

NEWS LETTER



DEFENSE FUEL SUPPLY CENTER

Winter 1992

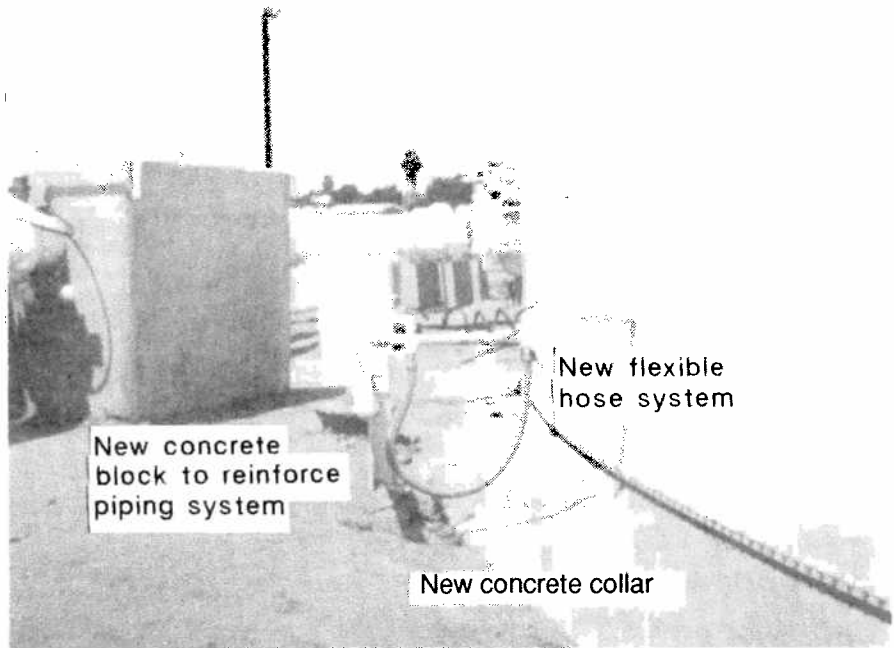
Information for DFSP Norwalk Neighbors

AUDIT SHOWS LOW RISK

DFSC has finished an environmental audit and given the information to the City of Norwalk. A major purpose of the audit was to provide information to help the City make decisions on building permits for developments south of the tank farm. Conclusions from the audit are:

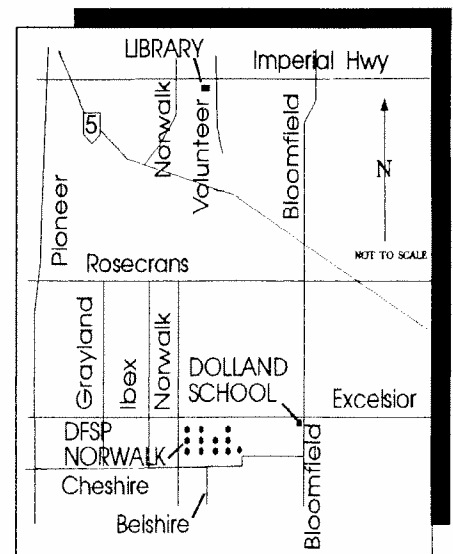
- Human health risks from vapors of the contaminants (e.g., benzene and 1,2-DCA) dissolved in the groundwater are less than the maximum acceptable risk level of Proposition 65
- Human health risks from vapors of contaminants (e.g., benzene and 1,2-DCA) from fuel floating on top of the groundwater are also less than the maximum acceptable risk level of Proposition 65.

A copy of the audit has been placed in the DFSP Norwalk information repository at the Norwalk Public Library.



DFSC on-site improvements are continuing as planned. Earthquake protection work on fuel tanks is scheduled to be completed by the end of January 1993. A new door has been installed on the tank farm pumphouse as a noise abatement measure. A contract for installing new tank bottoms is expected to be awarded around mid-1993.

Health Update ... In coordination with the California Environmental Protection Agency ("Cal EPA"), DFSC will complete a health risk assessment soon for the local neighborhoods on the south and west sides of the tank farm. The report is expected to be ready by the end of this year. The study is being done to see if chemicals in soil and groundwater around the tank farm pose a risk to human health. Because DFSC shares the concern of Norwalk neighbors, health risk experts will be available to answer questions at the next Community Meeting, planned for early 1993.



Update on DFSP Norwalk Project: Investigation and Remediation

Off-Site Investigation West of Norwalk Boulevard

Some samples from previously installed wells along Ilex Avenue had trace amounts of 1,2-dichloroethane or 1,2-DCA. (1,2-DCA may be found in leaded gasoline.) To find out more about what is underground to the west of DFSP Norwalk, DFSC installed and sampled four 55-foot-deep monitoring wells along Grayland Avenue. Laboratory tests of the recent water samples showed no 1,2-DCA. That means the 1,2-DCA is located west of Ilex Avenue but east of Grayland Avenue, and the DFSC can now plan how to remediate it.

Deep Well Investigation

DFSC installed two more deep (about 130 feet down) monitoring wells at the tank farm: one on the northwest corner and one in the south-central area near the truck fill stands. There are now three deep wells. Sampling results from these wells show no benzene and no 1,2-DCA. These results indicate that the chemicals have not moved into the drinking water aquifers.

The deep wells will be used as a continuing source of information

about what is happening underground.

Existing On-Site and Off-Site Well Investigation

Forty-eight monitoring wells, already in place on the tank farm, as well as off site, were resampled and analyzed to check the groundwater quality. The results update what is known about the size and location of the two benzene plumes. The northern plume remains in the tank farm;

the southern plume is partially on the tank farm and off site south of Cheshire Street.

Sampling results from the 48 wells have also been used to define the 1,2-DCA plume, which goes off site to the west and the south.

Once the new data are evaluated, a report of the results will be issued in December 1992, and a summary will be placed in the information repository.



Soil and Groundwater Remediation

The first two horizontal test wells for soil and groundwater remediation were installed in August 1992, shortly after the last Community Meeting. DFSC expects installation of additional horizontal wells will start in early 1993. All horizontal wells will be approximately 25 feet under the ground to the south of the tank farm.

These wells will allow cleanup of the contamination by drawing vapors from the soil and groundwater back to a treatment unit on the tank farm. Vapor extraction, free product recovery, and groundwater pump-and-treat technologies will be used to clean up on-site contamination. The groundwater pump-and-treat system will be designed to capture and treat contaminants in groundwater off site to the west and south of the tank farm.

GLOSSARY

Remediation is the process of cleaning up contaminated soil and groundwater to levels that are acceptable to the regulatory agencies and that protect public health and safety as well as the environment.

Pump-and-treat is a groundwater remediation method where contaminated groundwater is pumped from wells to an aboveground treatment system. The treated groundwater is either returned to the aquifer or placed in a storm drain.

Vapor extraction system is a remediation system that works like a vacuum cleaner to vacuum fuel vapors from the soil. The fuel vapors are removed in a treatment unit and the clean treated vapors are released to the air.

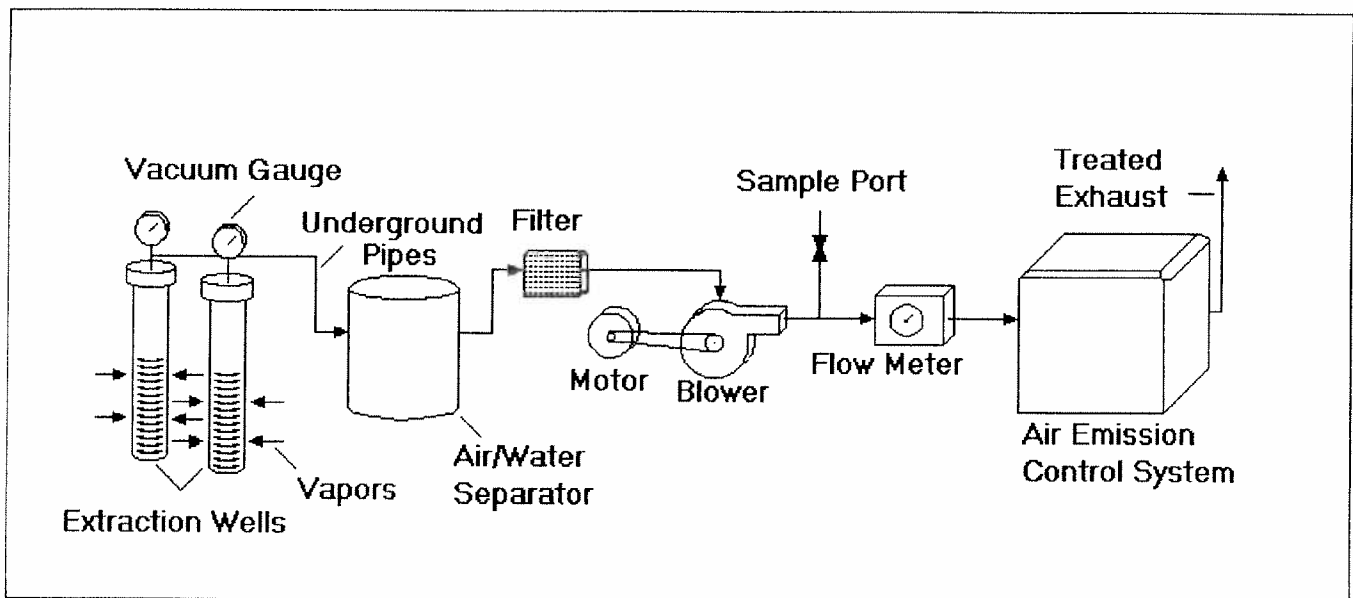
Free product recovery refers to the fuel floating on top of groundwater which is skimmed off and recycled or disposed.

Proposition 65, which is the California Safe Drinking Water and Toxic Enforcement Act, was adopted by voters in 1986. It requires warnings for products containing substances that the state has determined can cause cancer or birth defects. In addition, Proposition 65 has set "significant risk levels" for more than 50 chemicals, including benzene. The levels represent the daily level of exposure to an identified chemical that would result in no more than 1 case of cancer in 100,000 people exposed to that chemical over a 70-year lifetime.

WHO'S WHO: TANK FARM OPERATIONS

The *Defense Fuel Supply Center (DFSC)* supplies fuel to U.S. military bases through *Defense Fuel Supply Points (DFSP)*. Locally, the *Defense Fuel Region-West (DFR-W)* oversees the Norwalk tank farm which is operated under a contract with **TENCO Services, Inc.** Two environmental and engineering consultants also provide services: **Groundwater Technology, Inc.**, works for DFSC and **Woodward-Clyde Consultants** works for DFSC through the U.S. Army Corps of Engineers, Huntsville Division.

The simple diagram below shows a basic vapor extraction system (see Glossary). It extracts vapors from contaminated soil; in the process, volatile organic compounds (VOCs) such as gasoline evaporate and join the vapor stream. The vapor then passes through emission control treatment units before being released to the atmosphere.



GET THE FACTS

Community Meeting on Health Risk Assessment by Groundwater Technology, Inc.

Early 1993

John Dolland Elementary School
Multi-Purpose Room
15021 South Bloomfield Avenue, Norwalk

Information Repository

Norwalk Public Library (Reference Section)
12350 Imperial Highway, Norwalk

Point of Contact

Joe Trani
Environmental Specialist, Defense Fuel Region-West
310/514-6100

Catherine Tice
Community Relations Specialist, Woodward-Clyde
714/835-6886

Questions? Just Ask...

Norwalk tank farm neighbors and City residents have asked many good questions about tank farm operations over the past several months. Personal responses to these questions have been made both by telephone and letter. Your written or telephone questions are welcome at any time. Call Catherine Tice, Woodward-Clyde, at 714/835-6886 or Joe Trani, DFR-W, at 310/514-6100.

