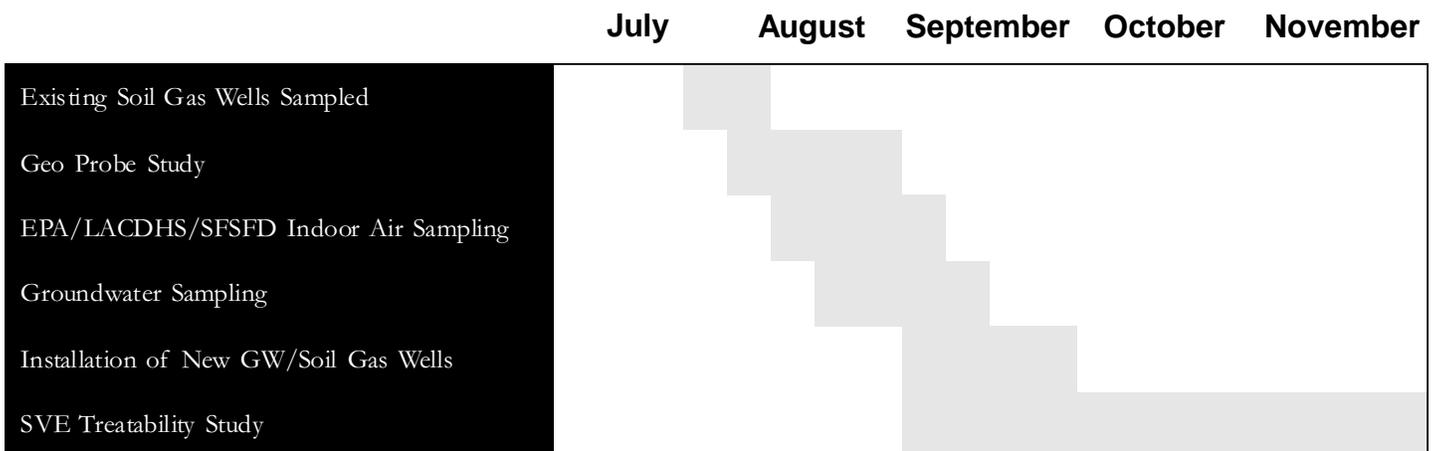
Field Work Planned for Summer 1997

SANTA FE SPRINGS, CA - As we mentioned in our last fact sheet (April 1997), the U.S. Environmental Protection Agency (EPA) is requiring additional field work and Remedial Design (RD) investigative studies at the Waste Disposal, Inc. (WDI) Superfund site before the cleanup design is finalized. The field work and investigative studies are being conducted to obtain current data on soil gas emissions and groundwater. This data will be used to validate the previously collected data and to complete the final design of the cleanup remedy. This fact sheet describes the activities scheduled to begin in late July and continue into September 1997.

- In early August, EPA will begin sampling the existing soil vapor wells located on the site. Also during August, EPA contractors will install and sample temporary soil gas probes at the site.
- In August, EPA and the Los Angeles County Department of Health Services (LACDHS), with support from the Santa Fe Springs Fire Department (SFSFD), will be conducting indoor air monitoring of buildings on the WDI site.
- In late August or early September, the Waste Disposal, Inc. Group (WDIG), the companies potentially responsible for the WDI Superfund site, also will be doing investigative work at the site. WDIG will be installing additional soil gas (vapor) and groundwater monitoring wells, as well as evaluating the feasibility of removing gas, if necessary, from subsurface soils at the site using a soil vapor extraction (SVE) system.

Each of these components of this summer's field work is described beginning on page 2.

Figure 1: Schedule for Remedial Design Investigative Activities



Subsurface Soil Gas Investigations

The first sign of field activity will be in late July, when an EPA on-site mobile laboratory to perform sample analyses will be temporarily located on the vacant lot at the northwest corner of Greenleaf Avenue and Los Neitos Road. In early August, another mobile laboratory will be added.

Existing Soil Gas Monitoring Wells

The first sampling activity at the WDI site will be the sampling of the existing soil gas wells (vapor wells). (See Figure 2: Existing and Planned Vapor Well Locations) Another 10-15 new soil gas wells are planned for installation on site by the WDIG in the late summer. The new and approximately 23 existing soil gas wells will be sampled for a number of volatile organic compounds (VOCs), including vinyl chloride and benzene. The reason for this subsurface gas sampling is to refine the design of the reservoir area cap (i.e., an impermeable cover with a gas collection system to prevent rainwater from entering the subsurface) and to determine if a SVE system should be used on selected areas of the site outside of the reservoir area.

Temporary Soil Gas Probes

Beginning with the data collected from sampling the soil gas wells, EPA will expand its sampling to define the extent of soil gas migration. A geo-probe rig (a truck-mounted drilling device) will be used to install temporary soil gas sampling tubes (soil gas probes) approximately 10 - 20 feet below ground surface to collect subsurface gas samples in locations not covered by the permanent soil gas wells. As soon as the gas sample is collected, the temporary probe is removed and the hole is refilled. Temporary gas probe installation and sampling will continue until the extent of gas migration has been adequately defined. This activity is expected to last two to three weeks.

Indoor Air Monitoring

Along with collection of subsurface gas samples, EPA will collect indoor air samples

from on-site buildings. Under local agency authority, the Los Angeles County Department of Health Services (LACDHS) with support from the City of Santa Fe Springs Fire Department (SFSFD) also will monitor the interior of the on-site buildings for methane. Monitoring will be conducted for methane and other chemical compounds over the next year or more until the final cleanup remedy is in place.

Indoor Air Sampling for Methane by LACDHS and SFSFD

In coordination with EPA, and with support from the City of Santa Fe Springs Fire Department (SFSFD), the Los Angeles County Department of Health Services (LACDHS), will conduct a "crack and crevice" study (i.e., using a hand-held methane detection device to check a building's foundation and other potential entry points for methane gas) of all the on-site buildings. These buildings are being sampled because they are located on the WDI site. In mid-June, EPA contacted all the current owners of the parcels that comprise the WDI site to obtain access for these studies.

While EPA does not think that subsurface gas is a problem in these buildings, this precautionary sampling will confirm this. If unacceptable levels of methane are found in a building, the LACDHS and the SFSFD will work with the property owners to correct the problem. If unacceptable levels of other chemical compounds are found in a building, EPA will install a remedy or an interim measure at the building to prevent the subsurface gas from entering through the building's foundation. Some examples could include an upgraded air conditioning system, better ventilation, exterior gas vents, or other engineering remedies.

Methane gas is commonly found in subsurface soils in Santa Fe Springs because of the widespread petroleum exploration and production activities in the city during the 1920s and 1930s; therefore, many areas of the city have been classified as "methane non-attainment areas." Methane is also found in landfills where there is subsurface anaerobic biodegradation of organic compounds, such as those disposed of at the WDI site. The LACDHS inspector will conduct a survey to determine if any locations (e.g., closed cupboards and closets, under sinks, near

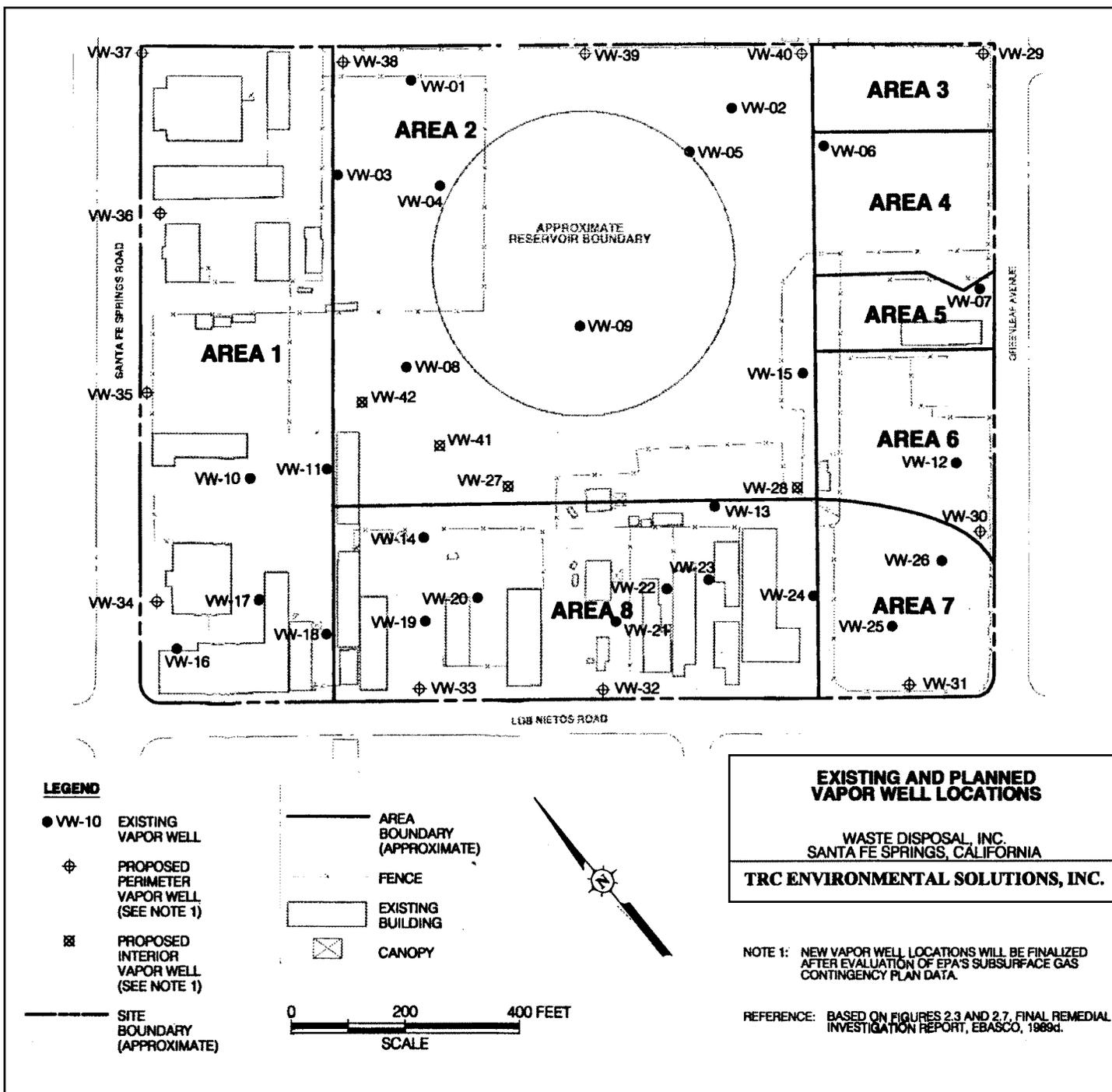
plumbing outlets) within the buildings surrounding the reservoir emit or accumulate methane gas at levels of concern. The results of these surveys will assist EPA in determining the best sampling locations for additional sampling studies.

Indoor Air Sampling for Chemical Compounds and Methane by EPA

After the "crack and crevice" study is completed, EPA will conduct a second round of

indoor air sampling of all the on-site businesses for chemical compounds and methane gas in order to verify that no harmful gases are migrating into the buildings. Because containers of solvents, paints, or other chemical compounds can greatly influence sampling results by masking or interfering with the detection of chemicals of potential concern, EPA will review the chemical usage of the tenants occupying the on-site businesses before selecting sampling points and locations. It is anticipated that indoor air

Figure 2:
Existing and Planned Vapor Well Locations within Site Boundary



Site Background

The WDI Superfund site is located in the City of Santa Fe Springs, Los Angeles County, California, on approximately 40 acres of land divided into multiple parcels. The site is surrounded by commercial and industrial areas to the north, west and south, residential areas to the east, and a school athletic field along the northeastern corner.

At its center, the WDI site contains a buried 42-million gallon capacity concrete reservoir originally constructed for crude petroleum storage. The reservoir was decommissioned in the late 1920s, but was used until the 1960s for disposal of a variety of liquid and solid wastes. Wastes disposed of at the site include petroleum chemicals, solvents, sludges, construction debris, drilling muds, and other waste materials. Historical aerial photographs show that liquids were discharged to the reservoir and into bermed areas surrounding the reservoir. The reservoir and portions of the site area were covered with soil during the 1960s. Soil borings indicate that the reservoir is covered by 5 to 10 feet of fill soil.

In December 1993, after completion of the Remedial Investigation, Feasibility Study, and Risk Assessment activities, EPA selected a remedy to mitigate the site. The site is currently in the Remedial Design (RD) phase of cleanup activities, with RD investigative activities currently underway as described in this fact sheet.

sampling will be conducted over the weekends to minimize inconvenience to the tenants. Air samples will be collected by placing a SUMMA cannister (a metal cylinder about the size of a 30-cup coffee urn) in the building for 24 hours. Afterwards, the SUMMA cannister will be removed from the building and the air samples analyzed. In some circumstances, EPA may conduct a shorter 8-hour sample event for certain buildings with the SUMMA cannister or possibly using another type of sample device. Future follow-up may result in EPA conducting additional indoor air monitoring sampling, if needed.

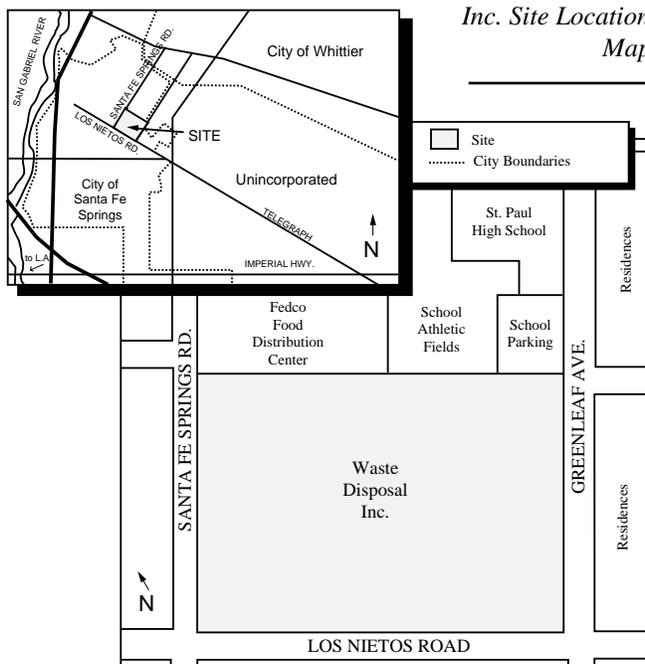
Soil Vapor Extraction System Study

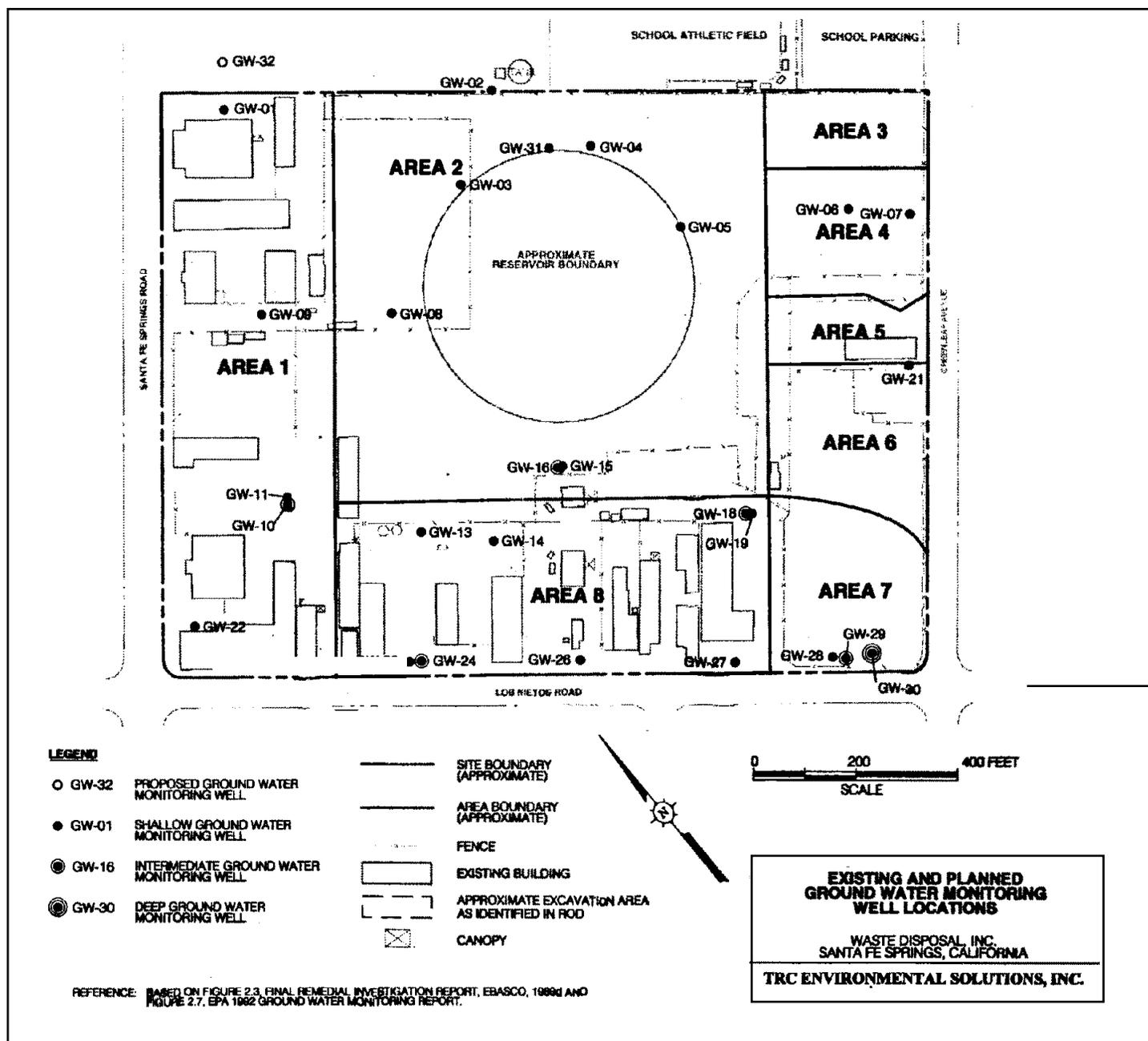
If subsurface gases should be detected in or around any of the on-site buildings, a method is needed for controlling or removing these gases. If necessary, in addition to capping the reservoir area, another technology may be needed to control the gases in these outlying areas. One technology, which has been used effectively at other waste sites with similar gas problems, is the use of a soil vapor extraction (SVE) system. In September, once the data from the other investigative studies have been analyzed, the WDIG will conduct a pilot treatability study to investigate the efficiency of using SVE in other areas of the site, if needed. The type of treatment device selected will depend on the long-term generation rate of the subsurface gases requiring removal or control. The performance of the SVE system will be evaluated before completing the design of the final remedy.

Additional Soil Gas and Groundwater Wells

In September and October 1997, the WDIG will install additional soil gas wells and groundwater monitoring wells, based on the results of the data collected during August. These wells, in addition to selected existing soil gas and groundwater wells, will be added to create a permanent compliance well monitoring network for the site.

Figure 3:
Waste Disposal, Inc. Site Location Map





Quarterly Groundwater and Soil Gas Monitoring

While an initial round of samples will be collected by EPA from the existing soil gas and groundwater wells during the summer of 1997, the WDIG will commence quarterly monitoring of these wells, in addition to any new wells installed, during the Fall of 1997. (See Figure 4: Existing and Planned Groundwater Monitoring Well Locations) This monitoring will continue indefinitely until EPA approves reducing the number of wells to be sampled or the frequency of this quarterly monitoring.

New Data to be Used in Final Remedial Design

The results of this investigative work, including the SVE studies, will be integrated into a revised design for the cleanup of the site. WDIG will submit the final drawings and specifications to EPA for approval during the Fall of 1997 so that construction of the remedy can begin in the Summer of 1998. If the investigative studies result in significant design changes, EPA will provide the community an opportunity for public comment during the late Fall of 1997.

*Figure 4:
Existing and
Planned
Groundwater
Monitoring
Well Locations
within Site
Boundary*

 **For More Information** 

The EPA Superfund program values community input in addressing hazardous waste cleanups. If you have any questions or concerns, please contact:

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or leave a message on EPA's TOLL-FREE line: (800) 231-3075
and we will return the call.

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