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Study and Clean Up Program

HYDE PARK LANDFILL

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HENRY G. WILLIAMS, *Commissioner*

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Public Meeting August 27, 1984

There will be a public meeting regarding the Requisite Remedial Technology Study - Overburden and Bedrock on Monday, August 27, 1984 at 7:30 p.m. The meeting will be held at the Power City Lodge, 2287 Delaware Avenue, Niagara Falls, New York.

State and Federal representatives will present an overview and an evaluation of the study. Following the presentations time will be provided for questions and answers.

Toll Free Line 1-(800) 342-9296

The Department of Environmental Conservation is operating a toll free "800" telephone line to help you get information about the Hyde Park Landfill. This telephone is staffed by members of DEC's Citizen Participation unit who will listen to your question and try to provide an immediate answer or will get back to you as soon as possible with accurate information.

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EPA Public Information Office

If you would like to review copies of plans, reports, studies and other documents regarding the Hyde Park Landfill, the EPA Public Information Office is the place to visit.

The Office, located in the Carson Building, 706 9th Street, Niagara Falls, is open 9 a.m. - 5 p.m. Monday, Wednesday, Friday and 12 noon - 8 p.m. Tuesday and Thursdays. 716/285-8842.

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Remedial Options Evaluation for Bloody Run Creek

One of the environmental and public health problems associated with the remedial program for the Hyde Park Landfill is restoration of the Bloody Run Creek which has been contaminated by the dumpsite. Bloody Run is a major chemical migration pathway that has moved contaminants off-site. The Settlement Agreement requires that OCC undertake an evaluation (an exposure and risk assessment) which compares the public health and environmental risks of the capping option vs. the excavation option for Bloody Run. Based on this evaluation, the government would then be able to select the option posing the smaller risk.

Each option has its own potential environmental and public health concerns which will be addressed through the evaluation. The excavation option requires complete removal of contaminated sediments from Bloody Run, with disposal in the Hyde Park Landfill. The capping option involves the installation of an impermeable clay cap on Bloody Run after partial excavation and diversion of the natural drainage path.

To help with the evaluation, OCC has retained the services of the Arthur D. Little Corporation (ADL). The ADL proposed methodology for evaluating the potential impacts posed by the two remedial options consist of:

- o Evaluating the two remedial options to determine potential chemical migration pathways, the environmental impact of the contaminants, and the probable contaminant exposure levels generated by the work procedures;
- o Identifying the potential toxic exposures generated by the remedial actions that could potentially affect the population, workers, and surrounding environment;
- o Identifying the various populations at risk;

- o Evaluating and determining the probable level of chemical exposure to the various populations at risk under each option;
- o Finally, using the preceding information to quantitate and evaluate the risks posed by each remedial option.

OCC submitted a draft of the assessment for government review in December 1983 and a revised draft January 1984. As a result of governmental review of each of these drafts, OCC made necessary revisions. Intensive discussions among OCC, ADL, and the government following these reviews have clarified concerns that the government felt ADL must address in order to properly evaluate these two options.

A comprehensive final draft report is expected to be submitted by OCC in September.

Leachate Seep

This spring, a leachate seep occurred in an area on the north central slope (New Road Side) of the landfill. It appears that a slump in the clay cap, in combination with the high amount of precipitation and snowmelt, created a situation in which the normal route of leachate movement changed. Instead of flowing toward the drains, the leachate began seeping out through the slump in the cap. As a temporary measure, absorbent material and plastic sheeting were placed over the seep area. Air sampling was done on New Road to assess the contaminant level. Contaminant levels of concern were not found. Plans for the site restoration and maintenance work were submitted by OCC during the month of May, 1984. Approval for this temporary fix was given by the Governmental Parties and the area was covered with absorbent, the cap repaired, and placement of top soil and seeding completed. A permanent fix will be done as part of Special Construction.

Chemical Contamination Identified at Devil's Hole State Park

Leachate that apparently originates in the Occidental Chemical Corp. Hyde Park Landfill in Niagara Falls has been found in an area of the Devil's Hole State Park, which lies along the Niagara River Gorge.

Soil samples containing typical Hyde Park chemicals were tested by the corporation and were reported on August 17 to contain undetermined concentrations of monochlorobenzene, monochlorotoluene, 2, 4, 5 trichlorophenol, and hexachlorobenzene. The appearance of the four chemicals together fits the profile of Hyde Park related contamination.

The sample reported upon was collected August 15 by State Officials accompanied by personnel from Occidental. The Devil's Hole area was one of several points along the Gorge that were checked after discovery several weeks ago of contaminants flowing from a rock face of the gorge a few hundred yards from the park property, in the vicinity of the Robert Moses power station.

The park commission has taken steps to assure that visitors to the park do not come into contact with the chemicals. A drain has been installed and the area covered with gravel.

A meeting of State officials, Occidental officials and members of a contracting firm retained by Occidental was conducted on August 17 to evaluate the situation. It was determined that the drain system will be expanded and the area will be closely monitored. Work on the drain system is scheduled to begin Tuesday, August 21 and should be completed in less than a week.

Gorge Face Seepage

Due to odors at the gorge face, DEC collected samples on June 15, 1984 and analyzed them for Hyde Park specific chemicals. Organic chemicals were found. OCC and DOH collected additional samples from four seeps along the gorge face. OCC's results indicate that chemicals known to be present in the Hyde Park Landfill are present in the seeps. DOH results are not yet available.

OCC proposed five actions to address this problem.

1. Plug all open wells still remaining from the pump tests.
2. Install a fence along New Road from the Robert Moses overpass to the Bloody Run culvert to insure no public access to the seeps.
3. Sample the sanitary sewer lift station.
4. Continue to sample and analyze the seeps monthly pursuant to the plume survey analytical protocols to determine if the chemical levels increase or decrease.
5. Take account of the foregoing in the Requisite Remedial Technology process.

EPA and the State are evaluating this proposal. DEC will carry out weekly inspections until the evaluation is completed. On Friday, August 17 Occidental met with the Power Authority of the State of New York (PASNY) to discuss fencing along the access road to the Power Station. As a result, work on the fence is scheduled to begin during the week of August 21.

Permanent Leachate Storage and Handling Facility

In January 1983, Occidental Chemical Corporation (OCC) submitted plans, specifications, and protocols for a Permanent Leachate Storage and Handling Facility at the Hyde Park Landfill. The permanent storage facility will replace the lagoons currently used to store leachate collected by the existing Barrier Collection System. Leachate stored in the lagoons is separated by gravity into aqueous (chemicals dissolved in water) and non-aqueous (chemicals separate from water) layers. The aqueous layer is pumped out and removed for treatment at OCC's carbon treatment facility on Buffalo Avenue. The Non-Aqueous Phase Liquids (NAPL) are to be removed and incinerated once an approved facility can be obtained.

The permanent storage facility design includes enclosed storage and gravity separation systems to handle leachate pumped from the Barrier Collection System, and any future collection systems installed as part of the remedial program at the landfill. The facility will be located immediately west of the landfill. It will consist of one or more large storage tanks and a separation tank contained within a concrete-diked area, and a building containing pumps, monitoring equipment, and an enclosed loading area.

Currently, plans and specifications for the facility are undergoing final review by the government agencies. Efforts are also underway for OCC to obtain a RCRA Part B permit and a New York State Part 360 permit required for the construction and operation of the facility. Once the review is completed, the design of the facility will meet all current government regulations pertaining to emissions, safety, storage, and operation of a facility handling toxic materials. Safety precautions include venting the storage and separation tanks through granulated activated carbon filters and a comprehensive spill prevention control and countermeasures plan.

The Settlement Agreement allows Occidental Chemical Corporation (OCC) to store liquids generated by the collection system in the existing lagoons or in bulk containers on the landfill. The on-site lagoons are nearly full. Therefore, OCC proposed the construction of a Temporary On-Site Storage Facility for Non-Aqueous Phase Liquids (NAPL—a mixture of heavy, oily, black liquids) at the Hyde Park Landfill in June 1983. The temporary facility would consist of four 10,000 gallon decommissioned chlorine railroad cars, surrounded by a clay dike. NAPL would be stored in the Temporary On-Site Storage Facility enabling the collection system to continue operating. Once OCC obtains a suitable, environmentally sound means for final disposal the NAPL would be removed from the Temporary Storage Facility. The facility would then be dismantled and the storage tanks buried in the Hyde Park Landfill.

At EPA's and New York State's request, OCC has developed contingency plans to deal with the increasing volume of NAPL in the lagoons. Included in the contingency plan are an expanded search for facilities willing to store the NAPL, and provisions to temporarily raise the level of the liquids stored in the lagoons to increase the holding capacity until the temporary storage facility is completed.

In November 1983, the federal and state government agencies approved construction of the Temporary On-Site Storage Facility. OCC then applied to the Town of Niagara Planning Board for a permit to construct the facility. The Town Board acting as the Planning Board denied the construction permit.

The federal and state government agencies and OCC submitted the issue of the permit denial to the U.S. District Court for a resolution. The Court has ordered the construction of the Temporary Facility. Final review of the plans, specifications and operating procedures is now underway to assure that the facility will meet the requirements of applicable State & Federal Regulations.

Health and Safety for Special Construction

The Hyde Park Settlement Agreement requires Occidental Chemical Corporation (OCC) to develop an Environmental Health and Safety Plan for the specific purpose of protecting on-site workers and the community from organic vapors and air-borne dust particles during special construction work.

What makes special construction a different type of work activity than well drilling or soil sampling?

Special construction involves the excavation, transportation, disposal and capping of soils and sediments that contain Hyde Park chemicals in excess of the levels described in the Settlement Agreement. It also presumes the soils and sediments involved in special construction contain dioxin (TCDD). These work activities have the potential to generate substantial quantities of excavated soil that contain chemicals and to remove the existing soil cover in contaminated areas during remedial activities. Therefore, the possibility of creating odor and dust hazards for workers and the community exists. Well drilling and soil sampling did not present the same level of exposure to the worker or the community, nor did it involve the quantities of contaminated soils that will be generated by special construction. The Safety Plan for special construction requires OCC to address the potential hazards presented by special construction through specific air monitoring programs.

What do these monitoring programs consist of?

First, OCC must monitor each working site where special construction is underway to determine the concentration of chemical compounds that are volatilizing into the air (organic vapors) using a photoionization detector and a field gas chromatograph. The gas chromatograph will monitor for trichloroethylene at 100 ppm and

benzene at 10 ppm. If either level is exceeded, the construction work will be immediately stopped and OCC is required to initiate appropriate corrective action before construction work can resume.

Secondly, using a combustible vapor analyzer, OCC must monitor each working site where special construction is underway to determine if an explosion hazard is present. In a manner similar to the organic vapor monitoring program, if acceptable levels are exceeded, OCC must immediately stop work and initiate appropriate corrective action before construction work can resume.

Thirdly, OCC must monitor the perimeter of the Hyde Park/Bloody Run Site and the surrounding community for air-borne dust particles resulting from the special construction work. OCC will compare the dust levels recorded for a 15 minute interval to the normal background dust levels if there were no construction work. If the dust levels for the 15 minute interval show a statistically significant increase above the background levels, OCC will stop work and initiate appropriate corrective action to suppress the dust.

Does the Safety Plan provide for other types of worker or community protection?

The Safety Plan specifically provides for worker protection by:

- 1) Requiring OCC to give medical examinations to special construction workers before, during and after their employment; and
- 2) Requiring OCC to provide special construction workers with appropriate safety equipment and protective clothing and training in their proper use.

In addition to the ambient air monitoring programs to determine the effects of special construction in the community, the Safety Plan requires OCC to:

- 1) restrict access to the special construction work sites (fencing the area);
- 2) furnish security patrols of the site to prevent unauthorized persons from entering the work site;
- 3) decontaminate all equipment and tools in contact with contaminated soils or construction materials before leaving the Hyde Park/Bloody Run Site;
- 4) evaluate the effectiveness of the dust suppression techniques in use during special construction to maximize protection against escape of air-borne dust from the work site;
- 5) develop a site-specific Emergency Plan, and
- 6) provide a Safety Officer to oversee special construction work who has the authority to stop all work activities if conditions at the Site indicate a problem (e.g., organic vapor levels exceed the Safety Plan criteria).

When does this Safety Plan become effective?

The Safety Plan becomes effective when all elements of the Plan have been approved by EPA/State, submitted to the Court and special construction work activities are authorized to begin by EPA/State.

Who is responsible to ensure that OCC follows the Safety Plan?

OCC's compliance with the Safety Plan will be evaluated by the EPA/State and the Occupational Safety and Health Administration (OSHA).

Incineration of Non-Aqueous Phase Leachate

In accordance with provisions of the Hyde Park Settlement Agreement requiring permanent disposal of Non-Aqueous Phase Liquids (NAPL) collected from the Hyde Park Landfill Barrier Collection System, Occidental Chemical Corporation (OCC) submitted proposals to the government in 1982 for transportation and disposal of NAPL by incineration. The most recent proposal to incinerate NAPL at SCA Chemical Service's Chicago, Illinois, PCB-incinerator was abandoned in May 1984 when SCA withdrew its bid to handle the NAPL waste for Occidental.

EPA has advised Occidental that a fully-permitted PCB incinerator would be technically acceptable for disposing of the Hyde Park NAPL. It was recommended that OCC consider applying for PCB approval for its Buffalo Avenue incinerator which was recently upgraded. Obtaining PCB approval for the Niagara Plant facility would be conditional on a successful test burn of the NAPL. OCC was also advised to pursue other alternatives for disposal.

We Want You To Be Involved

You, the active citizens, workers and residents of the Hyde Park - Bloody Run area are an important factor in our program to study and clean up the landfill and the surrounding area. In order to keep you informed and involved we have established the following methods to help us communicate with each other.

1. 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.
2. 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.

3. All documents specific to the plans for the study and clean up efforts are available for your review at the DEC office in Buffalo and the EPA Office in Niagara Falls. If you have any comments on these documents, you have up to 30 days from the time the document has been released to respond in writing.

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

Swale Survey

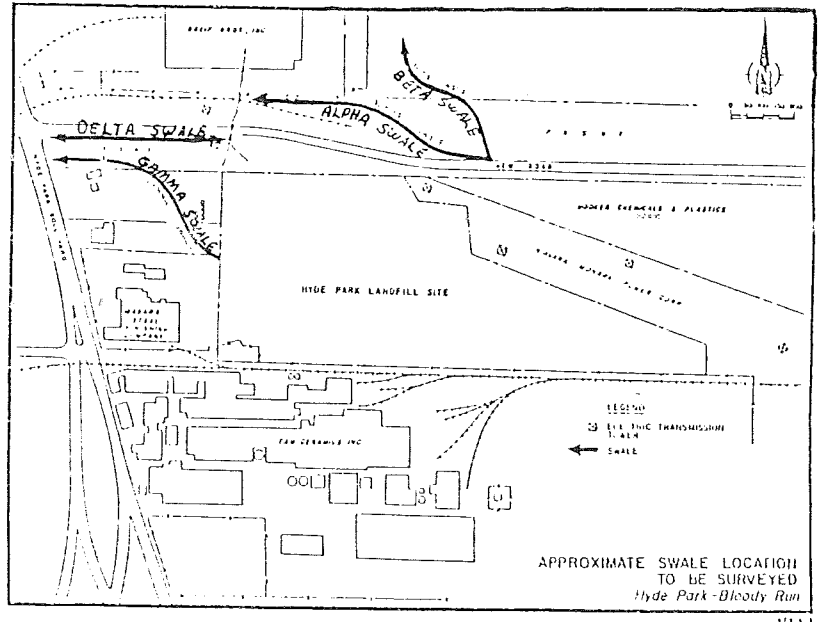
The Settlement Agreement recognizes swales as a likely route of migration of contaminants from the landfill. To address this concern, a swale survey was required to determine to what extent the swale areas should be capped.

Sampling was started April 30, 1984. Initial samples were taken where the outer boundary of the capping survey crossed the swale. If contamination was found where the fill and natural deposits met, (interface) another sample was collected 50 feet further down the swale, away from the landfill. This sampling continued until a clean area was reached.

The diagram below shows the approximate location of the four swales. No samples were analyzed from the Alpha swale as the interface was not reached within five feet of the surface. The Beta swale has been sampled at three locations because of contamination found in the first two samples. The Gamma swale has been sampled twice and additional samples are scheduled to

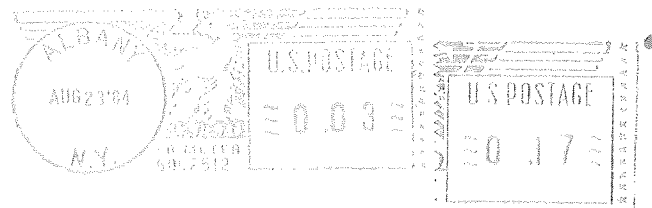
be taken during the week of August 20. The delta swale was sampled once and no contamination was found.

The final capping plan will include capping to cover the swales based on these results.



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