

Citizens' Guide to the Reich Farm Public Health Assessment March 2001

The New Jersey Department of Health and Senior Services (NJDHSS) and the federal Agency for Toxic Substances and Disease Registry (ATSDR) have completed the Reich Farm Public Health Assessment. Public Health Assessments, while not designed to determine the cause of disease observed in the community, do thoroughly review and document what is known about site contaminants, human exposure to those contaminants, and the implications for public health. They also identify actions needed to further evaluate and mitigate or prevent human health effects. The Reich Farm Public Health Assessment is summarized below. A draft version of the document was released in August 1999, underwent a two-month public comment period, and has been revised after consideration of the comments received. The full document is available to any interested citizen. Copies may be obtained from the locations listed at the end of this guide.

What is the purpose of the Reich Farm Public Health Assessment?

This Public Health Assessment was developed to learn about past and present exposures to contamination from the Reich Farm Superfund site, and evaluate their public health significance. This Public Health Assessment focuses on potential exposures from private wells and the community drinking water supply.

What contaminants from Reich Farm have been found in area groundwater?

In 1971, over 4,500 drums of chemical waste were illegally dumped at the Reich Farm. This led to the contamination of local groundwater, the source of drinking water for the area. In 1974, organic chemicals were found in private wells in Pleasant Plains near the Reich Farm site. Most chemical testing at that time was not specific enough to identify individual organic compounds. Phenolic compounds were also found in nearby private wells two years later.

In 1986, additional private wells in Pleasant Plains and certain community wells at the Parkway well field were found to be contaminated with volatile and/or semi-volatile organic compounds. Contaminants included trichloroethylene, tetrachloroethylene, and others.

Finally, in 1996, styrene-acrylonitrile trimer was discovered in several of the wells in the Parkway well field. This compound, which was present but unidentified in earlier water quality tests, was one of the chemicals dumped at the Reich Farm site in 1971.

How has exposure to these contaminants been reduced?

Exposure to site-related contaminants has been eliminated or reduced between 1974 and the present through the following actions:

- The 4,500 drums found on the Reich Farm were removed from the property in 1972 and 1974, preventing any additional product in the drums from entering into the environment.
- Some of the contaminated soil was removed from the site in 1974; removal and treatment of additional soils were completed in 1995.

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- Many private wells in the area were condemned and sealed in 1974 and 1976. A well restriction zone was established, creating an area in which no new wells could be installed.
- Air strippers were installed on two community water supply wells to remove volatile organic compounds in 1988.
- With the discovery of styrene-acrylonitrile trimer in the community water supply in 1996, water from two Parkway well field wells was treated with activated charcoal and primarily pumped to waste (except in instances of high water demand).
- In 1999, water from two additional wells in the community supply began undergoing treatment with activated charcoal.

What are the potential health risks from these exposures?

Early tests which detected contamination could not identify what specific contaminants were present, and more recent analyses may not be indicative of past levels of contamination. While toxicologic evaluations of known contaminants indicate that levels are below those at which adverse health effects would occur, there is much uncertainty about the nature and levels of past exposure.

The health effects of styrene-acrylonitrile trimer are not yet known. It is also not known how these compounds affect health when they are found in mixtures.

What are the conclusions and recommendations of the report?

After assessing the weight of evidence, the NJDHSS and the ATSDR conclude that the Reich Farm site was a **public health hazard because of past exposures** for the following reasons:

- 1) a potentially large number of people were exposed to contaminants in their drinking water;
- 2) epidemiologic studies in other communities suggest that exposure to trichloroethylene and tetrachloroethylene may increase the risk of certain childhood cancers and adverse neurological effects; and,
- 3) there is an excess of childhood cancer in this community.

As a result of the actions to reduce exposure described above, the Reich Farm site is considered to represent **no apparent public health hazard in the present.**

Because of the presence of site-related groundwater contamination, the treatment and monitoring of wells in the Parkway well field should continue. Private well use restrictions should remain in place. This Public Health Assessment also supports the need to consider the potential for Reich Farm-related exposures in the on-going epidemiologic study of childhood cancer in this community.

How can I get a copy of the full report?

For a full copy of the report, please contact:

NJDHSS Toms River Field Office
(732) 505-4188

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or visit our web site at www.state.nj.us/health.