2021 Hazardous Waste Scanning Project

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ADDENDUM TO SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR NIAGARA RECYCLING, INC. SANITARY LANDFILL EXPANSION ON THE SEAGULL DETERRENT SYSTEM

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1.0 INTRODUCTION

The New York State Department of Environmental Conservation (DEC), in a decision dated December 16, 1982, approved an application by Niagara Recycling, Inc. to utilize certain areas of the Pine Avenue Site for the disposal of solid waste. These areas are designated Areas III, V, VI and VII. A stipulation of this decision, however, was that putrescible wastes were prohibited from disposal in these areas.

During permit hearings, the principal issue concerned whether the expansion at the site would result in an increased hazard to aircraft utilizing the Niagara Falls International Airport. This hazard would result from seagulls being attracted to the site by the landfilling of putrescible wastes, a known food source for these birds. The Commissioner agreed that this hazard could exist, and so stipulated that putrescible wastes could not be disposed of in these areas.

Niagara Recycling contended an effective bird deterrent system could be designed and implemented at the Pine Avenue Site. This system consisted of overhead parallel wires which decreased the attractiveness of the putrescible wastes to gulls. Similar wire systems have been used successfully in a number of locations including Los Angeles and Orange Counties, California; Detroit, Michigan; and Toronto, Canada.

LGL Limited (LGL) of Toronto, Canada was contracted to design and execute an experimental study of such a deterrent system at the Pine Avenue Site. The Federal Aviation Administration (FAA) and the DEC consented to allow disposal of putrescible wastes in Area V for purposes of conducting the

experiment for one year. If the experiment proved successful, the FAA would no longer object to the disposal of putrescible wastes in Areas III, V, VI and VII.

The final report on the experimental study, entitled "Effectiveness of Wires in Reducing Gull Usage of the Pine Avenue Site, Niagara Falls, New York; was distributed to all concerned parties in March of 1984. The results of the study indicated a significant reduction in gull numbers occurred when the wire system was in place over the active area of the landfill.

As part of the procedures to grant a modification to the operating permit for Areas III, V, VI and VII, the DEC requested Niagara Recycling submit an addendum to the Supplemental Environmental Impact Statement (SEIS). This addendum presents a description of the gull deterrent system in reference to the appropriate sections of the SEIS filed for the expansion of sanitary landfill operations into Areas III, V, VI, and VII.

2.0 PROPOSED ACTION

2.1 Project Description

The deterrent system consists of parallel wires mounted on poles, such that these wires are approximately 20 feet apart. The wires cover the active face of the sanitary landfill, as this is where the seagulls forage for food. The wires create a visual barrier which the gulls will not cross.

2.2 Project Sponsor

Niagara Recycling, Incorporated, as owner and operator of sanitary landfills at the Pine Avenue Site, is sponsoring the gull deterrent system, and will be responsible for its maintenance and operation. Niagara Recycling offices are located at 2321 Kenmore Avenue, Kenmore, New York 14217.

2.3 Project Location

The areas permitted for sanitary landfilling are located on the industrially zoned property which is referred to as the Pine Avenue Site. This site is located primarily in the Town of Niagara, with a portion falling within the boundaries of the City of Niagara Falls. The site is bounded by Packard Road and Route I-190 to the north and east, respectively. The property is separated from the Airco Speer Company on the west by the Niagara Junction Railroad. A Niagara-Mohawk right-of-way runs along the southern boundary, which is adjacent to Great Lakes Carbon Company. The layout of the Pine Avenue Site is presented as Figure 1. This figure illustrates the location of sanitary landfill facilities.

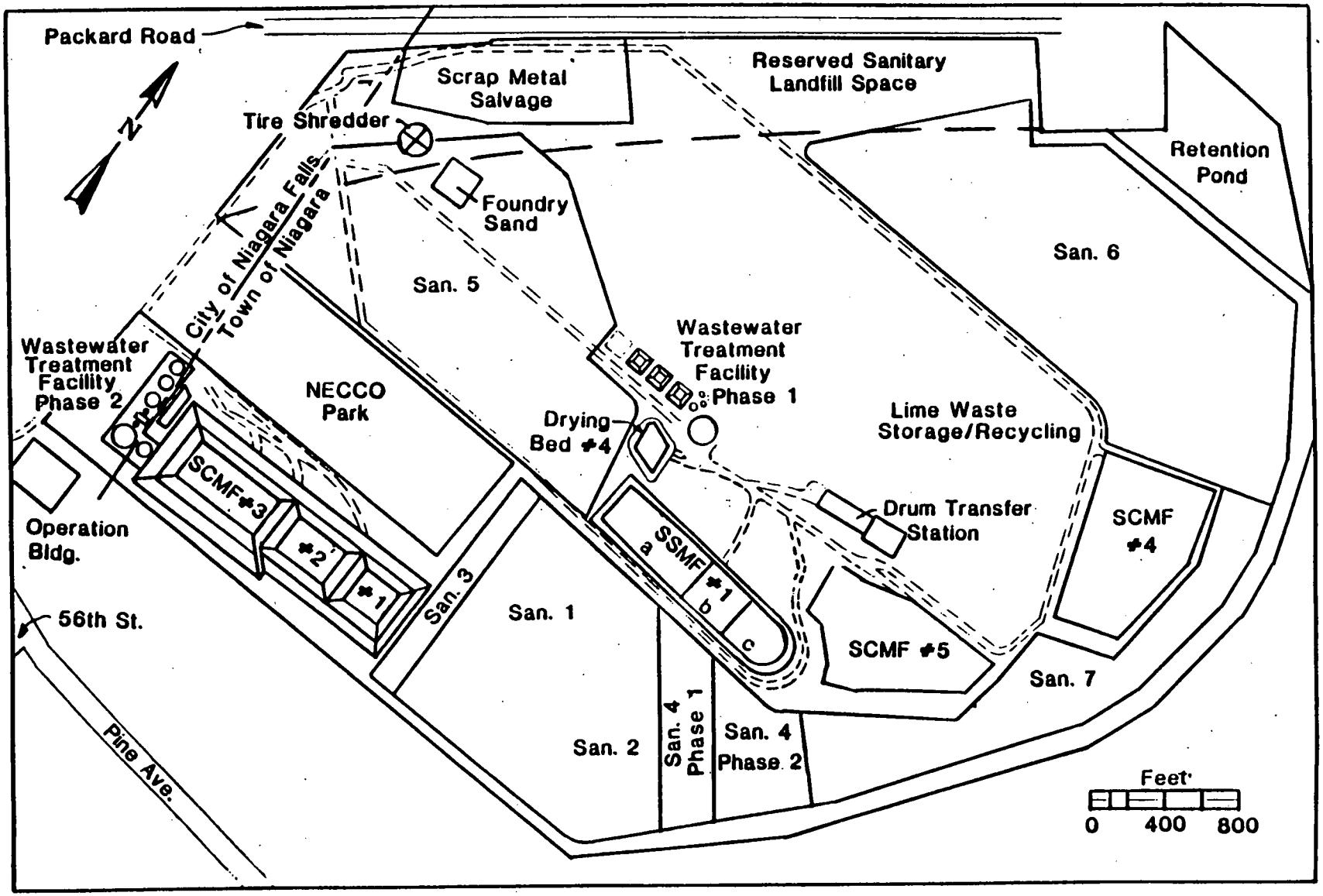

FIGURE 1

LOCATIONS OF EXISTING WASTE MANAGEMENT SYSTEMS

AT THE PINE AVENUE SITE, NIAGARA FALLS, NEW YORK

3.0 PURPOSE AND NEED

The overhead wire system is an important component of the bird control program at the Pine Avenue Site. Due to the proximity of the landfill to the Niagara Falls Airport, there could be a potential hazard to aircraft from the seagulls attracted to the site. To allow the disposal of putrescible wastes in Areas III, V, VI and VII, Niagara Recycling had to prove the overhead wire system would reduce the attractiveness of the site to seagulls. As described in the LGL report, the overhead wire barrier significantly reduced the number of gulls frequenting the site as compared to occassions when the wires were absent.

Based upon the results of the LGL study, Niagara Recycling can continue to provide disposal service to a large number of municipal and industrial clients without increasing the hazard to aircraft. The use of the bird deterrent system at the Pine Avenue Site will be implemented such that Niagara Recycling can meet the contractual agreements established with these clients.

4.0 DESCRIPTION OF THE ACTION

4.1 Design and Installation

For the study, the deterrent system consisted of parallel wires strung from telescopic poles. One pair of poles were required for each wire, with the span of wire being about 1000 feet. Stainless steel 0.032 inch wire was utilized. The bases of the poles were staked and weighted with pieces of concrete. Telescopic poles were used to allow for raising the height of the wire as the height of the landfill increased.

Initially the poles were arranged such that the space between wires was approximately 40 feet. This proved to be effective on herring gulls. As ring-billed gulls returned to the area in the spring, these birds would fly between the wires. Additional poles and wires were added to decrease the spacing from 40 feet to 20 feet. This arrangement effectively deterred both species of seagulls.

4.2 Operation and Maintenance

Once the system was in place, the only requirement to ensure effective operation was maintenance of the wires. Downed poles or broken wires needed to be repaired or replaced as necessary. While the system was in operation for the study, it became apparent that an improvement in the design could be implemented to provide easier replacement of broken wires and minimize the number of poles.

The revised design consists of a high, stable poles with the deterrent wires strung from cables between the poles. This configuration allows for replacement of the wires by connecting a new wire to the cable at the location of the broken wire.

5.0 IMPACTS OF THE PROPOSED ACTION

5.1 Gull Activity on the Pine Avenue Site

During the LGL Limited study, the number and behavior patterns of gulls were observed on a regular basis, at least three times per week. The wires were installed and removed in cycles, the time period the wires remained up ranged from three weeks to six months, while times when the

wires were removed varied from two to four weeks. Each time the wires were installed, the numbers of gulls on the site, particularly the active face of the landfill, were reduced from the number present when there were no wires. The presence of the wires also decreased the amount of time gulls spent on or near the active area, and the birds dispersed more easily than when the wires were absent.

5.2 Gull Activity at Other Locations

Several other locations known to be utilized by seagulls were also monitored during the study to observe changes in usage as a result of the wire system. These locations were the grounds of LeSalle High School, Hyde Park, the Niagara Falls Airport, and the roofs of buildings on Military Road and Third Avenue. Of these sites, Hyde Park and the adjacent golf course was the most regularly used site, besides the airport itself.

The presence of the wire system on the site decreased its attractiveness to seagulls, as compared to Hyde Park. In the fall, winter and spring, gull numbers at Hyde Park were greater than those at Pine Avenue when the system was in place. During periods when the wires were absent, gulls were found in greater numbers on the site than at Hyde Park.

5.3 Daily Operations at the Pine Avenue Site

The presence of the wire system had minimal impact on daily landfilling operations. Vehicle operators had to take precautions to ensure they did not strike the poles or wires, as this may have caused breakage of a wire or felling of a pole. Vehicular access could easily be provided on the

sides of the area without poles.

The wire system has been designed for ease of maintenance, thus requiring little time involvement on the part of landfill personnel to replace broken wires or downed poles.

6.0 ALTERNATIVES

6.1 No Action

In this instance, the "no action" alternative was not considered. Implementation of a deterrent system at the Pine Avenue site is required by the DEC and FAA in order to allow disposal of putrescible wastes. If no action were taken, the desired result could not be realized.

6.2 Action at a Different Time

The deterrent system must be in operation at this time to obtain the permit modification. If installation of the system is delayed until a later time, the permit modification will also be delayed.

6.3 Action of a Different Magnitude

The deterrent system has been designed to cover the active face of the sanitary landfill. To increase or decrease the size of the system would not be practical or valuable. Decreasing the size of the system would reduce its effectiveness by exposing a portion of the active face. As the active face is the source of food for gulls at the site, providing the gulls unobstructed access to this area would only increase the attractiveness of the site.

Increasing the size of the deterrent system to cover areas beyond that of the active face would not increase its desired effectiveness. As shown in the study the presence of the wire system over the active face reduced the attractiveness of the site as a whole.

6.4 Alternative Technologies

There are several methods of dispersing birds or preventing access to an area. These methods include:

1. Harassment and Scaring

   - loud noises
   - pyrotechnics
   - alarm calls
   - birds of prey

2. Chemical Measures

   - poisons
   - repellant sprays

3. Physical Barriers

   - netting
   - portable sheds

These methods have all been considered and some have even been utilized on the Pine Avenue site. However, for various reasons, none of them has been determined to be effective on the landfill sites. As a result of the study, the overhead wire system proved to be effective in reducing the attractiveness of the site to seagulls and was relatively easy to operate and maintain. If bird numbers on the site become excessive, as may occur during the summer months, employees will use loud noises and such measures to disperse loafing gulls.

6.5 Alternative Designs

The design of the deterrent system was based upon a similar system used on landfill sites in California. Initially, the wires were spaced a distance of forty feet apart. The observers noted that seagulls did fly between the wires with little difficulty. The spacing was then narrowed to twenty-feet between wires, creating a more effective barrier.

7.0 UNAVOIDABLE ADVERSE IMPACTS AND MITIGATIVE MEASURES

It should be noted that there are only very minor adverse impacts of this system on the environment at the Pine Avenue site. The system does not cause pollution of any natural resource, nor does it harm the wildlife or the health of persons living in the area. The system does have minimal effects on the operation of the landfill as described in the following sections.

7.1 Maintenance of the System

The experimental deterrent system has been improved to allow for ease of maintenance. The telescopic poles have been replaced by 105 foot high wooden poles anchored at the corners of the landfill area. To allow for easier replacement of downed wires, the wires are strung from a cable running between the poles on one side of the landfill to a cable supported by the poles on the opposite side. This system is arranged so that a wire can be replaced from the ground allowing for continuous coverage of the landfill.

7.2 Landfill Operations

The design for the deterrent system was selected because it had a minimal interference with landfill operations. The use of high, wooden poles which are securely anchored provide a stable base for the system and allow for easy vehicular access and movement beneath the wires.

7.3 Aesthetic Considerations

The presence of a system of poles and wires presents a temporary negative aesthetic impact (although the poles are the only visible objects). Due to the construction and operation of the sanitary landfills, the area is experiencing a short-term degradation in visual quality at present. Once landfilling of an area is complete, the wire system will be removed and the final cover put in place. The area will then be seeded and revegetated to improve the appearance of the landfill.