932085A

PETITION

In the matter of the 64th Street North Site, No. 932085A, City of Niagara Falls, County of Niagara, Re-classification of Status under the Registry of Inactive Hazardous Waste Disposal Sites.

Submitted on behalf of:

Tops Markets, Inc.
60 Dingens St.
Buffalo, New York 14206

Submitted by:

Blair & Roach
Attorneys for Petitioner
Suite 400, The Dun Building
110 Pearl Street
Buffalo, New York 14202
(716) 856-9181

Dated: Buffalo, New York
September 18, 1991

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I. INTRODUCTION

This Petition is submitted pursuant to Section 27-1305(4)(c)(1)-(5) of the Environmental Conservation Law ("ECL") and Part 624 of Title 6 of the Official Compilation of New York's Codes, Rules and Regulations ("NYCRR") to reclassify a portion of the 64th Street North Site, No. 932085A (hereafter the entire area shall be referred to as "Site" to distinguish it from the portion, defined below as "Parcels", which is the subject of this Petition), removing that portion from the Registry of Inactive Hazardous Waste Disposal Sites.

II. SITE

The Petitioner is the owner of three (3) contiguous parcels which are located in the vicinity of the Site. The parcels are more particularly described as follows:

A. ALL THAT TRACT OR PARCEL OF LAND situate in the City of Niagara Falls, County of Niagara and State of New York, being part of Lot No. 9, Township 13, Range 9 of the Holland Land Company's Survey, being more particularly bounded and described as follows:

BEGINNING at a point in the south line of Mooradian Drive, as said Mooradian Drive is shown on Dedication Map for 76th Street and Mooradian Drive (extensions) made by Wallace P. Keller and filed in the Niagara County Clerk's Office in Liber 49 of Microfilmed Maps at page 4811 and 4812 at a distance of 555.93 feet easterly as measured along the said southerly line of Mooradian Drive from its intersection with the east line of 70th Street; running thence southerly at an interior angle of 90° 03' 30" and along the east line of land conveyed to Johnson by deed recorded in Niagara County Clerk's Office in Liber 1451 of Deeds at page 792 a distance of 693.08 feet to the northwest corner of New York Subdivision Lot No. 25 as shown on a map filed in the Niagara County Clerk's Office in Liber 47 of Microfilmed Maps at page 4543; running thence easterly at right angles and along the northerly line of said New Subdivision Lot No. 25 a

distance of 193.42 feet to the northeast corner of said New Subdivision Lot No. 25; running thence southerly at right angels and along the easterly line of New Subdivision Lot No. 25 a distance of 250 feet to the north line of lands appropriated for widening of Niagara Falls Boulevard as Map 42, Parcel 43 and Map 43, Parcel 44; running thence southeasterly along the north line of Niagara Falls Boulevard as appropriated by Map 43, Parcel 44, Map 44, Parcel 45 and Map 45, Parcel 46 a distance of 44.7 feet to a point of a curve in the northerly line of said Niagara Falls Boulevard; continuing thence southeasterly along the northerly line of said Niagara Falls Boulevard as appropriated aforesaid, an arc distance of 262.60 feet to its intersection with the east line of lands conveyed to Johnson & Johnson by deed recorded in Niagara County Clerk's Office in Liber 2035 of Deeds at page 316; running thence northerly at an interior angle of 83° 20' 04" and along easterly line of lands conveyed to Johnson & Johnson by deed aforesaid and along the easterly line of lands conveyed to Johnson & Johnson by deed recorded in the Niagara County Clerk's Office in Liber 2003 of Deeds at page 36 a distance of 1003.95 feet to the southerly line of Mooradian Drive as shown on map aforesaid; running thence westerly along the southerly line of Mooradian Drive as shown on Map aforesaid and at an interior angle of 89° 56' 30" a distance of 494.46 feet to the point or place of beginning **("Parcel 1")**.

B. ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Niagara Falls, County of Niagara and State of New York, being pat of Lot No. 9, Township 13, Range 9 and further known as and being Subdivision Lot No. 25 as shown on a map entitled "Re-subdivision of Lands Owned by Jack B. Johnson" prepared by Frank Tripi, licensed land surveyor, filed in the Niagara County Clerk's Office on January 18, 1977 in Plat Cabinet A-22 **("Parcel 2")**.

C. ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Niagara Falls, County of Niagara and State of New York, being part of Lot No. 8, Township 13, Range 9 of the Holland Land Purchase (so-called), said tract or parcel of land being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the south line of Mooradian Drive and the east line of 70th Street, as said intersection is shown on Dedication Map for 76th Street and Mooradian Drive (Extension in Lot 9, Township 13, Range 9, City of Niagara Falls, NY, Map by Wallace P. Keller, P.E., L.S., and filed in the Niagara County Clerk's Office on February 25, 1983, in Liber 49 of Microfilmed Maps at page 4811, 4812; running thence southerly and along the east line of 70th Street as shown on Dedication Map for 66th, 70th and unnamed Street (now Mooradian Drive), in Lot 9, Township 13, Range 9, City of Niagara Falls, NY, Map by Wallace P. Keller, P.E., L.S., and filed in the Niagara County Clerk's Office, August 3, 1959 in Liber 40 of Microfilmed Maps at page 3968, 475.30 feet to a point, said point being the northwest corner of land conveyed by Johnson to Whitworth by Deed filed September 8, 1965 in the Niagara County Clerk's Office in Liber 1442 of Deeds at page 314; running thence easterly and at right angles to the east line of 70th Street, and along the north line of land conveyed by Johnson to Whitworth mentioned above, 217.44 feet to a point, said point being the northeast corner of land conveyed by Johnson to Whitworth above mentioned, running thence southerly and at right angles to the previous course and along the east line of lands conveyed by Johnson to Whitworth and also along the east line of lands conveyed by Johnson to Caggianno by deed filed February 14, 1956 in the Niagara County Clerk's Office in Liber 1210 of Deeds at page 205, (which line is also the west line of lands conveyed by Mattucci to Johnson by deed filed December 3, 1962 in the Niagara County Clerk's Office in Liber 1407 of Deeds at page 583), 330.30 feet to a point in the North line of land appropriated for the widening of Niagara Falls Boulevard (formerly Pine Avenue); running thence southeasterly and along the north line of Niagara Falls Boulevard and at an angle of 104° 44' 32" measured in the northeast quadrant to the previous course, 350.0 feet to a point; running thence northerly at an angle of 75° 15' 28" measured in the northwest quadrant to the previous course, 982.19 feet to a point in the south line of Mooradian Drive as said Mooradian Drive is shown on Map in Liber 49 of Microfilmed Maps at page 4811, and 4812 mentioned above; running thence westerly and along the south line of Mooradian Drive, and at an angle of 89° 56' 30" measured in the south west quadrant to the previous course, 338.85 feet to an angle point in

the south line of Mooradian Drive; running thence still westerly and still along the south line of Mooradian Drive, and at an angle of 180° 50' 04" measured on the south to the previous course, 217.08 feet to the point or place of beginning **("Parcel 3").**

A copy of the survey of the Parcels prepared by Wallace P. Keller, P.E., L.S., Job No. 11H8-2, dated November 14, 1988, which corresponds with the above-descriptions is attached hereto as **Exhibit A** and made a part hereof. The external boundaries of all three (3) Parcels as one premises are marked (yellow) as well as the boundaries of each Parcel (Parcel 1, blue; Parcel 2, red; Parcel 3, green).

No metes and bounds description of the Site exists. Rather, it has been variously described as the following:

A. ". . . 20 acres on the North Side of Pine Avenue." NYS DEC Division of Hazardous Waste Remediation, Inactive Hazardous Waste Disposal Report.

B. "This site consists of a roughly rectangular 20-acre disposal area approximately 800 feet north of Niagara Falls Boulevard. This site is bounded by the Niagara Mohawk Easement, Sabre Park Trailer Court, and CECOS (NECCO) Landfill to the north, extends several hundred feet west of Connecting Road, and more than 1,000 feet east of Interstate 190 (I-190)." Phase I Investigation Report for 64th Street North Site, prepared by Engineering Science in association with Dames & Moore, January, 1988, at IV-1 (the "E-S/D&M Report").

C. "The southern border of the [S]ite is approximately 800 feet North of Niagara Falls Blvd." Presentation of Analytical Data From 64th Street Dump North, prepared by NUS Corporation, contained in HRS Documentation Records of E-S/D&M Report.

A comparison of the descriptions of the Site with the boundaries of the Parcels supports the conclusion that, at most, none of Parcel 1 is within the Site, Parcel 2 may be on the edge of the Site and Parcel 3 is probably the only area which is within the Site. In terms of gross area alone, the Site and the Parcels cannot share much common territory. The Site is described as approximately twenty (20) acres. Coincidentally, the Parcels total approximately twenty (20) acres. Of course, the Site extends east from Interstate 190 (although some drawings indicate a part

of the Site lies west of I-190), while the Parcels lie east of 70th Street. Additionally the northwest corner of Parcel 3, arguably the closest point to, or deepest point within, the Site, is eight hundred twenty-eight (828) feet north of Niagara Falls Boulevard (according to the Keller Survey, **Exhibit A**), while the descriptions in paragraphs B and C above place the southern boundary of the Site eight hundred (800) feet north of Niagara Falls Boulevard. In sum, the Parcels are adjacent to or, in part, within the extreme southeastern portion of the Site.

Various drawings of the Site have been prepared but none of them appear to be to scale. A typical diagram of the Site which depicts it as a rectangle but does not qualify the location in terms of scale is attached hereto as **Exhibit B**. A drawing which attempts to show the eastern boundary of the Site by an irregular line which presumably marks the extent of disposed wastes is attached hereto as **Exhibit C**. Again, a comparison of this drawing in relation to 70th Street and Mooradian Drive with the descriptions and survey for the Parcels indicates that the Site, at most, extends only into Parcel 3. Thus, it appears that neither Parcel 1 nor Parcel 2 are within the Site. The best illustration of this relationship is provided at Figure 1 (Site Location-Aerial Photograph of Niagara Falls, 1982) in the Remedial Action Site Investigation prepared by Waste Resource Associates, Inc., September 1991 (the "WRA Report").

III. BACKGROUND

The Site, in general, and the Parcels, in particular, have been the subject of numerous investigations and assessments. With respect to the Site, the United States Geological Survey ("USGS") drilled two (2) auger holes in the western portion as part of a general survey in 1982.

NUS Corporation ("NUS") performed extensive soil and groundwater sampling as part of a hydrogeological investigation in and around the Site, an adjacent Site (64th Street South, No. 932085) and the LaSalle area of the City of Niagara Falls, in general, during 1985 and 1986 for the Environmental Service Division of the U.S. Environmental Protection Agency ("USEPA"). One (1) of the well clusters used in this investigation (located on the west side of I-190) is described in the E-S/D&M Report as being downgradient of the Site (E-S/D&M Report at I-2).

In 1986 Woodward-Clyde ("WC") performed an extensive study for Texas Brine Corp. regarding the installation of a brine pipeline which was in the vicinity of six (6) "environmentally sensitive" areas, including the Site. Three (3) of the soil sample locations for the pipeline excavation area were immediately north of the Site.

In 1988 NYSDEC received a Phase I investigation report from Engineering-Science ("E-S") in association with Dames & Moore ("D&M") regarding the Site. In that same year Empire Soils Investigations, Inc. ("ESI") undertook two (2) projects at the Parcels. In 1990 Waste Resource Associates, Inc. ("WRA") completed a Phase II investigation with respect to the Parcels. In 1991 WRA completed a Remedial Action Site Investigation with respect to the Parcels. Relevant portions of the materials prepared as a result of the various investigations or projects are attached as **Exhibits** and referenced throughout the text of this Petition. The entire WRA Remedial Action Site Investigation Report and relevant portions of the E-S/D&M Phase I investigation (both of which are designated "Reports") are being submitted with this Petition.

The previous suspected uses of the Site include farming and subsequent use by the City of Niagara Falls as a municipal landfill. This information is confirmed by aerial photography and by interviews conducted by and with the Niagara County Health Department, as summarized in **Exhibit D**. It is suspected that domestic and commercial wastes were deposited on the Site. However, there is no evidence of disposal of industrial waste at the Site. (E-S/D&M Report at IV-V).

It is also suspected that much of the Site has been covered with demolition wastes from a local civilian housing project and other buildings. This is confirmed by the nature of the materials which overlay much of the Site and Parcel 3, in particular. The depth of fill on the Site varies from 2-8 feet and on the Parcels varies from 3-5 feet (WRA Report at 5 and 3).

Currently approximately 60-70% of the Site is occupied, improved and covered by buildings and/or pavement (E-S/D&M Report a IV-2). The Parcels are essentially undeveloped. However, it is proposed that the Petitioner will build a 101,000 square foot supermarket and pave a substantial area of the Parcels for parking.

IV. REASONS FOR DELISTING

It is respectfully submitted that the Parcels, to the extent they are included in whole or in part within the Site, or otherwise, do not pose a significant threat to public health or the environment. This conclusion is supported by an examination of existing data and other literature as described in the remainder of this Petition.

A. Air Quality. In addition to the review of available information, interviews with knowledgeable individuals and physical inspection of the Site and Parcels performed by various contractors and summarized in the E-S/D&M Report and WRA Report, monitoring was performed on various occasions with an HNu photoionizing organic vapor detector. The results of these analyses are reported by E-S/D&M (no level of air contamination above 1 ppm, E-S/D&M Report Section V) and by WRA (WRA Report, Figure 4, no level in excess of 0.4 ppm, which is below background level). Consistent with these results, the air route factor in the Sm score was rated at zero (0) by E-S/D&M. Copies of the HRS summary and the Air Route Worksheet are attached as **Exhibit E.**

B. Water Quality. In scoring this factor for HRS purposes both surface water and groundwater conditions are considered. The surface water factor was the higher of the two, 19.22. However, the Phase I investigation did not include any surface water sampling (E-S/D&M Report at Section V, HRS Worksheets). Thus, the factor is based upon the presence of certain contaminants in the soil and the proximity of an urban population. It appears that this factor may have been rated too high in the absence of testing. While it is true that the area is generally urban and, thus, the population is moderately dense, surface water would not appear to be a problem. This is especially true with respect to the Parcels, which, in contrast to the majority of the Site, are not paved and developed. Thus, surface waters would be more easily absorbed. Finally, if surface water quality had been a concern it would have received additional consideration in the

WRA Remedial Action Site Investigation. Prior to commencing that investigation WRA submitted a proposed work plan dated April 30, 1991 to NYSDEC Region 9 for review and approval. Included within the work plan was a statement of the intended purpose of the investigation:

> "the purpose of this investigation is to obtain analytical data of sufficient nature to fully characterize subsurface materials at this site and determine whether or not any significant contamination is present on the property and establish the environment impact of that contamination (if any)...Based on the results of this investigation, this parcel will hopefully be delisted from any association as part of the 64th Street North Inactive Hazardous Waste Site."

A copy of the initial work plan is attached as **Exhibit F**. NYSDEC Region 9 reviewed the work plan and suggested modifications by letter dated May 14, 1991, a copy of which is attached as **Exhibit G**. In response to these comments, WRA revised the work plan (**Exhibit H**) and received NYSDEC approval to proceed with the testing (See letter dated May 31, 1991, attached as **Exhibit I**) the results of which are summarized and documented in the WRA Report. In sum, surface water testing with respect to the Parcels was not deemed necessary.

The groundwater factor was assigned an insignificant value of 2.98. This may be due to a variety of considerations. There is a significant amount of hydrogeological data regarding the Niagara Falls area, in general, and the Site, in particular. As discussed above, NUS performed an extensive groundwater investigation in the vicinity of the Site in 1985 and 1986. The NUS investigation in and around the Site was part of a larger project affecting the LaSalle residential area of Niagara Falls. Generally, groundwater samples were drawn from six (6) clusters of wells located within the immediate proximity of the Site. A monitoring well location map is attached as **Exhibit J**. At each location four (4) wells were installed, one (1) for monitoring each of the following intervals: (i) shallow groundwater in the overburden; (ii) the regolith; (iii) the shallow bedrock fracture zone; and (iv) the second fracture zone within the bedrock.

On the basis of the data generated by this investigation, NUS concluded as follows with respect to the 64th Street South Site:

1. Based upon the flow pattern of the regolith upper bedrock aquifers and existing patters of contamination it was not reasonable to attribute the groundwater contamination to the 64th Street South Site.

2. The lack of contamination in the shallow water wells and lower fracture zone wells suggests that the lacustrine clay and unfractured bedrock, respectively, are effective barriers to migration of contaminants.

William Nelson of the United States Department of Health and Human Services concluded that there was no immediate public health threat due to groundwater contamination because it is not used as drinking water source. USGS determined that groundwater contamination at wells downgradient of the Site did not significantly exceed New York State Class GA standards (WRA Report at 40).

These same conclusions apply to the Site and Parcels. The drilling logs document a clay barrier similar to that which affected 64th Street South. As discussed below in the subsection on soil quality, there appears to be no leachable metals on the Parcels. Thus, the groundwater factor with respect to the Site is lower than the same variable for 64th Street South (4.97).

C. Soil Quality. After numerous assessments and investigations in and around the Parcels, WRA, with approval of NYSDEC, proposed and performed a Remedial Action Site Investigation which focused upon the condition of soils at the Parcels. This investigation distinguished between two (2) levels of soil, *viz.*, the "fill" material which covers the Site and Parcels and the "indigenous soil" underneath that fill. Twenty (20) borings were made at uniform intervals across the Parcels. Two (2) samples were extracted from each bore, one (1) from the fill material and the other from indigenous soil. The samples were analyzed by an independent, NYSDEC approved laboratory for the following constituents:

- Volatiles
- Semi - Volatiles
- Pesticides/PCB's
- Metals

- Total Cyanide

The results of the testing for metals provided to be the most significant. The testing method attempts to detect twenty-three (23) inorganic constituents. Eight (8) of the constituents were detected in the fill material at levels which exceeded the common range for natural soils (WRA Report at 17). However, only two (2) constituents were present in significant amounts, magnesium and mercury. It is suspected that the presence of magnesium is due to the nature of the bedrock in the Niagara Falls area (WRA Report at 18). Thus, demolition debris or excavation materials at the Parcels probably contain bedrock, soils or dolomite gravel which are the source of the magnesium.

The Toxicity Characteristic Leaching Procedure ("TCLP") was performed on a composite sample of the fill comprised of the twenty (20) bore samples. None of the eight (8) metallic constituents present in the fill above natural levels measured above the maximum concentration allowable under the TCLP procedure. Thus, these elevated constituents do not exist at hazardous levels and are insoluble. WRA has concluded that the metals' migration potential is low and that they do not pose a threat to groundwater quality.

There were three (3) instances where total cyanide was detected in the fill material (WRA Report, Figure 9 at 23). However, only one (1) sample exceeded a concentration of 1 ppm.

Less than half of the fill samples indicated the presence of volatile organics. The range of concentrations was 0.011 ppm to 1.01 ppm. Volatile organics were detected in less than one-quarter of the indigenous soil samples and in the range of 0.007 ppm to 0.036 ppm. Three (3) of the detected constituents, methylene chloride, acetone, and an unknown are believed to be cross-contaminants from the laboratory.

Semi-volatile organics were present in a number of fill material and indigenous soil samples. The WRA Report examines various relationships with respect to this data (WRA Report at 32). Two conclusions are significant: (i) the predominant constituents are polycyclic aromatic hydrocarbons ("PAHs") which are probably attributable to asphalt in the fill and (ii) the concentrations are relatively low. When reviewing similar data with respect to the 64th Street

South Site, the New York State Department of Health concluded that it did not constitute a health hazard from short-term or continued exposure through direct contact. See **Exhibit K.**

Finally, the fill material was tested for PCB's and pesticides. Six (6) samples demonstrated quantifiable levels of pesticides in concentrations ranging from 0.1 ppm to 12.9 ppm. The one sample in which PCB's were detected was at a concentration of less than 1 ppm.

As mentioned above, WC conducted an extensive soil investigation of areas contiguous to the Site and in the vicinity of the Parcels in 1986. That investigation found fill and contaminants consistent with WRA's findings. As a result of that investigation WC concluded that excavated soils could be disposed of at a sanitary landfill. No data suggests a different conclusion with respect to the Parcels where testing has been a more extensive than any other investigation with respect to the Site or adjacent areas.

After the extensive testing described and documented in its Report, WRA reached the following conclusions with respect to the soil at the Parcels:

1. "Analytical testing of soil and groundwater samples has not identified levels of contaminants which could be considered as significantly elevated when compared to normal background levels (with the exception of mercury contamination detected in a few locations)."

2. "The results of TCLP testing has shown that inorganic constituents which have been detected on-site (including mercury) are present in an insoluble matrix, are not mobile and would not be likely to contribute to groundwater degradation nor expected to migrate from the site."

3. "The contaminants that have been detected on-site have been predominantly from samples taken of the non-indigenous "fill" materials which exist on the property."

4. "The low permeability of the underlying, indigenous clay layer which has been identified across the site has been an effective barrier to vertical migration of any contamination that may be present." (WRA Report at 3-4)

Finally, the direct contact factor was assigned the highest value in the HRS calculation, 50. The E-S/D&M Report notes that on the day of the Site inspection for the HRS

purposes, the representatives observed motorcycle riding on the property. Of course, this factor will change significantly as a result of Petitioner's proposed improvements. People using the supermarket will not be exposed to the soil contaminants discussed above. Most of the area of the Parcels will be paved or otherwise covered in a manner which will provide an effective barrier to any contact with soil.

V. CONCLUSION

It is respectfully submitted that the Parcels do not pose a significant threat to human health or the environment. First, it appears that two (2) of the three (3) Parcels are not even within the Site's boundaries. Nevertheless, extensive investigation and testing reveal that the low levels of contamination that exist are relatively consistent throughout the Parcels. Second, no industrial waste disposal is suspected at the Parcels. No hazardous waste was detected after extensive testing. Third, there are no issues with respect to air and water quality. The two (2) primary soil concerns, mercury and PAH's, have been subjected to additional investigation and testing. While mercury levels are high in some samples, TCLP testing confirms that it is not hazardous or migrating. The PAH levels are not considered a health threat and are characteristic of the demolition debris which covers the Parcels. Similar soil conditions were identified in an adjacent area (brine pipeline). Excavated soil from that area was accepted for disposal at a sanitary landfill. Fourth, proposed improvements will minimize, if not eliminate, the possibility for direct contact.

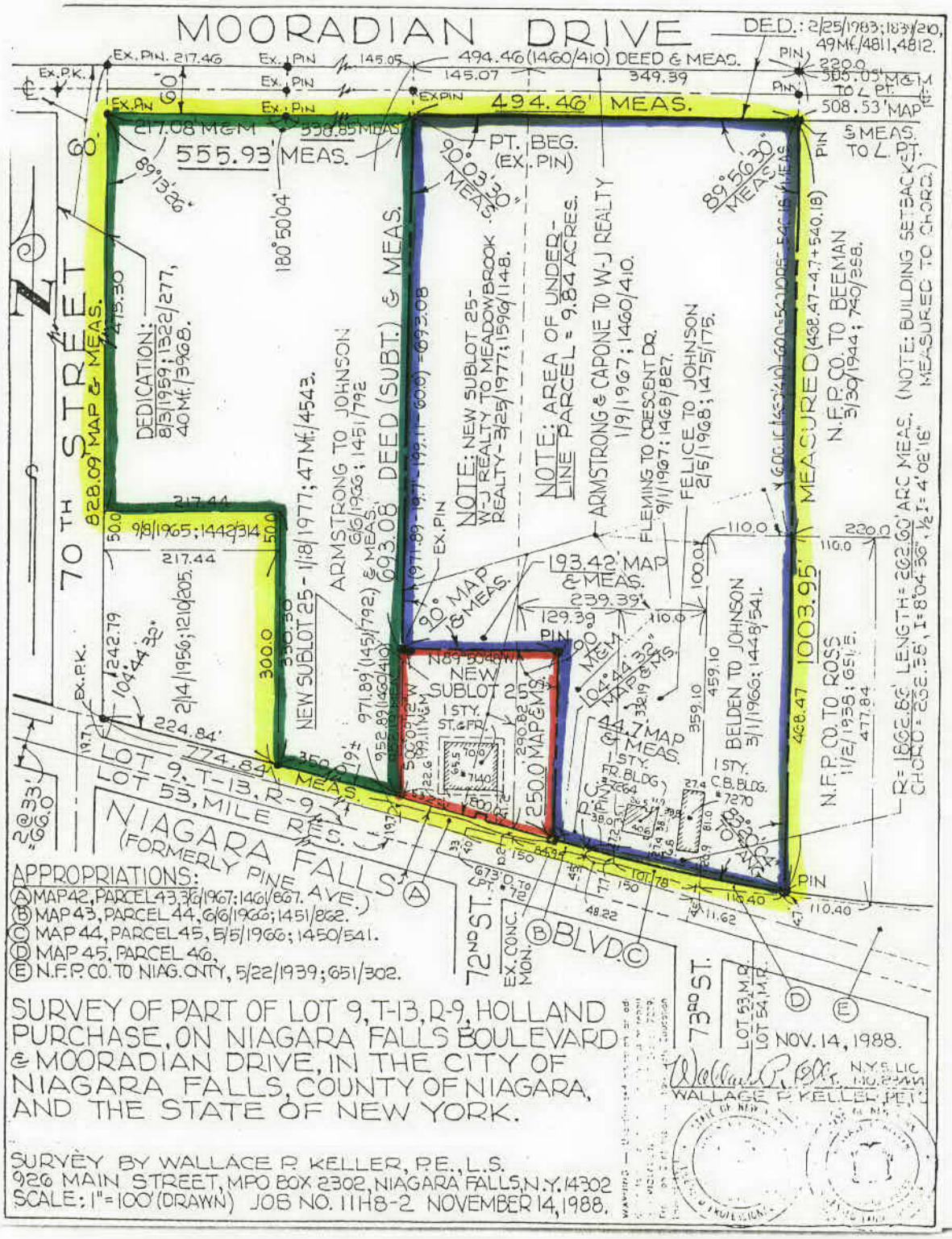
On the basis of the above, the Parcels should be re-classified and removed from the Registry of Inactive Hazardous Waste Disposal Sites and NYSDEC should confirm, that no notices or consents are required for development of the Parcels pursuant to ECL Section 27-1317.

Dated: Buffalo, New York
September 18, 1991

Respectfully submitted,

BLAIR & ROACH
Attorneys for Petitioner
Tops Markets, Inc.
Suite 400, The Dun Building
110 Pearl Street
Buffalo, New York 14202

Exhibit A



APPROPRIATIONS:

(A) MAP 42, PARCEL 43, 3/6/1967; 1461/867. (PINE AVE.)
(B) MAP 43, PARCEL 44, 6/6/1966; 1451/862.
(C) MAP 44, PARCEL 45, 5/5/1966; 1450/541.
(D) MAP 45, PARCEL 46,
(E) N.F.P. CO. TO NIAG. CNTY, 5/22/1939; 651/302.

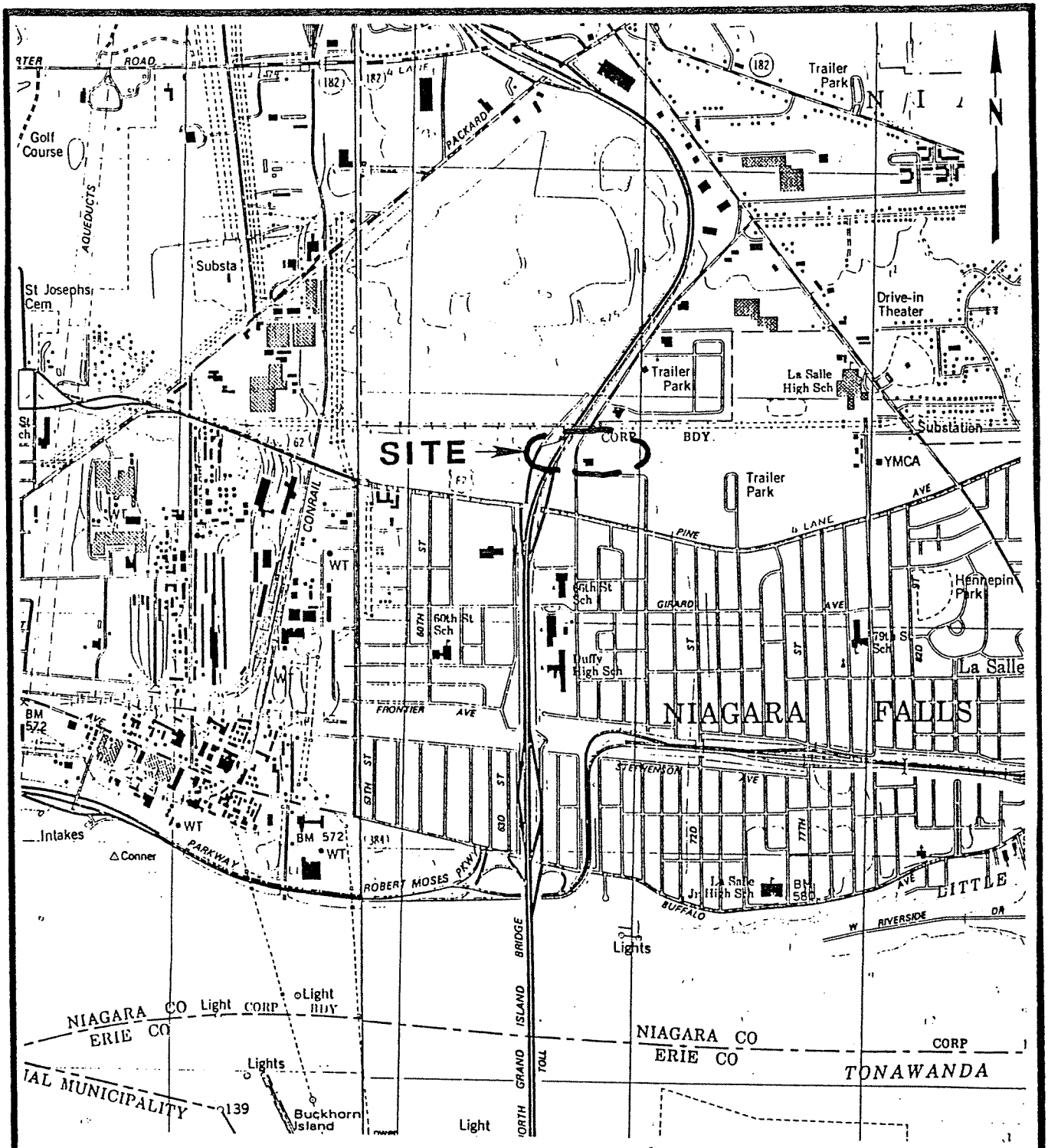
SURVEY OF PART OF LOT 9, T-13, R-9, HOLLAND PURCHASE, ON NIAGARA FALLS BOULEVARD & MOORADIAN DRIVE, IN THE CITY OF NIAGARA FALLS, COUNTY OF NIAGARA, AND THE STATE OF NEW YORK.

NOV. 14, 1988.

WALLACE P. KELLER, P.E., L.S.

SURVEY BY WALLACE P. KELLER, P.E., L.S.
926 MAIN STREET, MPO BOX 2302, NIAGARA FALLS, N.Y. 14302
SCALE: 1"=100' (DRAWN) JOB NO. 1118-2 NOVEMBER 14, 1988.

Exhibit B



LATITUDE: 43°05'32" N
LONGITUDE: 78°59'29" W

SCALE
0 1000 2000 3000 4000 FEET

ENGINEERING-SCIENCE, INC.
IN ASSOCIATION WITH
DAMES & MOORE

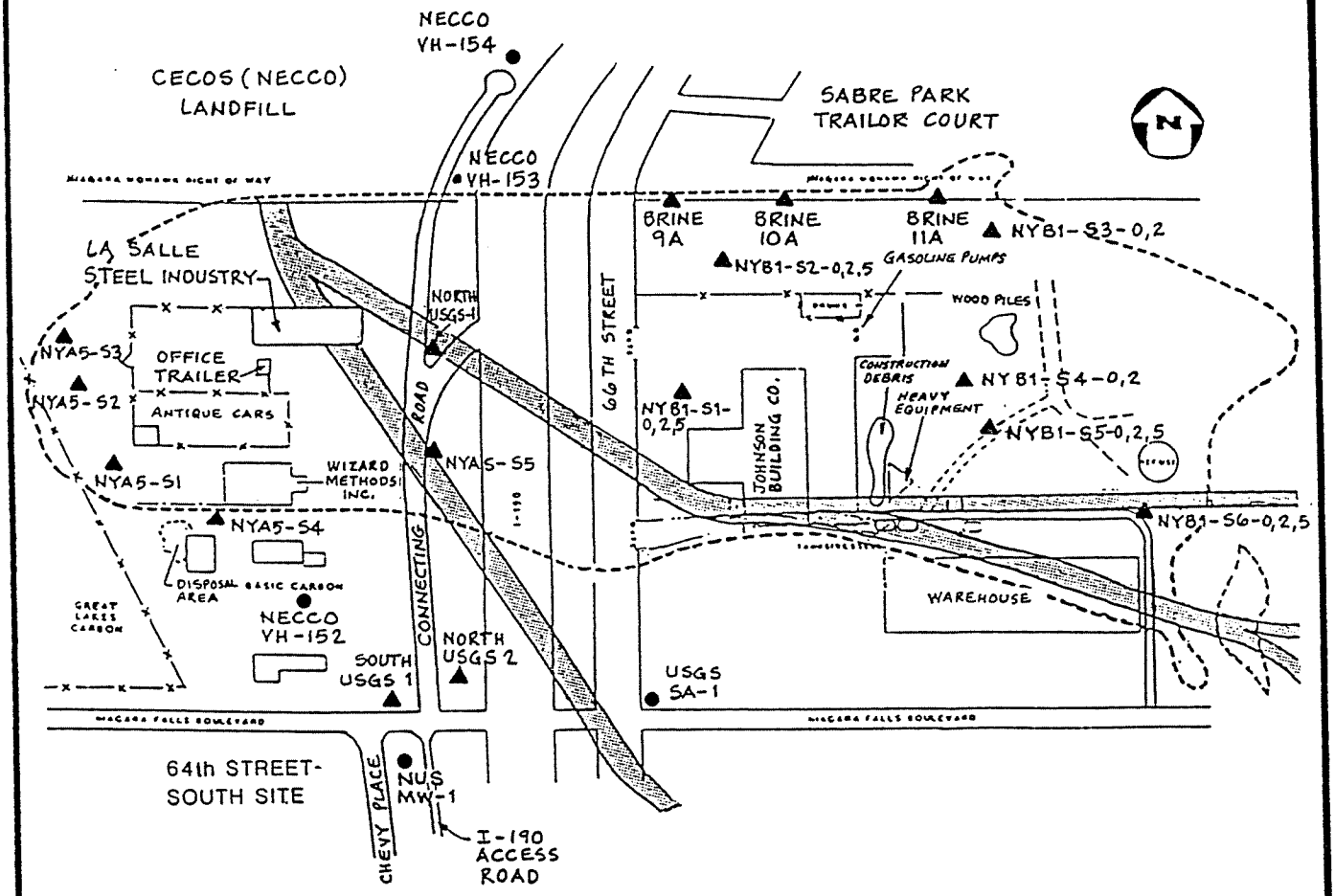
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE I REPORT

SITE LOCATION MAP
64 TH STREET NORTH

FIGURE I-1

REFERENCE: U.S.G.S. 7.5' Topographic Map
Tonawanda West, NY (1980) and Niagara
Falls, NY-ONT (1980) Quadrangles.

Exhibit C



64TH STREET - NORTH SITE

NOT TO SCALE

LEGEND:

—x—x— FENCE

APPROXIMATE AREA OF SUSPECTED DISPOSAL

ORIGINAL DRAINAGE SWALE

▲ SOIL SAMPLE

0 SURFACE SAMPLES

2 SAMPLE TAKEN AT 2 ft. DEPTH

5 SAMPLES TAKEN AT DEPTHS GREATER THAN 2 ft.

● GROUND WATER SAMPLES

NOTE:

SAMPLES LABELLED BRINE WERE OBTAINED DURING CONSTRUCTION OF THE BRINE PIPELINE.
SAMPLES LABELLED NY WERE TAKEN BY NUS CORP.

REFERENCES: BASE FROM NUS 1986 STUDY. REVISED BASED ON INFORMATION OBTAINED FROM NCHD, 1988 AND ES AND D&M SITE VISIT, 1985.

ENGINEERING-SCIENCE, INC.,
IN ASSOCIATION WITH
DAMES & MOORE

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE I REPORT

PLOT PLAN
64th STREET-NORTH

FIGURE IV-1

Exhibit D

REF - 7

Hopkins, 2/23/88

NIAGARA COUNTY

HEALTH DEPARTMENT
HUMAN RESOURCES BUILDING
MAIN POST OFFICE BOX 428
10th AND EAST FALLS STREET
NIAGARA FALLS, NEW YORK 14302

February 23, 1988

Recd
2-29-88 pm

E S Engineering Science
Two Flint Hill
10521 Rosehaven Street
Fairfax, VA 22030-2899

Attention: Ms. Cathy Bosma

Dear Ms. Bosma:

The following is a compilation of the information you requested regarding the 61st Street-North Site:

1) Historical information

In response to your request for historical information and documentation of our 1985 investigation in this area, we have compiled a summary of our actions and conclusions. We feel this will suffice for your purposes. It is noted that the entire file contains hundreds of pages with useful information scattered throughout.

During 1985 this department conducted an extensive historical investigation into reports of former waste disposal at a number of areas in the LaSalle area of Niagara Falls including the 61st Street-North Site. This investigation included study of historical aerial photographs (1937, 1951, 1958, 1966 and 1978), interviewing with knowledgeable individuals, including former residents, a door to door survey to obtain information from present residents, identification of former drainageways which are now filled to grade, interviews with Thruway Authority personnel and contractors who have built buildings and installed utility lines in this area. Since that time, NUS Corporation, as contractor to EPA has collected samples from many of these areas and a salt-water brine pipeline has been constructed through the area.

Based on the above information, the following is our interpretation of historical waste disposal activities at the 61st Street-North Site:

No evidence of waste disposal activity or any significant development of this site is noted prior to 1937 (based on air photos (1937 and 1919, 1921 and 1927 maps). Much of the surrounding area was being cultivated at that time. The I 190 was not yet constructed but Connecting Road and Niagara Falls Boulevard were in place. A forked drainage swale, several to possibly 10 feet deep in places stretched across the site. Drainage apparently flowed westward. The surrounding area was largely wetland. Drawing showing the former swale routes were previously provided to you.

During World War II the area south of Niagara Falls Boulevard was developed as a civilian housing complex for aircraft construction workers. This development was demolished in the early 1950's. Simultaneously, the drainage swale from the center of the 68th Street Site to Niagara Falls Boulevard was filled in. This area may contain debris from the demolition of the housing project. It has also been reported that this area may have received garbage or incinerator ash from the housing project while it was active. We contacted the Department of Defense, but they were not able to provide any useable information on these activities.

In the 1950's the remaining section of swale, including the large east-west trending swale was filled. It is suspected that much of this area was filled with municipal-type garbage. Several adjoining low areas were also filled. The area appears to have been filled in and essentially level with grade by 1958.

The I 190 was constructed in the late 1950's and early 1960's and the site was developed to near its present extent by the mid 1960's.

The above information is largely confirmed by using aerial photographs and by several persons interviewed by this department in 1985. In 1986 the Texas Brine Corporation encountered obvious raw garbage in an excavation along the north side of the site. Thruway Authority personnel interviewed were unaware of any waste material encountered during the I 190 construction but it is noted that this section of the I 190 is a fill section.

We hope that the above is adequate for your purposes, we can supply more detailed information if requested however the above should be adequate for a Phase I or II type investigation.

REF-7

February 23, 1988

2) Groundwater information

Groundwater data for this area is available from several sources, including:

1) NUS - 1986 LaSalle Area groundwater study
2) USGS - Niagara River Study
3) Dupont/Woodward Clyde - Hecco Park Investigations
4) CECOS/Newco groundwater monitoring system

The above data in its entirety is too large to transmit. We have attached various summaries and maps showing well locations. Additional information should be obtained from the above sources.

3) Information on Texas Brine Line construction near site

Attached are various documents related to the construction of the Texas Brine Line adjacent to the site.

Please contact me with any questions at 716-284-3128.

Very truly yours,

Michael Hopkins
Assistant Public Health Engineer

MH:lj

cc: Jaspal Walia
L. Rusin
R. Tramantano

Exhibit E

Facility Name: 64th Street - North Date: 1-28-86

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
[1] Observed Release	(0) 45	1	0	45	5.1
Date and Location: April 1986 Measurements taken upwind & downwind of site.					
Sampling Protocol: HNu meter					
If line [1] is 0, the S_a = 0. Enter on line [5]. If line [1] is 45, then proceed to line [2].					
[2] Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
[3] Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
[4] Multiply [1] x [2] x [3]				35,100	
[5] Divide line [4] by 35,100 and multiply by 100			S_a = 0		

AIR ROUTE WORK SHEET

Exhibit F

"Remedial Action Testing Program
Niagara Falls Boulevard and 70th Street
Niagara Falls, NY 14304"

submitted to:

New York State Department of
Environmental Conservation
600 Delaware Avenue
Buffalo, NY 14414

prepared for:

TOPS Markets, Inc.
60 Dingens Street
Buffalo, NY 14206

prepared by:

Waste Resource Associates, Inc.
2576 Seneca Avenue
Niagara Falls, NY 14305

April 30, 1991

56-0068

INTRODUCTION

The subject of this proposed Remedial Action Testing Program is a parcel of property located immediately north of Niagara Falls Boulevard at 70th Street in the City of Niagara Falls, NY. The purpose of this investigation is to obtain analytical data of sufficient nature to fully characterize subsurface materials at this site and determine whether or not any significant contamination is present on the property and establish the environment impact of that contamination (if any). The information to be collected relates to a comprehensive geotechnical site evaluation and will summarize the analytical testing data derived from soil samples taken at twenty (20) test borings located on the property and subjected to the full Superfund Target Compound List (TCL) scan. Based on the results of the investigation, this parcel will hopefully be delisted from any association as part of the 64th Street North Inactive Hazardous Waste Site. A successful delisting effort will allow development of the property to proceed as is currently planned by the owners, TOPS Markets, Inc.

BACKGROUND

The parcel of property located at Niagara Falls Blvd. and 70th Street has been previously investigated on a number of occasions (Empire Soils Investigations, Inc. [1988]; Waste Resource Associates, Inc. [1989], [1990]. The results of these prior investigations has confirmed that the site has been extensively backfilled with construction and demolition debris. This "fill" material covers nearly the entire parcel and is known to exist from two (2) to eight (8) feet in thickness at various locations across the site. Although analytical data from previous investigations have not shown significantly elevated levels of contamination to exist, a portion of this property has been included in the 64th Street North Inactive Hazardous Waste Site designated by NYSDEC.

The sampling and analysis program outlined in this proposal is designed to fully characterize subsurface material found on-site and determine precisely what type of contamination does or does not exist. This information may allow for a delisting determination to be made by NYSDEC and permit the development of the site by TOPS Markets, Inc.

Should this development proceed, removal of the majority of the "fill" material will be required to improve sub-surface conditions and provide satisfactory site stability. The data derived from this investigation which relates to the character of this "fill" material will also be important to decisions associated with disposal options which are viable and can be readily approved for the "fill" material to be removed from the site.

SAMPLING PROGRAM

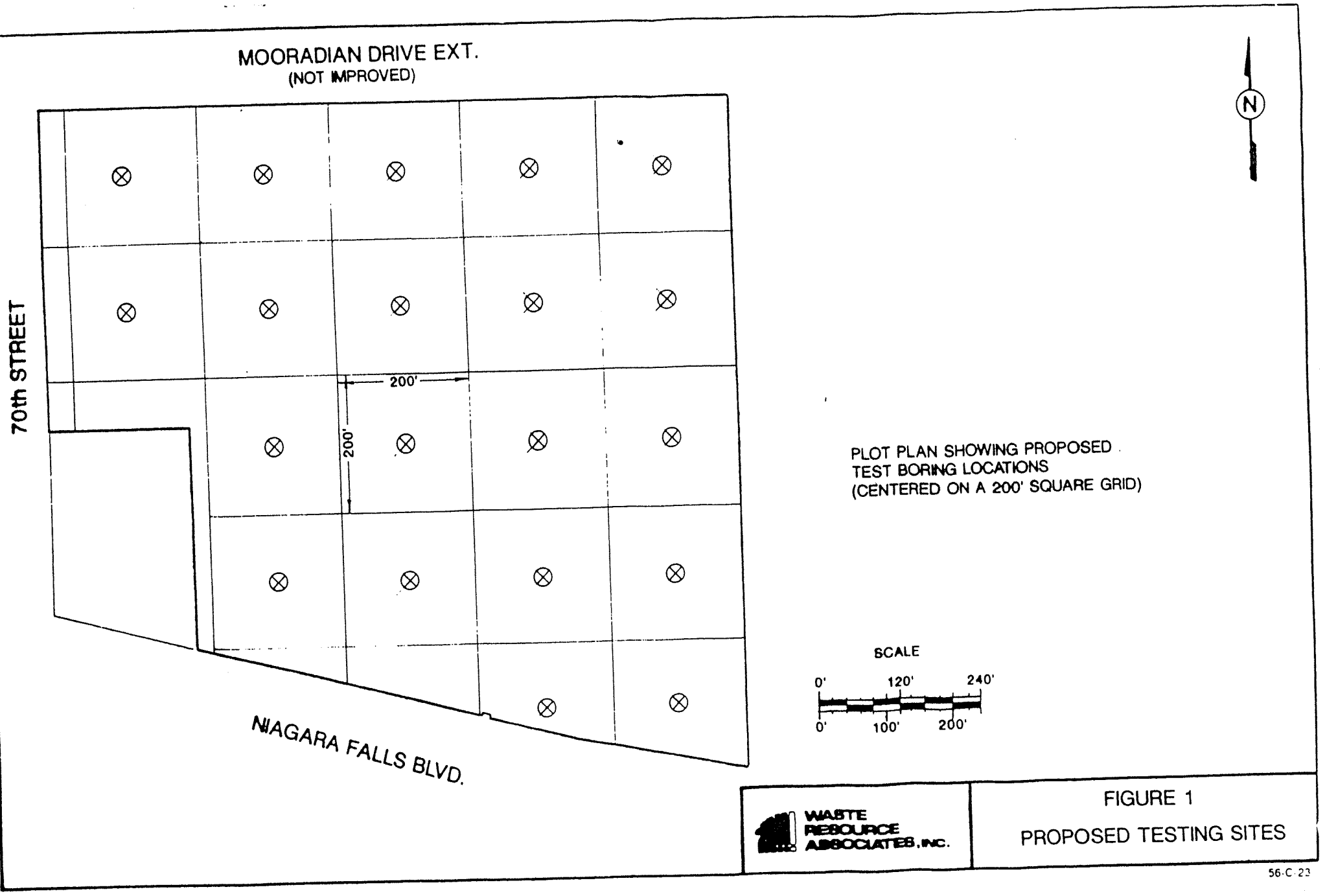
Sample collection at the subject property will involve the advancement of twenty (20) test borings at pre-determined locations within the site boundaries. These locations have been selected to insure that testing sites are evenly distributed throughout the total acreage occupied by the parcel and that the analytical data derived from the soil samples presents a comprehensive evaluation of sub-surface materials. Selection of testing locations was accomplished by constructing a 200' x 200' square grid pattern over the entire parcel and locating a test boring approximately at the center of each individual square (see Figure 1-Proposed Testing Sites). The resultant pattern of twenty (20) test borings approximates one (1) boring per acre of property.

The test borings will be advanced using hollow-stem augering techniques. Continuous split-spoon sampling will be done over two foot intervals from the ground surface to the base of each test boring. Samples to be taken at each location will include;

- A composite sample of fill material which appears to be homogeneous in nature,
- A grab sample of fill material exhibiting characteristics which differ significantly from surrounding material, and,
- A representative sample of the underlying indigenous soil.

On-site decontamination of sampling and drilling equipment will occur between sampling events and between individual test borings.

To ensure the highest level of Quality Assurance/Quality Control, all appropriate sampling and analysis protocols will be followed as outlined in EPA Manual SW-846.



WASTE RESOURCE ASSOCIATES, INC.

FIGURE 1

PROPOSED TESTING SITES

56-C-23

ANALYTICAL TESTING

The composite "fill" material samples (and any other non-homogeneous fill-type material encountered in any test boring) will be tested for the presence of constituents evaluated by the following Superfund Target Compound List (TCL) Test procedures;

Testing Procedure	Method
TCL Volatiles	SW-846;8240
TCL Semi-volatiles	SW-846;8270
TCL Pesticides/PCB's	SW-846;8080
TAL Metals	SW-846;7000
Total Cyanide	SW-846;9012

If the analytical test results for any fill sample indicate any significant levels of contamination, a sample of the indigenous soil which underlies the fill material will be taken to determine if contamination has penetrated down into that stratum. All analytical testing data generated by the laboratory to which samples will be directed will be validated by Waste Resource Associates, Inc. Mr. Stephen S. Odojewski (President-Waste Resource Associates, Inc.) will be responsible for conducting the independent, third-party validation of the accuracy of all analytical testing data generated in the project. The qualifications of Mr. Odojewski in serving as data validator on the project are presented as Exhibit I.

Throughout the entire project, special efforts will be made to ensure the data generated is of the highest quality and represents a high degree of accuracy.

These efforts will include activities related to;

- field inspection of all test boring locations,
- detailed documentation of all field operations compiled in a field log book,

- use of proper sample labeling, sample storage, sample preservation and sample transportation techniques,
- meticulous chain-of-custody records,
- use of an accredited and certified analytical testing laboratory,
- independent, third party verification of laboratory QA/QC procedures and analytical testing data.

Total Cost: $50,000-$100,000 (depending on the number of confirmatory indigenous soil samples which need to be analyzed).

Exhibit I

Qualifications
of
Stephen S. Odojewski
as
Data Validator

Education: BS and MS degrees in Organic/Analytical Chemistry - Canisius College, Buffalo, NY.

Experience: 1972-1974 Research Chemist
Chem-Trol Pollution Services, Inc.
Model City, NY

Among other duties, Mr. Odojewski performed research on the applicability of various analytical methods to the analysis of waste samples. In this role, he developed clean-up techniques necessary to allow the use of instrumental procedures.

1974-1976 Laboratory Supervisor
Chem-Trol Pollution Services, Inc.
Model City, NY

Directed the analytical efforts of 5 chemists and 6 technicians. Assigned work, reviewed results and specified procedures to be employed. Established Quality Control/Quality Assurance Program for Operations Laboratory.

1976-1979 Laboratory Manager
Chem-Trol Pollution Services, Inc.
Model City, NY

Responsible for the technical efforts of 16 chemists and technicians. Directed research program, operations laboratory and special analytical laboratory. Was responsible for regulation interpretation and liaison with regulatory agencies including; EPA Region II, NY State DEC Region 9 and the Niagara County Health Department. In this role, he designed and supervised the assembly of one of the nation's first mobile laboratories for use at abandoned hazardous waste sites.

1979-1983 Vice President - Technical Services
Waste Resource Associates, Inc.
Niagara Falls, NY

Provided technical control of all analytical work secured by the firm. In this role, he specified analytical procedures to be employed and reviewed the analytical results. This effort has included the design of groundwater monitoring programs for active hazardous and solid waste landfills as well as the design of the analytical program for remedial action investigations of abandoned in uncontrolled hazardous waste sites.

1983-1991 President
Waste Resource Associates, Inc.
Niagara Falls, NY

As President of the firm, Mr. Odojewski has assumed the administrative control for the corporation in addition to providing analytical review for projects the firm undertakes.

Exhibit G

New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, New York 14202

Thomas C. Jorling
Commissioner

May 14, 1991

Mr. Randolph Rakoczynski
Waste Resources Associates
2576 Seneca Road
Niagara Falls, NY 14305

Dear Mr. Rakoczynski:

The draft of the revised remedial action sampling and analysis plan proposed for Niagara Falls Boulevard and 70th Street dated May 1, 1991 has been reviewed. Although we agree with the plan's objectives, the following items should be included in the final revised work plan before an approval is given:

1. The soil sampling plan needs to be expanded to include information as to how a composite sample will be collected for analysis;

2. Decontamination procedures that will be followed between soil sampling;

3. A Health and Safety plan for soil boring and sample collection should be developed;

4. The laboratory that will be used for soil analysis shall be on the list prepared by the NYSDOH; and

5. Soil analysis will follow the SW-846 requirements, however, the results will be reported according to the Section B in Volume 1 of the Analytical Service Protocol, September 1989.

The New York State Department of Environmental Conservation has issued a guidance manual 4007 - Phase II Investigation Generic Work Plan dated 5/9/88 which can assist you in the development of some of the above items.

Should you have any questions on these items, please call me at 716-847-4585.

Yours truly,

Yavuz Erk

Yavuz Erk, P.E.
Environmental Engineer II

YE/ad

cc: Mr. Joseph Sciascia
Ms. Valerie Lauzze

Exhibit H

Modifications to Soil Sampling and Analysis Proposal
Response to NYSDEC Review
(Niagara Falls Blvd. & 70th St.)

1) Sampling Procedures

A composite sample of fill material will be obtained through continuous split-spoon sampling at two foot intervals commencing at the grade elevation and terminating at the depth where indigenous soil is encountered. The composite sample will consist of material derived from each 2 foot split-spoon which is retrieved from the interval characterized as fill by previous site investigations.

In the event that fill material is encountered which differs significantly from the surrounding fill, a portion of this material will be obtained as a grab sample. The remainder will be included in the composite sample. The determination that an interval of fill material is "significantly different" from surrounding strata will be made based on various field observations and measurements which will include color, texture, odor, moisture content, degree of consolidation, particle size and Hnu meter readings of hydrocarbon vapor emissions.

Each test boring will terminate when the underlying indigenous soil is encountered. A portion of this soil will be collected as a grab sample. The indigenous soil sample will not be subjected to analysis unless the analytical data derived from the composite fill sample shows significant levels of contamination.

An Hnu photoionization detector will be operated on-site during all field testing operations. The readings obtained will serve as an indicator of relative levels of hydrocarbon vapors emitted by materials disturbed during sampling procedures. This data will be used as a partial determining factor influencing soil sampling as well as site safety considerations.

A background level will be established by taking air measurements prior to the initiation of any ground disturbance associated with the sampling operations. Background readings will also be taken between individual test borings. Hnu measurements will be taken (and recorded) in the vicinity of the drill rig during augering procedures and of the split-spoon samplers upon opening.

2) Decontamination Procedures

On-site decontamination of all drilling and sampling equipment will be conducted between each test boring location. All equipment associated with the advancement of test borings and sampling of subsurface material will be cleaned of foreign matter and sanitized with a steam cleaner. A sufficient number of decontaminated split-spoons and soil augers will be available on-site to complete any individual test boring and will limit decontamination procedures to a "between location" operation. Additionally, all drilling and sampling equipment will be decontaminated prior to exiting the site at the end of each working day.

3) Health and Safety Plan

Training

All personnel required to perform on-site tasks as part of the remedial action sampling and analysis plan will have received appropriate levels of safety training for their assigned duties as outlined in 29CFR 1910.120, Hazardous Waste Operations and Emergency Response.

Project Management

Representatives from Waste Resource Associates, Inc. who will be providing project management on-site during sampling procedures includes Mr. Mark Schwippert, Geologist, and Mr. Joseph McGowen, Technician. Additional off-site technical guidance will be

supplied by Mr. Randolph W. Rakoczynski, P.E., Vice President of Engineering.

Personal Protective Equipment

Hnu meter readings will be taken during all phases of the on-site sampling program. These measurements will be continually monitored for any elevated levels (in excess of ~~10~~ 5 ppm for a prolonged duration) which would prompt a shift from Level D (which will initially be required) to Level C protection. All necessary personal protective equipment for Level C protection will be on-site, readily available, and will include:

- NIOSH approved air-purifying cartridge respirators,
- Chemical-resistant clothing,
- Hard hat,
- Safety glasses with side shields,
- Rubber boots (over-the-shoe type),
- Gloves,
- Long sleeve shirt or coveralls.

Communications

Should an emergency situation arise while work is being performed on-site, the following phone numbers will be available to all site workers to assist with an appropriate response:

Sheriff	911
Fire Control Center	433-4482
Niagara County Office of Emergency Management	283-0371
Public Safety-Community Services	286-4569
New York State Department of Environmental Conservation	847-4585
Waste Resource Associates, Inc.	297-4205

Emergency Response

In the event of injury to on-site personnel, the emergency telephone number list should be referenced to obtain medical services. Such assistance is available by dialing 911 and describing the injury. If immediate transportation of the victim is required, the prescribed treatment facility is Niagara Falls Memorial Medical Center. The transportation route to the hospital is as follows:

- exit site to the south and turn right on Niagara Falls Boulevard (Route 62),
- take Niagara Falls Blvd. to Walnut Ave. (Route 62A) (bear left at fork onto Walnut Ave. from Niagara Falls Blvd. just east of Packard Road),
- go right on Portage Road from Walnut Ave.,
- go left on Pine Ave from Portage Rd.,
- enter Hospital from Pine Ave.

4,5) Lab/Analysis Requirements

The analytical laboratory which will be selected to conduct the soil sample analysis outlined in this proposal will be certified by the NYSDOH to perform such tasks. Soil analysis will follow SW-846 requirements with results conforming to the Analytical Service Protocol (9/89) reporting requirements as outlined in Section B of Volume 1 of that manual. Our preliminary selection for analytical service is Advanced Environmental Services, Inc. of Niagara Falls, NY, which satisfies these requirements.

Exhibit I

New York State Department of Environmental Conservation

Thomas C. Jorling
Commissioner

May 31, 1991

Mr. Randolph W. Rakoczynski
Waste Resources Associates, Inc.
2576 Seneca Avenue
Niagara Falls, NY 14305

Dear Mr. Rakoczynski:

Niagara Falls Blvd. & 70th Street

I have reviewed your letter of May 23, 1991 which brings clarifications to the proposed Remedial Investigation (RI) plan for the referenced property.

The RI plan, with this addendum, is acceptable to us. Please notify this office at least five (5) days before commencing to work at the site. We may chose to split a number of soil samples with you if we so desire.

I am also sending you information concerning the laboratory capabilities of Advanced Environmental Services in Niagara Falls, NY. This information is published by the NYSDOH and I have recently discussed this issue with Mr. Mark Schwippert over the phone. Please make sure that the laboratory of your choice will meet the NYSDOH's approval.

Should you have any questions please call me at 716-847-4585.

Sincerely,

Yavuz Erk

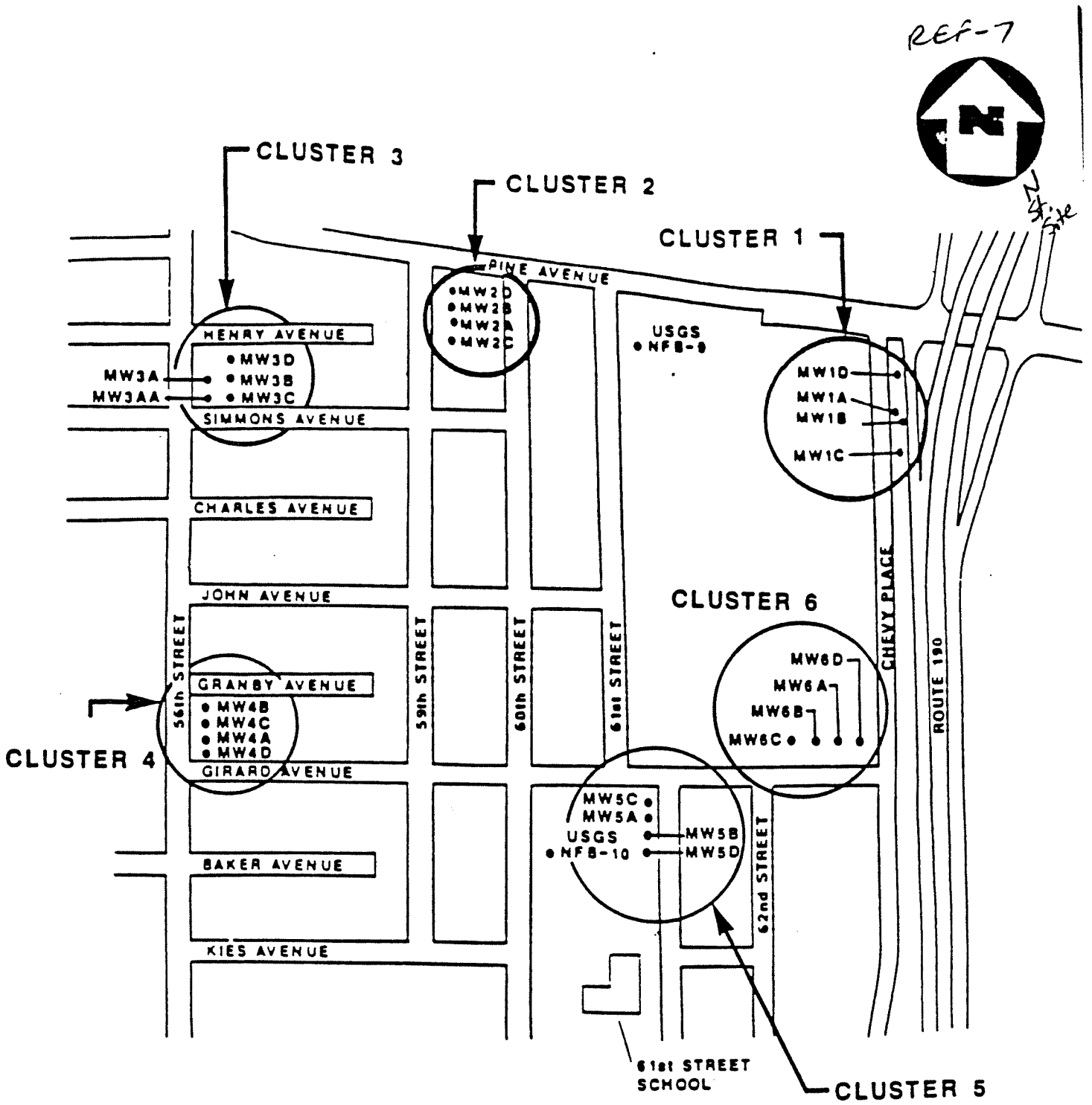
Yavuz Erk, P.E.
Environmental Engineer

YE/ad

cc: Mr. Joseph Sciascia
Ms. Valerie Lauzze - Albany
Mr. Al Wakeman - Department of Health, Albany

Exhibit J

REF-7



LEGEND

● SAMPLED EPA AND USGS WELLS

FIGURE 1-3

MONITORING WELL LOCATION MAP

LASALLE AREA GROUNDWATER MONITORING PROGRAM

NIAGARA FALLS, N.Y.

(NOT TO SCALE)

NUS CORPORATION

A Halliburton Company

Exhibit K

NEW YORK STATE DEPARTMENT OF HEALTH

INTEROFFICE MEMORANDUM

TO: Sandra Stanish

FROM: John Hawley

DATE: November 19, 1985

SUBJECT: 64th Street Dump - South Niagara Falls

I have reviewed the letter report on the above site sent by N. Myers of NUS Corp. to D. Messina of EPA on September 5, 1985. A full evaluation of possible public health significance of soil contamination at such a site requires, first, selection of proper analytes in the data - gathering phase of the investigation. I do not know anything about previous history of the site - other than it is described as a "former disposal area" - or about the basis for selection of analytes. Although the letter and attached tables do not provide all the information needed for a full evaluation, the soil is contaminated above background levels at some places in and adjacent to the former disposal area. My initial assessment is that none of the measured contamination levels is high enough to constitute a health hazard from short-term or even continued exposure via normal playing activities. However, the site is not recommended as a play area for very small children (younger than 3 years old or so) who sometimes have a tendency to swallow quantities of dirt while playing. I see no need to fence the area.

Soil samples were analyzed for volatiles, semi-volatiles, pesticides/PCBs, and inorganics (metals). The only volatiles found are methylene chloride and acetone, which appear to be the result of contamination of samples or equipment during cleaning. The principal semi-volatiles found are polycyclic aromatic hydrocarbon compounds (PAHs), which were found at the surface at every sampling site. These compounds are very common throughout the environment, being formed in the combustion of wood, petroleum products and the like. The levels found at the site are comparable to total PAH levels found by various investigators in areas such as fields adjacent to highways (see references). The relative abundance of individual PAH compounds in the one sample result I examined on this basis was consistent with that found by Blumer et al (1977) in soil near a highway in a town in the mountains of Switzerland. At three sampling sites on the area identified as the former disposal area, PAHs were found at all depths sampled. At one of these sites (NYA1-S7), which also was identified as being "in a shallow trench, the PAH level was six to 50 times greater than at any other site, although the level was still well within the range found in the other studies. The sample location map indicates this site to be between gas station and Russo Chevrolet. As such it could represent additional contamination by activities at these places.

The other semi-volatile contaminant found is bis (2-ethylhexyl) phthalate. This is a compound used in a great variety of products, including many plastics. It was found in soil five feet below the surface at two sampling sites in the former disposal area (S3,S5) as well as in surface soil at one of these locations (S5) and off the designated disposal area in a swale (S11) and a shallow depression (S10). This compound has been found to be carcinogenic in an animal biossay; EPA has estimated a human cancer potency based on accepted extrapolation techniques. Using my estimates for the lifetime exposure associated with contaminated soil in a residential yard, the highest contamination level found at this site would correspond to about a one in a billion increased cancer risk if it were present throughout a residential area. On this basis none of the bis (2-ethylhexyl) phthlate levels measured appear to represent a significant health risk.

The pesticide compounds, alpha-hexachlorocyclohexane (a-HCH), beta-hexachlorocyclohexane (b-HCH), and endosulfan sulfate were found in some surface and sub-surface soil samples. [Note: the report uses the abbreviation BHC, a misnomer for the hexachlorocyclohexanes.] These levels, too, are well below those that would represent a public health hazard.

Metallic elements are natural contituents of soil Several metals were detected in the analysis for inorganic compounds. The toxicity of metallic compounds often depends on the chemical and physical properties of the particular compound rather than on the toxicity of the elemental metal. It is impossible to make such distinctions on the basis of the present data, however, since only the metal concentrations are reported in the analysis. I have compared the individual sample data to elemental composition data for eastern U.S. soils (Shacklette and Boerngen, 1984) and to other samples to detect significant deviations that may indicate contamination by a metallic compound. The data indicate elevated levels of zinc, manganese, copper, tin, and possibly chromium at some locations. Presence at five feet below the surface in the former disposal area (e.g. site S3) indicates a probable association with the disposal activity [although, as noted above, I know nothing about this purported activity]. Elevated surface concentrations at other sample locations e.g. site S7) may be indicative of surface run-off from the street or from automotive repair activities.

A summary of the data at each sample location and a list of references are attached.

JH:dm
S0039

cc: Dr. N. Kim
Mr. R. Tramontano