



Healthy People in a Healthy Environment

ATSDR
AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY

Fresh Kills and
Brookfield Avenue
Landfills

Staten Island, New York

No. 4

Final Newsletter

April 2000

This April 2000 edition of the Fresh Kills / Brookfield Avenue Newsletter will be the last issue of the series of newsletters that have been distributed to local residents of Staten Island over the past two years. ATSDR instituted this communication feature in order to provide residents information on the agency's activities related to the Fresh Kills and Brookfield Avenue landfills. ATSDR was committed to doing all we could to provide the people of Staten Island with a scientifically sound health investigation and other actions that addressed the community's health concerns about the landfills.

I would like to thank Staten Island residents for your participation and commitment to your community. If you have any questions concerning our activities, please do not hesitate to contact us at 1-888-42-ATSDR (1-888-422-8737).

Sincerely,
Henry Falk, M.D., M.P.H.
Assistant Administrator

ATSDR Releases Summary Public Health Assessment (PHA) for the Fresh Kills Landfill

ATSDR has released a Public Health Assessment on the Fresh Kills Landfill. The assessment provides a summary of all the documents produced by ATSDR and describes the culmination of the many years of ATSDR's work on this site.

At the request of concerned residents of Staten Island, New York, the Agency for Toxic Substances and Disease Registry (ATSDR) evaluated whether the Fresh Kills Landfill releases unhealthy levels of contaminants to the local environment. For the last eight years, ATSDR conducted a wide range of activities to address the Staten Island residents' public health concerns. These activities included reviewing existing environmental data, reviewing proposed environmental sampling plans proposed by other agencies, evaluating

previous health-related activities, conducting a respiratory health study, and participating in frequent meeting with health departments, elected officials, and concerned residents.

Since 1991, ATSDR has regularly communicated its public health findings to the residents of Staten Island in a series of reports that have focused on very specific issues (e.g., reviewing recently released air monitoring data). However, ATSDR has yet to release a *comprehensive review* of the public health issues relevant to the Fresh Kills Landfill site. The purpose of this public health assessment, therefore, is to provide an extensive overview of information related to the landfill, including a review of recently released ambient air monitoring data that previous reports did not consider.

The combined results of the information gathered by ATSDR provides one of the most extensive sets of ambient air monitoring data that ATSDR ever has reviewed for a municipal solid waste landfill.

Although these studies confirmed that Staten Island residents have been, and continue to be, exposed to numerous air pollutants, ATSDR found that airborne levels of the contaminants detected in ambient air monitoring (*that most likely originate from the Fresh Kills Landfill*) had not exceeded ATSDR based “unsafe” or “unhealthy” levels. An insufficient amount of air data were available to review before 1990, when sufficient landfill emission controls were inadequate. Therefore, the agency classified past air emissions as an *indeterminate public health hazard*. In March, 2000, the PHA was released to the public for a 30 day public comment period, which is scheduled to end on April 14, 2000. A full copy of the report can be viewed at the repositories listed at the end of this newsletter.

Brookfield Avenue Landfill Final Public Health Assessment (PHA) Released

In August of 1999, ATSDR released a draft PHA which evaluated data collected during the remedial investigation (RI) of the Brookfield Avenue Landfill conducted by Camp Dresser & McKee (CDM), which served as a contractor for the New York City Department of Environmental Protection (NYCDEP). ATSDR also evaluated a limited amount of historic environmental data and health outcome information to determine if residents might be exposed to site-related contaminants.

From the review of available environmental data for air, groundwater, soil, surface water, soil gas, and sediment, ATSDR concluded that present and potential future exposures to contamination associated with the landfill pose *no apparent health hazards*. In addition, past exposures represent an *indeterminate health hazard*, because inadequate data are available to evaluate possible exposures and their possible relationship to outcomes seen in previous health evaluations. Therefore, ATSDR has identified the site as an *indeterminate public health hazard*. The final report, with public comments addressed, was issued on November 22, 1999 and can be viewed at the repositories listed at the end of this newsletter.

Updated on Respiratory Health Investigation

Working with the New York State Department of Health, the New York City Department of Health, and the Staten Island Borough President's Office, ATSDR conducted a health study of respiratory health in communities neighboring Fresh Kills Municipal Landfill during the summer of 1997. The purpose of the study was to determine if there were any substances in the air near the landfill that could worsen the respiratory (breathing) health for people with asthma living in neighboring communities. This 6-week study is one of many steps we have taken to get a better understanding of possible health risks associated with the landfill.

The study included 148 people living next to the landfill who had been told by medical doctors that they had asthma. The people in the study were men and women who ranged in age from 15 through 65 years. Over 80% of them had lived on Staten Island for at least 5 years. Three types of information were collected:

(1) respiratory (breathing) health: each day, the people in the study wrote down information such as how much they coughed, wheezed, and if they took medication. They also wrote down which odors they smelled in their neighborhood,

(2) possible exposure to substances from the landfill: during the 6-week study period, we also collected ambient air measurements in the residential area. We studied the wind flow from the landfill toward the New Springfield area. We also checked odor in the surrounding area and levels of hydrogen sulfide, which is an irritant chemical released from the landfill that causes bad odors, and

(3) other conditions affecting breathing: we looked at other things that might have caused breathing problems, such as daily activity. We also tested for substances in the air that came from various sources, such as ozone, particulate matter, and pollen.

The study showed that measurements taken during the study period of hydrogen sulfide and other substances in the air were not high enough to cause health problems. Among the group, results indicated that on the days when people smelled rotten eggs or garbage, they were

more likely to wheeze, and report difficulties in breathing and cough. These reports varied by factors such as age and how long the person had suffered with asthma. This investigation is the first to address long-standing community concerns about potential respiratory health risks from landfill emissions. Although a relationship was not documented with hydrogen sulfide levels, the presence of odor does appear to affect the respiratory health of study participants. Results of this investigation suggest that the perception of certain odors (garbage or rotten eggs) is associated with a worsening of respiratory health among some persons with asthma who live near the landfill

A draft of our final report was released for public comment in August 1999 and extending through October 1999. The final report will be issued during early 2000. A full copy of the report can be viewed at the repositories listed at the end of this newsletter.

Health Education Activities

The New York City Department of Health, in cooperation with a Health Education Specialist from Hunter College in New York, is in the final phase of the full scale needs assessment. This needs assessment (outreach activity) is being done to determine the health education needs of Staten Island community residents. The activity includes interviews with local Staten Island residents, educational programs in the local community, and an evaluation of existing educational resources within the community.

With the guidance from the Fresh Kills/Brookfield Project Steering Committee (created under this activity), local directors from organizations, such as Catholic Charities Family Services, have been contacted, to help identify volunteers, and to assist in upcoming educational and training activities. Over the next few months, information gathered from these activities will be evaluated to assist in the design and implementation of the education training program which are scheduled to begin during the spring of 2000.

The following repositories will have a full copy of the reports mentioned in this newsletter:

College of Staten Island Library
2800 Victory Boulevard
Staten Island, NY 10314
(718) 982-4000

Todt Hill Branch, New York Public Library
2550 Victory Boulevard
Staten Island, NY 10314
(718) 494-1642

St. George Branch, New York Public Library
5 Central Avenue
Staten Island, NY 10301
(718) 442-8560

Port Richmond Branch, New York Public Library
75 Bennett Street
Staten Island, NY 10302
(718) 442-0158

We welcome and value your input into this newsletter. If you would like to comment on it or would like to know more about ATSDR, please contact Loretta Bush, ATSDR Community Involvement Representative at:

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This is a new toll-free number as of January 1, 1999.
Visit the ATSDR homepage at: www.atsdr.cdc.gov