

Site Review and Update

Industrial Latex Corporation

Wallington Borough, Bergen County, New Jersey

Cerclis No. NJD981178411

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Prepared by:

New Jersey Department of Health and Senior Services
Consumer and Environmental Health Services

Under Cooperative Agreement with:
The Agency for Toxic Substances and Disease Registry

SUMMARY OF BACKGROUND AND HISTORY

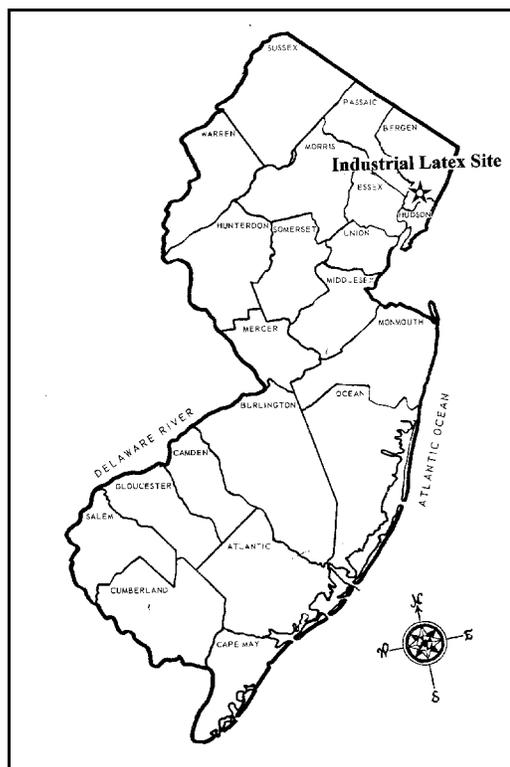
The Industrial Latex Corporation (ILC) site is located at 350 Mount Pleasant Avenue on an inactive 9.67 acre site in Wallington Borough, Bergen County, a metropolitan area in Northern New Jersey (see inset).

The Industrial Latex Corporation manufactured chemical adhesives and natural and synthetic rubber compounds from 1951 to 1980. Vegetable proteins in a solvent base (acetone, hexane, heptane, methyl ethyl ketone, and methylene chloride) were initially used to formulate the adhesives. Polychlorinated biphenyls (PCBs) were used in the process for their fire retardant properties. By the late 1970's, water-based latex adhesives had replaced the solvent-based adhesives, and processing of latex compounds continued until October 1983, when all operations ceased.

Process wastes were buried at the rear of the property or stored in drums. Feedstock chemicals were stored in underground tanks. Chemical wastes were flushed into an on-site sanitary septic system. These actions lead to widespread contamination of surface soil and subsurface soil.

In response to local official's repeated complaints about the property, particularly the dumping of chemicals and trash, the New Jersey Department of Environmental Protection (NJDEP) visited the Industrial Latex Corporation site in 1980. In addition to many leaking drums, there was evidence of PCB-contaminated materials and VOCs in an on-site sanitary septic system. A second NJDEP inspection in 1983 found about 1600 open, leaking drums containing chemicals, including acetone, hexane, methyl ethyl ketone (MEK), dimethyl formamide and 1,1,1-trichloroethane.

The Industrial Latex Corporation site is located in a region of dense industrial and residential development. A row of houses along the street fronting the site (Mt. Pleasant Avenue) begins at the tip of the fence near the entrance gate, and runs southward. There is an elementary school directly across the street and an outdoor recreation complex immediately to the south. To the east, the site is bounded by a Conrail/New Jersey Transit rail line, behind which lies the backyards of a row of residences.



The area beyond the site and its immediate surroundings consists of residential blocks to the west and east, and industrial sections to the north and northwest. These include the Curtis-Wright Corporation, Farmland Dairies, and a tractor-trailer storage site. To the south there is an undeveloped lot which is owned by the Borough of Wallington and used for the storage of road salt, sand and gravel, and for composting.

The Industrial Latex Corporation site is located in the Passaic river basin. On-site surface runoff flows eastward to a channel parallel to the railroad tracks which flows only during periods of excessive precipitation. Groundwater is present in both consolidated and unconsolidated subsurface material at the Industrial Latex Corporation site. In 1986, the United States Geological Survey conducted a survey of groundwater quality in the area of the Industrial Latex Corporation site, which included wells outside of the site. Groundwater around the site was found to be contaminated with volatile organic compounds (VOCs), petroleum hydrocarbons, and phthalate esters. This may indicate that groundwater contamination is a regional problem in the area.

The depth to water at the Industrial Latex Corporation site ranges from approximately 10 feet below the ground surface in the eastern portion of the property to about 20 feet in the western portion. The difference in the depths corresponds to a change in the topography between the eastern and western portions of the site.

In the past, numerous VOC contaminants have been detected in Wallington's municipal wells. As a result, starting in February 1986, Wallington has purchased all of its water from the Passaic Valley Water Commission. Since that time, periodic samples analyzed per the New Jersey Safe Drinking Water Act (A-280) indicated that all contaminants were below detection levels.

An estimated 71,000 people obtain potable water from groundwater within three miles of the site. NJDEP records indicate 27 groundwater wells within three miles of the site, including wells downgradient from the site. Although water from the Passaic Valley Water Commission is currently supplied to all homes in the area, it has not been clearly established whether any of the private wells are still used for potable purposes.

The remediation of the site has gone through its initial stage including drum removal and installation of a fence. Further long term remediations are planned. The purpose of this Site Review and Update is to reevaluate the current site data and any additional information available and the impact of site related contaminants on public health.

Demographics

The majority of the land use within a one-half mile radius of the Industrial Latex site is residential. However, some land is zoned for commerce and industry. Major residential developments are closely

situated to the east, west, and south of the site. According to 1990 United States Census data, approximately 17,500 people live in the Boroughs of Wallington and Wood-Ridge.

A row of houses along the street fronting the site (Mt. Pleasant Avenue) begins at the tip of the fence near the entrance gate, and runs southward. The nearest occupied residence is located approximately 100 feet south of the site.

A summary of population statistics calculated using an area-proportion spatial analysis technique, within one mile of the site is presented in the attached map on page 13.

Remedial History

The site remediation plan is being addressed in three stages: initial actions and two long term remedial phases focusing on source control and cleanup of the groundwater.

NJDEP initiated enforcement proceedings in 1985 to remove and dispose of all the drums on the site. The United States Environmental Protection Agency (USEPA) initiated a removal action in April 1986 to address immediate contaminant hazards present at the site. Sampling and analyses of on-site drums revealed the presence of benzene, ethylbenzene, toluene, xylene, and extensive PCB contamination. By early 1987, USEPA had removed 1200 drums and 22 underground storage tanks from the site.

An expanded site inspection was conducted by USEPA from May 1987 to January 1988 to collect additional data on the nature and extent of contamination. In addition, a fence was installed to restrict access to the site. The data indicated extensive organic and PCB contamination in the surface and subsurface soils and it was also found that buried drums remained on the site.

The Industrial Latex site was included on the National Priorities List in March 1989. USEPA initiated a remedial investigation and feasibility study (RI/FS) at the Industrial Latex in June 1989.

The USEPA completed a four-year remedial investigation and feasibility study (RI/FS) in June 1992 to determine the type and scope of the site contamination and to develop remediation options. Samples taken showed that buildings, vats, septic tanks, and soil at the site were contaminated with PCB's and volatile and semi-volatile organics. A large number of drums were also found buried at the site. Based on the RI, the NJDEP and USEPA formulated goals and objectives which would reduce risks due to incidental ingestion or direct contact with contaminated soils; release of contaminants from other source areas such as buried drums or septic tanks, or from equipment process vats and buildings. A Record of Decision (ROD) was issued by USEPA in September, 1992. The ROD provided for the site remediation into two operable units.

Operable unit one consists of two phases that includes the excavation of contaminated soil followed by on-site treatment by low temperature thermal desorption and backfilling of treated soil on-site, the removal and disposal of contaminated vats in an approved landfill, demolition and off-site disposal of buildings in an appropriate landfill and excavation and off-site treatment or disposal of buried drums.

Operable unit two will include the full characterization and extent of groundwater contamination. A final remedy for the groundwater contamination will be determined after evaluating additional groundwater information.

The design for the phase one of the operable unit one was completed in late 1994. Cleanup activities (demolition of buildings and removal of the vats) at the site were initiated in the summer of 1995 and completed in the fall of 1995. The design for the phase two of the operable unit one (cleanup and treatment of the contaminated soil) was completed in the spring of 1995. Cleanup activities for the second phase are expected to begin in 1997. Currently USEPA is evaluating the need for groundwater cleanup and will make a decision whether to conduct investigation for the site related groundwater contaminations (operable unit two).

ATSDR Activity

The Agency for Toxic Substances and Disease Registry (ATSDR) completed a Public Health Assessment for the Industrial Latex Corporation site in September, 1990. The Public Health Assessment noted that contaminated on-site soils and groundwater were identifiable human exposure pathways associated with the site. The contaminants of concern at the site were furans, polychlorinated biphenyls (PCBs) and dioxins. Dioxin and furan are presumed to have resulted from the burning of PCB-contaminated waste on site. The primary potential human exposure pathway associated with the Industrial Latex Corporation site included ingestion and direct contact with contaminated groundwater. Significant exposure may have also occurred through direct contact with on-site soil.

The 1990 Public Health Assessment identified community health concerns focused primarily on two general issues:

- 1) The site's perceived contribution to the general groundwater contamination of the area ;
- 2) The possibility of site contaminants threatening a nearby school and residential areas.

The municipal wells of Wallington Borough were closed due to contamination with numerous VOCs in 1986. Since then, the municipality has been served by an alternate public water supply provided by the Passaic Valley Water Commission. However, local health authorities reported that few private

wells in the area are still used for non-potable purposes. Between 1986 and 1988, citizens expressed concerns regarding the impact of the site upon the air quality in the area. Airborne particulates and volatilized organic chemicals were perceived as a real threat by local citizens. The USEPA's air sampling results did not indicate the presence of any air contaminants.

The ATSDR identified the following public health concerns in the 1990 Public Health Assessment:

- 1) Human exposure to volatile organic compounds may have occurred in the past via the potable use of contaminated groundwater. However, in the light of current site information, this exposure pathway is no longer complete since Wallington Borough has purchased all of its water from the Passaic Valley Water Commission. Contaminants have not been detected by periodic samples analyzed under the NJSDWA (A-280) in Wallington's potable water.
- 2) Direct contact and incidental ingestion of contaminated soil by trespassers is the most likely route of exposure. This pathway is not substantiated in the light of current site data and information since the Industrial Latex site is fenced and as specified in the ROD, cleanup and treatment of the on-site contaminated soils are expected to begin in fall of 1997.

In summary, the ATSDR categorized the Industrial Latex Corporation site as a potential public health concern because of the risk to human health resulting from potential human exposure to hazardous substances (dioxins, furans, and PCBs) by either inhalation, ingestion or dermal routes at concentrations that may result in adverse health effects.

Recommendations were made to take the following measures:

- 1) Comprehensive evaluation of potential human exposure pathways to be carried out; investigate possible soil contamination of adjacent residences, perform air sampling for PCBs, investigate groundwater contamination in the area, characterize soil/sediment receiving site drainage, and gather new information on private well uses;
- 2) Future remedial activities at the site conducted so as to minimize the adverse impact to the nearby sensitive populations and facilities;
- 3) Determine which follow-up public health action or studies are appropriate for this site.
- 4) Provide remedial workers with adequate personal protective equipment, minimally as required by the Occupational Safety and Health Administration (OSHA), to prevent exposures to contaminants associated with this site during remedial activities. Appropriate monitoring should be performed at the worksite periphery during remedial activities to protect nearby residents.

CURRENT SITE CONDITIONS

Conditions at the Industrial Latex Corporation site, since the 1990 Public Health Assessment, have changed. The conclusion in the Public Health Assessment that the site poses a potential public health concern was accurate in the context of the data and information available at the time the site was evaluated, but will be reevaluated for this Site Review and Update.

On December 9, 1996 Narendra P. Singh and Steve Miller of the New Jersey Department of Health and Senior Services (NJDHSS) visited the Industrial Latex Corporation site accompanied by a representative of the USEPA and the Mid-Bergen Health Commission. The site visit included a formal presentation by the USEPA, and a tour of the area surrounding the site.

The following observations were made and information obtained during the site visit:

- 1) As noted in the site documents, the surrounding area is residential and commercial. Conditions at the site have changed since the 1990 Public Health Assessment.
- 2) The Industrial Latex Corporation site is fenced with signs posted along the fence line indicating that this is a superfund site. There was no evidence of any trespassing on the site.
- 3) The Industrial Latex Corporation site is a cleared, well-kept area, comprising almost 10 acres. Demolition of buildings and removal of vats were recently completed, leaving the site as a flat, clear plain.
- 4) There are no residences on-site, although a row of homes starts only yards from the site entrance gate, and a school is directly across the street.
- 5) The fenced area contains contaminated soil awaiting planned processing for decontamination.

CURRENT ISSUES

Based on the Remedial Investigation, site related contamination is present in soils and groundwater. Soils contain polychlorinated biphenyls (PCBs), dioxins and furans. Construction of a security fence around the site and removal and disposal of on-site buildings and vats have greatly reduced the potential for accidental contact with hazardous materials. Further investigations into the contaminated soil areas are on-going. As specified in the ROD, cleanup and treatment of the on-site contaminated soils are expected to begin in fall of 1997.

The current public health issue associated with the Industrial Latex Corporation site pertains to the

potential impact of the on-site groundwater contamination on existing private potable wells. At the time the 1990 ATSDR Public Health Assessment was written, there was a great deal of concern regarding on-site groundwater contamination and it was noted that the full extent of the groundwater contamination was not known. High concentrations of VOC's have been detected in off-site groundwater monitoring wells. The concentrations of VOC's in the groundwater below the Industrial Latex site is relatively low and there are other sources of VOC contamination in the area. It is highly unlikely that the off-site groundwater contamination with VOC's is exclusively from Industrial Latex Corporation site.

The municipal wells of Wallington Borough were closed due to contamination with numerous VOCs in 1986. Since then, the municipality has been served by an alternate public water supply provided by the Passaic Valley Water Commission (PVWC). Contaminants have not been detected by periodic samples analyzed under the NJSDWA (A-280) in Wallington's potable water supplied by PVWC.

Local health authorities report that a few private wells in the area are still used for non-potable purposes. Currently, USEPA is evaluating the need for groundwater cleanup and will make a decision whether to conduct investigation for the site related groundwater contaminations (operable unit two).

The ATSDR/NJDHSS have not identified any additional community health concerns associated with sites related contaminants.

CONCLUSIONS

1. The ATSDR/NJDHSS has determined that the Industrial Latex site poses no apparent public health hazard at present. The former conclusions that the site comprised a potential public health concern have been reevaluated and no longer exist under present site conditions.
2. The recommendations from the 1990 Public Health Assessment that the comprehensive evaluation of potential human exposure pathways should be carried out including investigating possible soil contamination of adjacent residences have been satisfied. Current data and information indicate no completed human exposure pathways exist at the Industrial Latex site. Contaminated soils have been capped and fenced, and residents are provided potable water by Passaic Valley Water Commission.
3. The recommendations from the 1990 Public Health Assessment that the remedial workers should be provided with adequate personal protective equipment to prevent exposures to contaminants associated with the site during remedial activities have been satisfied.

4. The ATSDR/NJDHSS have not identified any additional community health concerns associated with sites related contaminants.

RECOMMENDATIONS

1. There are no outstanding recommendations from the public health assessment which remain valid and unsatisfied.
2. Results of the ongoing environmental monitoring program for groundwater quality should be periodically reviewed for public health significance when available. Should the data indicate a change in site conditions, or the likelihood of human exposure pathways, a health consultation should be performed to evaluate toxicological implications of groundwater contamination.
3. Any future use of the land should not be permitted unless site related contaminants are completely remediated as planned by USEPA.
4. Remedial activities specified in the ROD, when implemented, are sufficient to address remaining concerns of the ATSDR, the NJDHSS, and the community regarding the site and are consistent with protection of the public health.

PUBLIC HEALTH ACTION PLAN

The Public Health Action Plan (PHAP) for the Industrial Latex Corporation site contains a description of the actions to be taken by ATSDR and/or NJDHSS at or in the vicinity of the site subsequent to the completion of this Site Review and Update (SRU). The purpose of the PHAP is to ensure that this SRU not only identifies public health hazards, but provides a plan of action designed to mitigate and prevent adverse human health effects resulting from exposure to hazardous substances in the environment. Included, is a commitment on the part of ATSDR and NJDHSS to follow-up on this plan to ensure that it is implemented. ATSDR will provide an annual follow-up to this PHAP, outlining the actions completed and those in progress. This report will be placed in repositories that contain copies of this SRU, and will be provided to persons who request it. The public health actions taken or to be implemented are as follows:

Public Health Actions Undertaken by ATSDR/NJDHSS:

1. Environmental data and proposed remedial activities have been evaluated within the context of human exposure pathways and relevant public health issues.

Public Health Actions Planned by ATSDR/NJDHSS:

1. ATSDR and the NJDHSS will coordinate with the appropriate environmental agencies to develop plans to implement the recommendations contained in this SRU.
2. ATSDR will provide an annual follow up to this PHAP, outlining the actions completed and those in progress. This report will be placed in repositories that contain copies of this site review and update, and will be provided to persons who request it.
3. Document will be circulated to the Bergen County Health Department.

ATSDR will reevaluate and expand the Public Health Action Plan (PHAP) when needed. New environmental, toxicological, health outcome data, or the results of implementing the above proposed actions may determine the need for additional actions at this site.

CERTIFICATION

This Site Review and Update (SRU) was prepared by the New Jersey Department of Health and Senior Services (NJDHSS) under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the SRU was begun.

Technical Project Officer
Superfund Site Assessment Branch (SSAB)
Division of Health Assessment and Consultation (DHAC)
ATSDR

The Division of Health Assessment and Consultation, ATSDR, has reviewed this SRU and concurs with its findings.

Chief, SPS, SSAB, DHAC,

DOCUMENTS REVIEWED

1. Record of Decision, Industrial Latex Corporation site, Wallington Borough, Bergen County, New Jersey, USEPA Region II, September 1992.
2. Agency for Toxic Substances and Disease Registry, Health Assessment for Industrial Latex Corporation Site, Wallington Borough, Bergen County, New Jersey, September, 1990.
3. Remedial Investigation Report for the Industrial Latex Corporation site, Wallington Borough, Bergen County, New Jersey, January 1988.

INTERVIEWS/PERSONAL COMMUNICATIONS:

1. Section Chief/USEPA
2. Environmental Specialist/Mid-Bergen Health Commission

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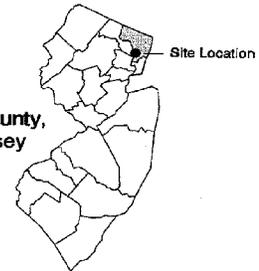
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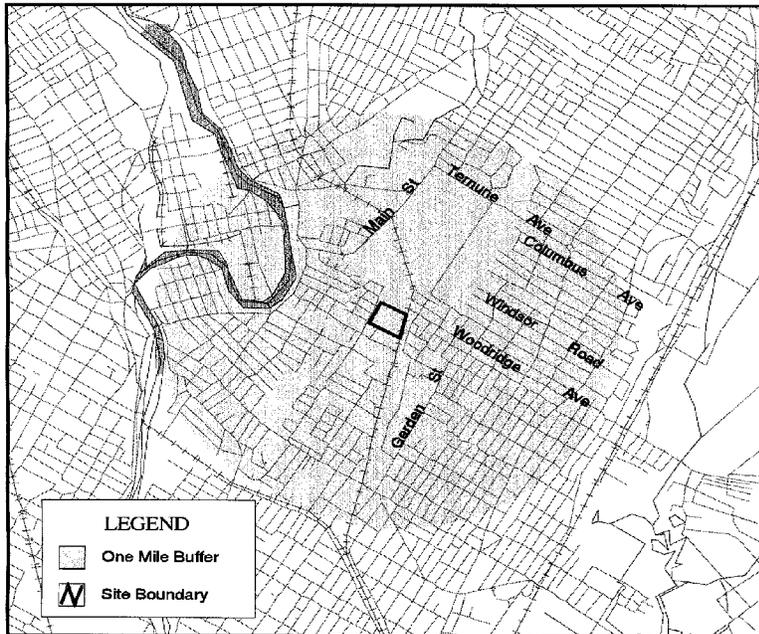
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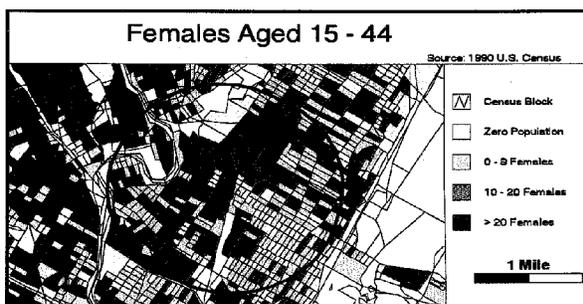
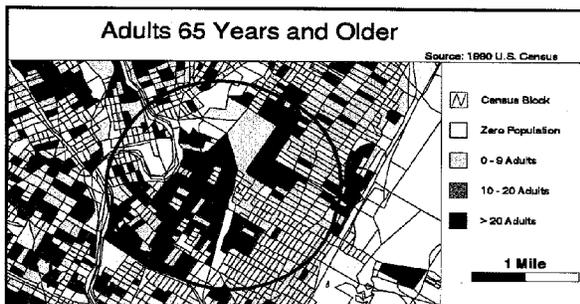
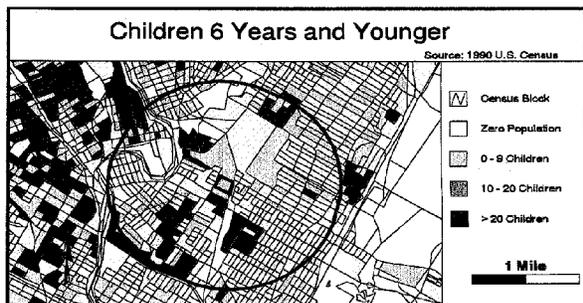
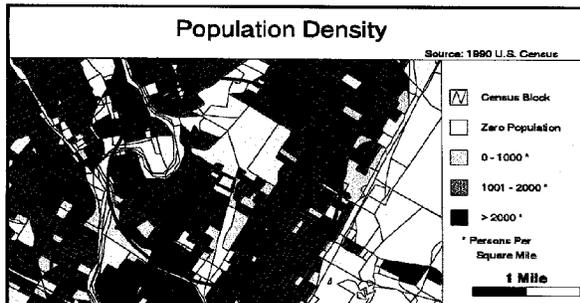


Bergen County,
New Jersey



Demographic Statistics Within One Mile of Site*	
Total Population	34759
White	30657
Black	1114
American Indian, Eskimo, Aleut	43
Asian or Pacific Islander	1137
Other race	1790
Hispanic origin	3703
Children Aged 6 and Younger	2399
Adults Aged 65 and Older	5436
Females Aged 15 - 44	7566
Total Housing Units	14550

*Calculated using an area-proportion spatial analysis technique



ATSDR
GIS 2.0 Spatial Analysis Activity