New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

M E M O R A N D U M

Thomas C. Jorling
Commissioner

MAY 25 1993

TO: Tom Suozzo, Region 7, Kirkwood

FROM: Martin Brand

RE: GAF Dump (704011) PSA Work Plan

DATE: MAY 24 1993

Please find attached the final version of a Preliminary Site Assessment (PSA) Technical Work Plan for the GAF Dump (704011). The plan has been revised to include soil gas and shallow groundwater sampling using the GeoProbe system. This method allows rapid field screening using on-site GC analysis. First encountered groundwater will be sampled along the southern edge of the dump as shown on the attached site sketch. Permanent groundwater monitoring wells will be installed later as specified in the plan. The soil gas survey should allow us to refine test pit locations. Accordingly, the test pit scope was reduced from seven pits to five pits.

I do not anticipate making further significant changes to this plan. As you know, a PSA is designed to document hazardous waste disposal pursuant to 6 NYCRR Part 371 (i.e., answer a Yes or No question) and determine significant threat to the environment per 6 NYCRR Part 375. This PSA will not determine extent of contamination, volume or mass of contaminated materials, or develop remedial alternatives. The PSA work plan attached is extensive in scope given the size of the site and previous investigations and is sufficient to accomplish our objectives. The revisions proposed, I believe, will satisfy the concerns expressed by the NYSDOH and local citizens.

The work plan is currently assigned to a standby consultant for cost development. I anticipate field work to take place in late summer 1993.

If you have any questions, feel free to call me at (518) 457-9538.

Attachment

cc: w/attachments
Ron Heerkens, NYSDOH-Syracuse

PRELIMINARY SITE ASSESSMENT 05.20.93

TECHNICAL WORK PLAN

SITE: GAF Dump

CODE: 704011

LOCATION: Binghamton/Broome County

INTRODUCTION

The GAF Dump site consists of a paved parking lot and field located north of the Anitec Image Corporation plant in Binghamton. When the former GAF plant was purchased by Anitec, GAF retained ownership of the two-acre parcel reportedly because of allegations of dumping. A Phase II investigation found low levels of volatile organic contaminants in the groundwater, but no evidence of hazardous waste disposal. Since the completion of the Phase II, the Anitec plant has been added to the Registry as a Class 2 site and some further hints of disposal at the GAF site have been found. In addition, the upgradient well has been destroyed. In light of this new information, further study of the site has been proposed. The PSA will focus on the determination of hazardous waste disposal pursuant to 6 NYCRR Part 371. Additional groundwater samples will be taken to support a significant threat determination under 6 NYCRR Part 375.

GEOLOGIC SETTING

The GAF Dump lies at the edge of the valley-fill aquifer designated as the Clinton Street - Ballpark Aquifer. During the Phase II investigation, very compact material was encountered in MW-1, which was placed on the north site of Seymour Street, partially up the valley wall. It is believed that the groundwater encountered in that well was not directly hydraulically connected to the water in the two downgradient monitoring wells. The two downgradient wells encountered silty clay at the water table, which may be representative of a perched water table since older maps show the area was once a swamp. The two existing monitoring wells are screened in the silty clay, since this was where the first groundwater was encountered when drilling.

Production wells used by the Anitec plant draw a large quantity of water from the aquifer and have most likely affected the groundwater flow direction in the vicinity of the site, giving it a westerly component.

ANTICIPATED LEVEL OF PERSONAL PROTECTION: Level D with Level C Backup.

TASK 2 ACTIVITIES

PROJECT MANAGEMENT PLAN/HASP/QAPjP: As previously directed. .....

SITE RECONNAISSANCE: A site reconnaissance will be performed. .....

+ A site visit will be made to ascertain current site conditions, determine access for site activities, and mark sampling locations.

TASK 3 ACTIVITIES

GEOPHYSICAL SURVEY: A survey will be conducted. .....

+ Magnetometer Survey: The proposed survey will cover all proposed monitoring well locations and the areas beneath the parking lot identified as possibly receiving hazardous waste. As test pits are proposed, the magnetometer survey will be used to fine tune the locations of these pits. The primary purposes of the survey are drilling hazard identification and possible buried drum location. A survey grid using appropriate spacing will be proposed by ~~the consultant. Pending~~ the approval of NYSDEC, the selected scope of work will included in the work plan as an addendum.

SOIL GAS SURVEY: A soil gas survey using the GeoProbe system will be conducted at the site. .....

NUMBER: Approximately 18 locations will be chosen for soil gas measurements; 7 along the dump margin/property line, and 11 locations in the rest of the site.

METHOD: GeoProbe system for shallow soil gas sampling, on-site GC analysis.

SHALLOW GROUNDWATER SAMPLING: Samples of groundwater at the water table will be taken using the GeoProbe. ...

NUMBER: 8 samples of groundwater will be taken; 7 from the dump margin/downgradient locations and one from an upgradient location.

TARGET: Water table, at a depth of approximately 25 feet.

PROPOSED SAMPLING: One groundwater sample from each location, on-site analysis by GC.

TEST PITS: 5 Total. .....

NUMBER: 5 Total (Designated TP-1 through TP-5).

TARGET: Hazardous waste possibly buried beneath the paved parking area.

PROPOSED SAMPLING: + Up to two waste samples will be collected from each test pit. Samples could be waste, stained soil, or possibly liquid from buried drums.

PROPOSED METHOD: Backhoe, extendable hoe to reach target depth.

PROJECTED FOOTAGE: Pits will be approximately 10' X 10' up to a depth of 15 feet.

TEST PIT SAMPLES: 10 Total. .....

+ Up to two samples will be taken from each proposed test pit.

TASK 4 ACTIVITIES

MONITORING WELL INSTALLATION:

NUMBER: 3 Total (single wells) (Designated MW-4, MW-5, and MW-6)

TARGET: Water table for each well.

PROPOSED SAMPLING INTERVALS: + Samples will be collected at 5' intervals within the unsaturated zone and continuously below the water table in both wells.
+ Samples will be collected continuously from MW-6.

PROPOSED DRILLING METHOD: Hollow Stem Auger System (4.25").

	Typical Well	MW-x
PROJECTED FOOTAGE:	+ Overburden	25'
	+ Bedrock	0'
	+ Total Depth ...	25'

... OVERBURDEN TOTAL: 75 Feet.
... BEDROCK TOTAL: 0 Feet.

PROPOSED SCREEN LENGTH: 10' for each well.

WELL CONSTRUCTION: See NYSDEC Generic P2/PSA Guidance on well installations.

GROUNDWATER SAMPLES: 5 Total. .....

+ One sample from each of the proposed monitoring wells MW-4, MW-5, and MW-6.
+ One sample each from the existing wells (MW-2 and MW-3) located on the property.

SUBSURFACE SOIL SAMPLES (MONITORING WELL SAMPLES): 3 Total.....

+ One sample from each of the proposed monitoring wells. The samples will be chosen based on field conditions.

PHYSICAL ANALYSIS: *

GRAIN SIZE ANALYSIS: 3 Total. .....

+ One sample from each of the proposed monitoring wells.

ATTERBERG LIMITS: 3 Total. .....

+ One sample from each of the proposed monitoring wells.

* - The listed totals for physical analysis are provided for costing purposes. The actual number of analyses performed will depend on the soil conditions encountered when drilling.

DRILL WATER SAMPLE: 1 Total. .....

+ One sample of water used in drilling and/or well construction.

THER ACTIVITIES

HRS SCORING:

PA-SCORE: A Hazard Ranking System (HRS) score using the PA-Score scoring system and software will be developed for this site.

PRESCORE: At the direction of NYSDEC, a Hazard Ranking System (HRS) score using the PRE-Score scoring system and software will be developed for this site.

MAPPING:

SITE/SURVEY/PROPERTY MAPS: Site maps will be produced. .....

+ A map of the site will be prepared by a licensed land surveyor to facilitate CADD mapping and GIS. State Plane coordinates, Suburban Class standards will apply. The surveyor's map will be used by the consultant in preparation of the site map. The PSA report site map figures will be prepared using Autocad Release 11 (or a ~~newer~~ release if agreed upon by NYSDEC). Maps will be supplied with reports as specified in the PSA report format guideline previously supplied. Additionally, copies on 1.44 mb. floppy disks will be supplied. See "Preliminary Site Assessment (PSA) Site Maps" guidance attachment.

SAMPLING SUMMARY/ANALYTICAL PARAMETERS

	Full TCL	Cyanide	EP Toxicity	HW Char.	Other Special	Other Special
SUBSURFACE SAMPLES (TEST PITS): 10 total						
TP-1A	x	x	x	x	.	.
TP-1B	x	x	x	x	.	.
TP-2A	x	x	x	x	.	.
TP-2B	x	x	x	x	.	.
TP-3A	x	x	x	x	.	.
TP-3B	x	x	x	x	.	.
TP-4A	x	x	x	x	.	.
TP-4B	x	x	x	x	.	.
TP-5A	x	x	x	x	.	.
TP-5B	x	x	x	x	.	.
GROUNDWATER: 5 total.						
MW-2	x	x	.	.	.	.
MW-3	x	x	.	.	.	.
MW-4	x	x	.	.	.	.
MW-5	x	x	.	.	.	.
MW-6	x	x	.	.	.	.
SUBSURFACE SOILS (MONITORING WELLS): 3 total						
SOIL-MW-4	x	x	.	.	.	.
SOIL-MW-5	x	x	.	.	.	.
SOIL-MW-6	x	x	.	.	.	.
DRILL WATER: 1 total						
DRILL-1	x	x	.	.	.	.

GEOPROBE SAMPLING:

SOIL GAS - 18 Total for On-site GC Analysis
SHALLOW GROUNDWATER - 8 Total for On-site GC Analysis

Notes:

* All analyses will be performed using the Analytical Services Protocols (ASP) as prepared by the NYSDEC in December, 1991.
* TCL represents the Target Compound List.
* "x" denotes analysis to be performed.