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New York State Department of Environmental Conservation
Division of Solid Waste

HENRY G. WILLIAMS, *Commissioner*

NORMAN H. NOSENCHUCK, P.E., *Director*

ISSUE 1



FEBRUARY 1983

First Issue

This is the first issue of the Love Canal UPDATE. The purpose of the UPDATE is to keep concerned citizens, interested groups, government officials and members of the media informed about the progress of remedial actions and the monitoring program taking place at the Love Canal landfill. We will be covering information concerning current activities at the site, what new documents are available for review, advising you on citizen participation activities and reporting on the citizen input we've received.

This first issue includes;

- an announcement of a public hearing concerning Love Canal habitability
- a brief history of the remedial actions that have taken place at Love Canal
- a summary of the public meeting held on January 3rd in Niagara Falls
- a brief description of the opportunities that you have to become involved

We will be publishing this UPDATE periodically and hope that you will find it valuable and informative. If you have any suggestions or questions about the "UPDATE," please write: Bruce Bentley, DEC, Room 505, 50 Wolf Road, Albany, New York 12233.

Public Hearing—

February 17, 1983

A public hearing sponsored by the Assembly's Standing Committee on Environmental Conservation and Subcommittee on Toxic and Hazardous Substances will take place on February 17, 1983 at 10:00 a.m. in the General William Donovan Building, Hearing Room 1, First Floor, 125 Main Street, Buffalo. Representatives of federal and state agencies, the Love Canal Revitalization Agency, the Attorney General's Office and other interested parties will testify on proposed future uses of the Love Canal Area.

Witnesses testimony will include: State Environmental Quality Review Act (SEQR) applicability; the validity of EPA'S conclusions concerning the Love Canal Area, U.S. Health and Human Services Agency's (HHS) findings on the habitability of the region, the status of additional cleanup and containment efforts, whether further health studies should be performed, and the question of future liability should people relocate near Love Canal.

We will review and summarize the hearing proceedings for the next Love Canal UPDATE.

Love Canal—Remedial Action

New York State Department of Environmental Conservation (DEC) responsibilities for remedial construction work at the Love Canal landfill began in 1978. The department's responsibilities included reviewing and approving of plans for remedial construction undertaken by the city of Niagara Falls, providing on-site environmental monitors for the construction activity at the Love Canal site, and consulting with federal, state and local agencies on the development of long range engineering needs and concerns.

In 1979 DEC entered into a cooperative agreement with U.S. Environmental Protection Agency (EPA) to carry out and evaluate measures to control the escape of hazardous waste from Love Canal. More than 170 monitoring wells were installed throughout the community to monitor any shallow or bedrock contamination. Air and soil samples were collected for chemical analysis.

Additional remedial construction was undertaken in 1979-80 to complete the work started by the city of Niagara Falls. A tile drain system completely surrounding the Canal was installed 12 to 20 feet below the surface. This drainage and collection system serves as a barrier to prevent further escape of chemical waste and as a means of collecting the leachate from the canal. An on site treatment plant was built to treat the leachate collected by the tile drain system. The entire landfill was covered with a minimum of three feet of compacted clay. The clay cap prevents human contact with the wastes and greatly reduces the amount of water entering the canal site.

Sampling, monitoring, study, and evaluation have continued and additional remedial tasks have been identified.

SITE CONTAINMENT - Close and plug sanitary and storm sewers serving the area immediately surrounding the site, build an underground containment wall

completely surrounding Love Canal, enlarge and improve the cap covering the site.

ASSESSMENT PROJECTS - These will be followed by design and construction.

- o Storm and sanitary sewers will be sampled and evaluated.
- o Black and Berkholtz Creeks will be sampled and evaluated.
- o The 102 Street outfall will be sampled and evaluated.

MONITORING PROJECT - A three-year groundwater monitoring program will evaluate the effects of the clean-up actions; determine the effectiveness of the clean-up actions; and develop a computer model of the site and vicinity.

These additional remedial actions were the subject of a January public meeting. More detail concerning these actions is contained in the following article.

Public Meeting Held

A public information meeting was held at the County Office Building in Niagara Falls on January 3. Approximately 40 people attended including local residents, representatives from DEC and EPA, state, local and federal elected officials; members of the Love Canal Area Revitalization Agency; the Niagara Falls Board of Education, the Love Canal Area Homeowners Association, and the Concerned Area Residents of the Love Canal Area. The meeting was thoroughly covered by the area's newspapers and television stations.

The meeting began at 7:30 P.M. with Norman Nosenchuck, P.E., director of the Department of Environmental Conservation's Division of Solid Waste, giving a short overview of the Love Canal situation and the remedial actions and monitoring program that will be taking place. He explained that the department will use federal funds provided by the

Comprehensive Environmental Response and Compensation Liability Act of 1980 SUPERFUND-to enhance the existing containment system and to evaluate off-site impacts attributable to Love Canal. He briefly outlined the program involving construction of a concrete containment wall two-feet thick and 14-feet deep that will surround the site, cutoff of all underground utilities, extension and enlargement of the clay cap and the addition of a synthetic membrane covering the site. He also outlined additional sampling and monitoring that will take place at Love Canal, the surrounding creeks and the Niagara River. Each of the consultants that will be involved in the remedial action and monitoring program made a presentation further explaining the actions that Mr. Nosenchuck briefly described.

Following is a summary of each of the presentations:

o CH₂M HILL

Mr. Green explained that CH₂M HILL would be administering a number of construction projects designed to accomplish three major objectives:

1. Prevent off-site contaminant movement through the utilities.

On-site water, gas and sewer lines no longer in use will be plugged and abandoned. Existing storm and sanitary sewers will be cleaned and plugged. New sewers to the existing leachate treatment plant and new off-site drainage facilities will be constructed.

2. Isolate and increase the transport of surface runoff.

The site will be cleared of trees. The 99 Street school will be razed. Additional earthfill will be brought in and installed. The existing clay cap will be enlarged. A synthetic membrane will be installed over the entire clay cap. Additional soil will be placed over the membrane to protect it and the entire area will be covered with topsoil and grass will be planted.

3. Reduce flow of groundwater into the site.

A two-foot thick 14-foot deep concrete cut-off wall will be installed completely surrounding the site. It will extend downward into the underlying clay, only the very top will be at the surface.

Mr. Green explained that the tree clearing and plugging of the sewers would begin in January and that the concrete wall and clay cap would be completed in the fall of 1983.

MALCOLM PIRNIE, INC.

Mr. Mann began by explaining that Malcolm Pirnie, Inc. would be assessing the extent of contamination and evaluating alternative clean up methods.

Samples from test borings, sewers, creeks and the Niagara River will be analyzed. From these the extent of contamination will be determined, migration pathways identified and the contaminant effects assessed. Following a thorough analysis, cleanup alternatives will be developed and evaluated after which a recommended action will be selected.

The sampling program should be completed in January and the laboratory analysis by the end of February. A draft report should be available in May and a final report including the recommended actions should be completed by September.

E. C. JORDAN COMPANY

Mr. Walker described the monitoring program. The objective of the monitoring program is to measure and evaluate the effects and effectiveness of the site containment program (concrete wall, clay cap, etc.) and clean-up work at Love Canal. The program will be conducted in two phases. Phase one will involve a review of existing information, a study of Love Canal area, collection of additional soil samples and the design of both a short and long-term monitoring program. Phase two will be the actual tasks involved in monitoring both the surface and groundwater in the Love Canal area.

The study will develop a clear understanding of the movement of surface and groundwater to and from the site. In addition to a detailed review of existing site information and discussions with previous investigators new test borings will be made along the alignment of the new concrete cut off wall. Analysis of samples from these wells coupled with other site information will be used to develop a series of computer models that will represent actual site conditions. These models will be used to predict long-term movement of groundwater and contaminants to and from the site. The model will then be used to design the monitoring program. Groundwater movement patterns and movement rates will be identified and used to select appropriate locations and depths for monitoring wells and sampling schedules. Presently there are approximately 200 existing monitoring wells which will also be checked for their adequacy and appropriateness for use in the long term monitoring program. Results of the stream and sewer studies being conducted by Malcolm Pirnie, Inc. will be used to determine the need for additional monitoring in those areas.

Past studies carried out by numerous investigators indicated that groundwater movement in the Love Canal area is controlled by a complex combination of man made and natural geologic conditions. In view of these conditions the groundwater models that are developed will have to take into account a large number of factors. Over the next few months, the E.C. Jordan Company will be developing an effective means of predicting and measuring the effects and effectiveness of the remedial work at Love Canal.

DEC Information Office

DEC is setting up a Love Canal information office at 9820 Colvin Boulevard, Niagara Falls, New York, 14304. The office will be staffed by a citizen participation specialist who will be able to answer your questions, record your concerns, and help you find information your interested in.

Until this information office is established, Love Canal information and documents are available at DEC, Region 9, 600 Delaware Avenue, Buffalo, New York 14212, contact: Peter Buechi, (716) 847-4590; and at Environmental Protection Agency, 706 9th Street, Niagara Falls, New York 14301, contact: Sharon Thompson, (716) 285-8842.

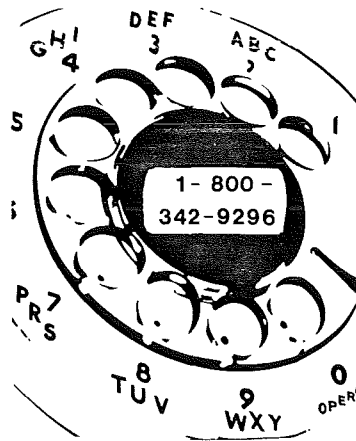
Toll Free Line Available

In order to make it easier for people concerned about the Love Canal landfill to ask questions or have their comments recorded, DEC has opened a toll-free "800" telephone line. This telephone will be answered by members of DEC's citizen participation unit who will listen to your questions and either provide an answer immediately or get back to you with accurate information.

The telephone line is open from 9 a.m. to 5 p.m. Monday thru Friday. If our staff is busy and cannot immediately answer the phone, you may hear a recorded message inviting you to leave your name and telephone number. We will get back to you as soon as possible.

If you want to talk to us, please call 1-(800)-342-9296.

We look forward to hearing from you!



We Want You To Be Involved

You, the citizens, workers and residents of the Love Canal area are an important factor in our program to study, monitor, clean up and contain the Love Canal landfill. In order to keep you informed and involved, we have established the following methods to help us communicate with each other.

- o This newsletter, which will be published periodically, will help keep you up to date on what's happening and what will happen in the near future.
- o The toll-free line (800) 342-9296 puts you in direct communication with our professional staff so that we can hear your concerns or comments and take them into consideration in our planning and review process. We will try to answer your questions to the best of our ability.

- o All documents specific to the Love Canal Remedial clean-up and containment program are available for your review at the DEC office in Buffalo and the EPA office in Niagara Falls.
- o Periodically, public meetings will be held to exchange information and concerns about various aspects of the clean-up and containment program.



Your concerns and comments are important to us. We want to hear from you.

___ Please correct my name or address as listed below

___ Please add the following name to your mailing list

___ I do not want to be included on your mailing list

NAME _____

ADDRESS _____

Send to : N.Y.S. Dept. of Environmental Conservation
50 Wolf Road -- Room 505
Albany, New York 12233



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