PROPOSED SITE INVESTIGATION
FORMER SCHMIGEL SITE
Oak Materials Group Inc.
Hoosick Falls, New York

prepared for:
Whiteman, Osterman & Hanna

November 1985

Ref. No. 1393

CONESTOGA-ROVERS & ASSOCIATES LIMITED

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1.0 INTRODUCTION

A proposed plan of work to investigate an inactive waste site (former Schmigel Site) near Hoosick Falls was presented in the report entitled "Proposed Site Investigation - Oak Materials Group Inc. - May 25, 1984". The NYSDEC has reviewed and commented on the proposed plan. A copy of these comments dated July 2, 1984, is presented in Appendix 'A'.

This revised plan of work, which addresses the comments of NYSDEC, is submitted as the proposed written scope of work (the "Proposal") pursuant to an Order on Consent between NYSDEC and Oak Materials Group Inc. (File No. 4-0213).

2.0 INACTIVE WASTE AREA - SCHMIGEL SITE

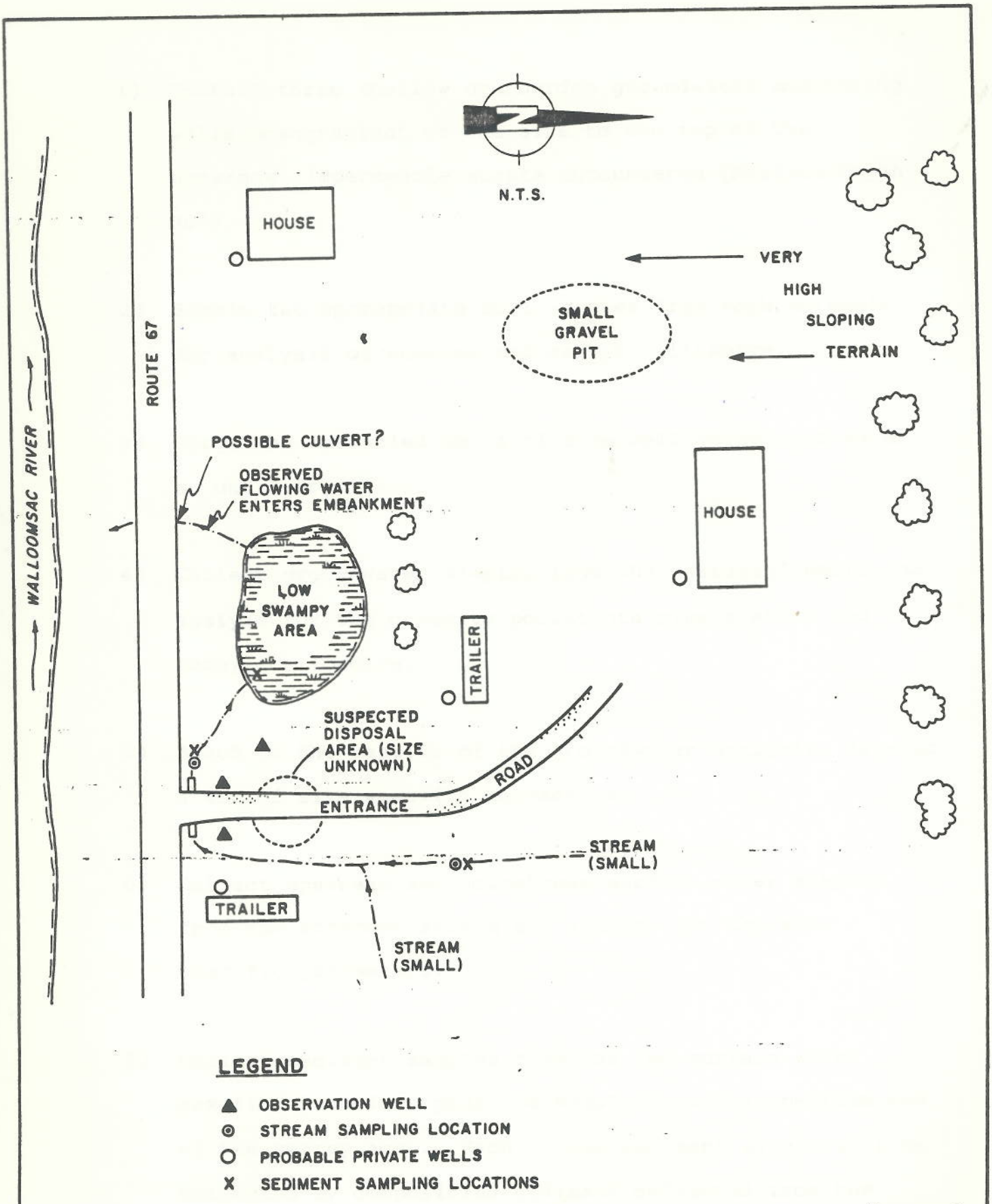
2.1 HISTORIC INFORMATION

The Schmigel Site may contain the disposal of 100 to 200 55-gallon drums of scrap material. The material is suspected to include epoxy resins, dicyamide, methyl cellosolve and acetone. The material was transported to the site (circa 1974) by Alex Schmigel (former owner) who opened the drums and crushed the barrels to fill a low lying area. The disposal area currently provides access across the low area to a few residences. A general plan of the area is presented in Figure 1.

The size of this site can not be easily determined by visual inspection. It is suspected that waste material from other sources may also be present at the site.

2.2 INVESTIGATION PLAN

The proposed plan, contingent upon receiving authorization to enter the property for such purpose and weather conditions permitting, for the Schmigel Site will include the following:



LEGEND

- ▲ OBSERVATION WELL
- ⊙ STREAM SAMPLING LOCATION
- ○ PROBABLE PRIVATE WELLS
- X SEDIMENT SAMPLING LOCATIONS

figure 1

INACTIVE WASTE AREA

Former Schmigel Property
Oak Materials Group Inc.

CRA

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1) Install three shallow overburden groundwater monitoring wells downgradient of the site to the top of the uppermost impermeable strata encountered (Maximum Depth = 30')

2) Submit two appropriate soil samples from each borehole for analysis of acetone and methyl cellosolve.

3) Purge the installed wells of five well volumes of water or until dry.

4) Collect groundwater samples from the installed wells and analyze for the priority pollutants plus acetone and methyl cellosolve.

5) Based on the results of the groundwater analysis, develop a set of site specific parameters.

6) Collect upstream and downstream surface water samples from the adjacent stream and analyze for the site specific parameters.

7) Collect sediment samples from the two surface water sampling locations plus one sample from the upstream end of the swampy area. Each stream sediment sample will be collected by compositing sediment collected from the centerline and both edges of the stream. The swamp

sediment sample shall be collected as a composite of three sample locations at the upstream edge of the swamp area. The sediment sample will be analyzed for the site specific parameters.

8) Collect groundwater samples from the local residential wells (including the trailer well at the intersection of Route 67 and the entrance road) and resample the installed monitoring wells (for confirmation) for the site specific parameters.

9) Estimate the areal extent of the former disposal area using a metal detecting device.

The proposed sampling locations are presented in Figure 1.

3.0 WELL INSTALLATIONS

Based on local information collected during the initial site visit, it is suspected that the water table at the site is relatively close to the ground surface. (i.e. < 10' below grade). As a result, the groundwater monitoring wells may be installed in test holes excavated by backhoe. Deeper well installations will require the use of a drill rig. The geologic stratigraphy will be continuously logged to depth using standard New York State DOT soil specifications and classification techniques.

Each well will be constructed of 2" diameter PVC pipe coupled to a 5 foot length of PVC slotted well screen as shown in Figure 2. Periodic water table measurements will be taken in conjunction with the installation of wells and collection of samples for chemical analysis.

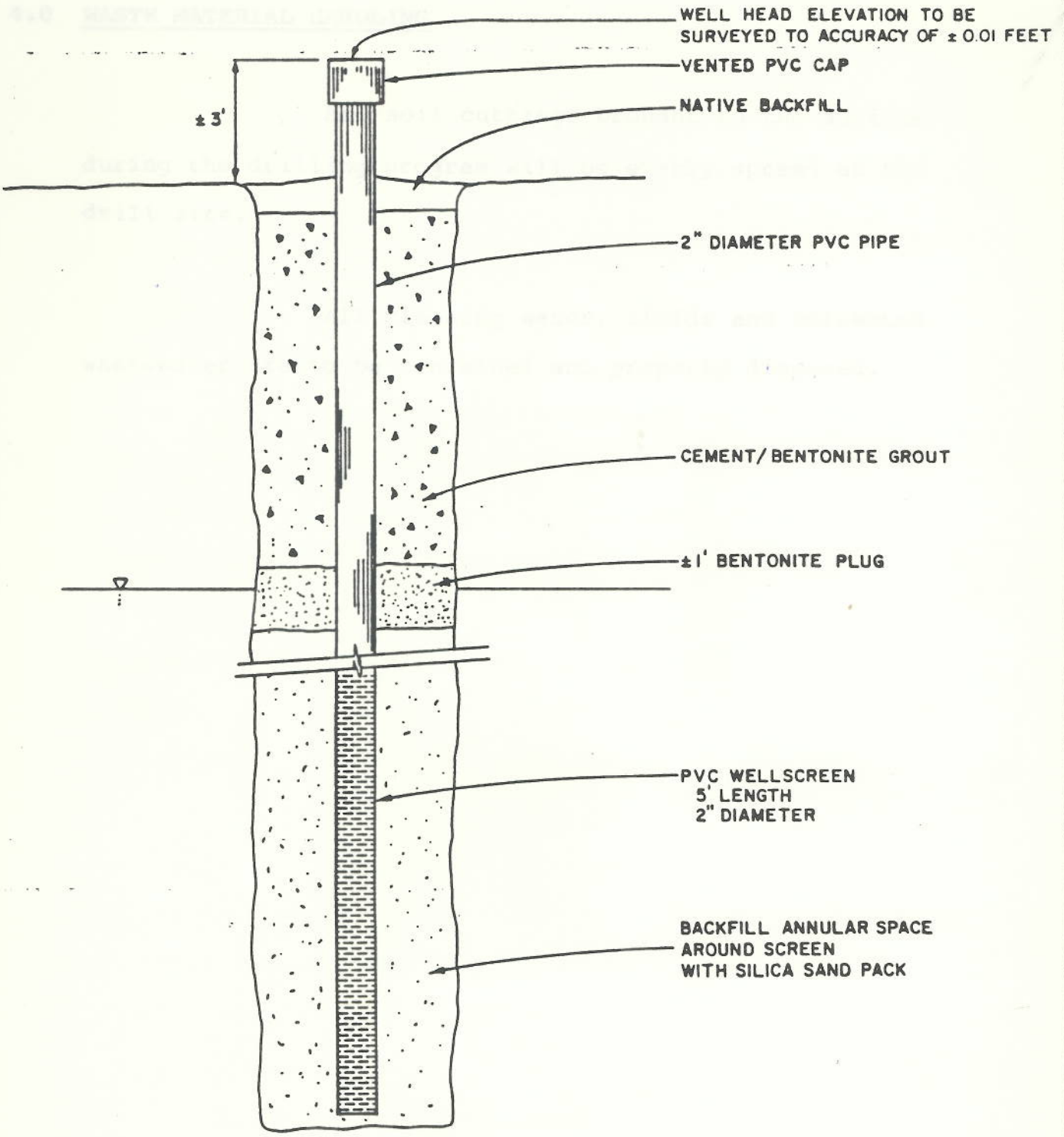

figure 2

TYPICAL GROUNDWATER MONITORING WELL DETAIL

Oak Materials Group Inc.

4.0 WASTE MATERIAL HANDLING

All soil cuttings brought to the surface during the drilling program will be evenly spread at the drill site.

All cleaning water, fluids and collected wastewater are to be contained and properly disposed.

5.0 EQUIPMENT CLEANING

After each well installation of borehole, all drilling equipment, tools and casings will be cleaned in the following manner:

- remove all soil with a wire brush
- steam clean

All split spoon samplers and soil sample extraction tools will be cleaned as follows prior to collection of each soil sample for chemical analysis:

- water wash to remove all foreign material
- rinse with acetone
- rinse with hexane
- rinse with acetone
- rinse with distilled deionized water

All equipment will be cleaned at a designated area (polyethylene covered) and all personnel must wear protective clothing including tyvek coveralls, rubber boots and rubber gloves.

6.0 ANALYTICAL PROTOCOL

The following analytical protocols will be implemented for chemical analysis:

Acetone	- by GC (No standard method - lab to provide procedure used)
Methyl Cellosolve	- by GC (No standard method - lab to provide procedure used)
Priority Pollutants	- EPA-600/D-80-021, "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Proposed Regulations", Federal Register 44 (233), December 3, 1979.

Of every ten samples submitted for chemical analysis, one duplicate sample will be submitted for quality assurance confirmation.

7.0 HEALTH AND SAFETY PLAN

7.1 PURPOSE

This Health and Safety Plan has been designed to ensure:

1) that personnel working on-site are not over-exposed to the compounds present at the site;

2) that the health and safety of the general public and the environment is not compromised by airborne off-site migration of contaminated materials due to this project;

3) compliance with applicable governmental and non-govermental (American Conference of Govermental Industrial Hygienists) regulations and guidelines.

All site operations will be conducted in accordance with the provisions of the Health and Safety Plan. Cost and/or scheduling considerations will not be considered as justification for modifying this plan.

7.2 RESPONSIBILITIES AND ADMINISTRATION

A Site Representative will be assigned to this project and shall be responsible for all decisions regarding operations and work stoppage due to health and safety considerations.

The Site Representative's responsibilities include:

- supervision and enforcement of safety equipment usage,
- supervision and inspection of equipment cleaning,
- supervision of decontamination area,
- conducts air monitoring program,
- personnel training in safety equipment usage and emergency procedures,
- maintains Exclusion Zone (EZ) and Contaminant Reduction Zone (CRZ) work areas,
- implementation of safety and health program,
- has authority to suspend work activity due to unsafe working conditions,
- informs workers of the nature of chemical exposure risk as required by Right-to-Know Law,
- responsible to recommend medical examination when worker appears to require it, and
- coordination of emergency procedures.

7.3 WORKER TRAINING AND EDUCATION

Prior to commencing site activities, a health and safety training program will be presented. Attendance is mandatory for all personnel who will be or are expected to be involved with the program. Visitors and other personnel not fully trained in the health and safety aspects of this program will not be permitted within the Exclusion Zone.

All personnel employed on this project will receive a copy of the health and safety program and will sign a form stating that they have read and understood the contents of the plan and will comply in every respect with the program.

This training program will ensure that each attendee understands the basic principles of personnel protection and safety, be able to perform their assigned job tasks in a safe and environmentally responsible manner, and be prepared to respond in an appropriate manner to any emergency which may arise. Personnel not successfully completing this training program will not be permitted to enter or work in potentially contaminated areas of the site.

7.4 AIR MONITORING

Various direct reading instruments, including an explosimeter and an organic vapor photoionizer, will be used to assess background and work zone concentrations of organic hydrocarbons. Measurements will be taken immediately adjacent to the well/borehole. Any significant departures from general background will be reported to the Site Supervisor, who will decide if operations are to be shut down or continued. Organic vapor concentrations of 5 ppm above background or combustible gas concentrations greater than 10% LEL (Lower Explosive Limit) are considered significant and reportable.

In the event that any significant departure from general background level is measured, the following contingency plan will be implemented:

- organic vapor >5 ppm but <25 ppm
  - don air purifying respirators
  - increase air monitoring at EZ perimeter
- organic vapor >25 ppm
  - cease work
  - continue air monitoring at EZ perimeter
  - evaluate means to reduce organic vapor emission and/or continue in SCBA equipment
- LEL >10%
  - cease work and rectify as appropriate

All air sampling instruments will be calibrated daily and/or according to manufacturer specifications or established EPA protocols.

7.5 SITE OPERATIONS AND ORGANIZATION

The scope of work for this project involves installing monitoring wells and boreholes and collecting surface and subsurface soil samples. All active augering or sampling personnel will require the use of the following types of PPE:

1) Disposable, splash resistant Tyvek coveralls,
2) Rubber gloves,
3) Hardhats (liners optional),
4) Safety shoes with steel toes and shanks,
5) Rubber boots,
6) Safety glasses with side shields, and
7) Half-mask air purifying respirators equipped with organic vapor, cartridges. (Available in the event they are needed)

PPE will be maintained in a clean sanitary condition and ready for use. Disposable coveralls shall be discarded when torn and as an employee leaves the contaminated work zone. Respirators shall be cleaned after

each day's use and cartridges discarded. A sufficient quantity of potable water shall be supplied for washing of personnel, cleaning PPE, and drinking.

Designated work areas will be set up during all on-site soil handling operations. The purpose of these procedures is to limit access to contaminated areas, and prevent the migration of hazardous materials into adjacent non-contaminated areas. These areas are as follows:

1) The Exclusion Zone (EZ) is the area immediately surrounding the drilling operation. Stakes and flagging will be used to define its boundaries. Sufficient area will be provided for efficient movement of personnel and equipment, as well as contaminant control. Boundaries are modifiable depending on operational requirements. The Site Representative will be responsible for maintaining the boundaries of this area. Personnel entering this area are required to wear the full PPE as defined above.

2) The Contaminant Reduction Zone (CRZ) lies upwind of the EZ and provides for the decontamination of equipment and samples. In addition, personnel entering or leaving the EZ will use this area for donning, washing or disposing of PPE. Labeled drums will be provided for disposal purposes. Supplemental safety equipment, such as fire

extinguishers, portable eyewash and extra quantities of PPE may be stored in this area. The order in which safety equipment is to be donned is as follows:

- Tyvek
- gloves
- boots

The reverse order applies when removing safety equipment.

3) The remaining portions of the site, the Clean Zone, are considered to be free of major contamination. Support and administrative activities will be located in this area.

Additional PPE usage guidelines are as follows:

1) Prescription eyewear used on-site shall be safety glasses equipped with side shields. Contact lenses shall not be used.

2) On-site personnel unable to pass the respirator fit testing shall not be allowed to enter or work in the EZ.

3) Steel toed leather footwear shall be covered with neoprene overboots prior to entering the EZ and immediately upon entering the CRZ.

4) Safety footwear and hard hats are to be worn by site personnel at all times.

EZ personnel also carry certain responsibilities for their own safety and health, and are required to observe the following safe work practices:

1) Familiarize themselves with this Health and Safety Program.

2) Use the "buddy system" when working in a contaminated operation.

3) Use the safety equipment in accordance with training received, labeling instructions and common sense.

4) Maintain safety equipment in good condition and proper working order.

5) Refrain from activities that would create additional hazards (i.e. smoking, eating, etc. in restricted areas, leaning against dirty, contaminated surfaces).

6) Soiled disposable outerwear shall be removed prior to washing hands and face, eating, using lavatory facilities, or leaving the site.

7.6 EMERGENCY AND FIRST AID EQUIPMENT AND SUPPLIES

The safety equipment listed below will be supplied for use by EZ personnel and will be located in close proximity to the work zone:

1) Twenty pound ABC type dry chemical fire extinguishers. (One per drill rig)

2) Self contained breathing apparatus (SCBA). (One per drill rig)

3) OSHA approved first aid kit sized for a minimum of five people.

4) Potable water.

8.0 SUMMARY

The described investigatory program will be complete upon receipt of final results of all analyses performed pursuant to the program. Within 60 days of completion of the described investigatory program, a report containing the following will be submitted to NYSDEC:

a) A summary of all environmental conditions at the Site and potentially affected off-site areas, including: soil conditions, hydrogeological characteristics, groundwater and surface water quality, site water balance, site drainage and any adversely affected wildlife.

b) A presentation of all data collected during the Field Investigation and/or used in preparing the Report, including, but not limited to: soil boring logs, well data, and the results of chemical analyses performed on samples obtained during the Field Investigation.

c) An assessment of the types and quantities of any hazardous and industrial wastes present as well as the areal and vertical extent of such wastes with a waste location map and cross-section of the waste disposal area.

d) A determination of the nature and extent of actual and potential release and migration of hazardous and industrial wastes from the Site through surface water, groundwater, soil and sediment to areas at the Site and off-site. Mathematical modeling of the Site will not be performed due to the size and nature of the Site.

e) An identification of all households, persons, municipalities and industries in the vicinity of the Site who utilize public or private wells as a source of drinking, household, or irrigation water, which may be impacted by the release and migration of any hazardous and industrial wastes through groundwater, based upon a search of available public records and other reasonable attempts to ascertain the location of the public and private wells which may be impacted by any release and migration of hazardous and industrial wastes through groundwater.

f) An assessment of the results of the Field Investigation and a determination of the current or potential impacts of any threat to the environment which exists, or may exist in the future, at the Site and off-site, as a result of the hazardous and industrial wastes disposed of at the Site.

g) References to all scientific or technical literature used in the preparation of the Report; and

h) Names, titles and disciplines of all professionals engaged in the preparation of the Report.

All of Which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES LIMITED

Frank A. Rovers, P. Eng.

APPENDIX A

CORRESPONDENCE FROM NYSDEC, JULY 2, 1984.

1393

New York State Department of Environmental Conservation
REGION IV HEADQUARTERS
2176 Guilderland Avenue
Schenectady, New York 12306
(518) 382-0680

Henry G. Williams
Commissioner

July 2, 1984

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JUL 6 1984
WHITEMAN OSTERMAN & HANNA

Ms. Carol S. Knox
Whiteman, Osterman & Hanna
One Commerce Plaza
99 Washington Avenue
Albany, New York 12206

Dear Ms. Knox:

We have reviewed the proposal for site investigations at the Oak Materials Group and Alexander Schmiegel properties. In general, we feel that a more detailed investigation will be necessary to adequately assess the existing/potential environmental impacts at the two sites. We, therefore, offer the following comments and recommendations:

GENERAL: Detail the local geology including type and depth of overburden, type and character of bedrock, topography, etc.

SCHMIEGEL SITE: At least 3 downgradient monitoring wells should be installed. Wells should be installed to the upper most impermeable strata. Soil samples should be taken at regular intervals during well borings and analyzed for physical properties and chemical contamination. Details of well installation should be provided in the report. QC-QA and sampling protocols should be furnished to the Department. Well screen placement should be such that monitoring will detect any compounds which tend to migrate vertically. The trailer well at the intersection of Route 67 and the entrance road should also be sampled. In addition to stream sampling points indicated, a sediment sample should be taken from each and from the upstream end of the swampy area. All samples should be analyzed for priority pollutants in addition to the specified parameters. An appropriately located potable well may be used for background determination. Based on results of water sample analyses, a Health and Safety plan should be developed for the site.

NOTE: A magnetometer survey may be helpful in making an initial determination of the limits of disposal.

OAK MATERIALS: A representative of the Rensselaer County Health Department who monitored the burial of the material at the Oak Materials site recalls that no liner was installed in the pit. This would seem to preclude the necessity for test pits at this time.

We feel that the best way to proceed at this point would be to install 3 downgradient wells; sample and analyze for the specified parameters. Wells should be installed so that screen placement is at least to the expected depth of the pit. If nothing is detected, a periodic monitoring program would be initiated based on ground water flow rates. Should contamination show up initally or in the future, removal and proper disposal of the waste will be required. Again, an appropriately located potable water well may be used for background determination. Any comments or questions should be directed to George Elston at (518) 382-0680.

Sincerely,

Eldred Rich, P.E.
Regional Engineer
Region IV

ER:vaa

cc: Charles Sarris