US EPA RECORDS CENTER REGION 5
472878

ECOLOGY AND ENVIRONMENT, INC.
FIELD INVESTIGATION TEAM
SITE INSPECTION PLAN

S I, I
ACIDS, SOLVENTS
D + C

A. GENERAL INFORMATION

SITE: CORNING GLASS - ZIRCOA PROD.
TDD NO.: F05-8705-085
LOCATION: 31501 SOLON RD.
SOLON, OH
CUYAHOGA COUNTY
U.S. EPA NO.: OHD097947097
SSID NO.:
WSIS NO.: F0H0596T
PLAN PREPARED BY: DIRK KAISER
DATE: 5/21/87
APPROVED BY: C. Carll
DATE: 6/2/87

OBJECTIVE (including description of work to be performed): TO CONDUCT A SITE INSPECTION OF THE FACILITY & INTERVIEW SITE REPRESENTATIVES. Containment of wastes to be verified for the HF and other wastes.

DESIRED REPORT FORM: SI REPORT (2070-13) X HRS REPORT X

OTHER (EXPLAIN)

PROPOSED DATE OF INVESTIGATION: SPRING/SUMMER 1987

BACKGROUND REVIEW: Complete: ___ Preliminary: X

HRS PRELIMINARY SCORE OF ROUTES: GW 0 SW 0 AIR 0
(NO FIELD WORK)

DIRECT CONTACT 62.5 FIRE AND EXPLOSION 0

TOTAL PRELIMINARY HRS SCORE VALUE (NO FIELD WORK) 0

PROJECTED HRS SCORE: GW 13.61 SW 6.66 AIR 0
(WITH FIELD WORK)

DIRECT CONTACT 62.5 FIRE AND EXPLOSION 0

TOTAL PROJECTED HRS SCORE 8.76

IF NO SAMPLING, EXPLAIN ON PAGE 3.

INSPECTION PRIORITY (BASED ON PROJECTED HRS SCORE): LOW: ___ MEDIUM: X HIGH: ___

B. SITE/WASTE CHARACTERISTICS

WASTE TYPE(S): Liquid X Solid ___ Sludge ___ Gas ___

CHARACTERISTIC(S): Corrosive X Ignitable ___ Radioactive ___ Volatile ___

Toxic ___ Reactive ___ Unknown ___ Other (Name)

FACILITY DESCRIPTION: CORNING GLASS IS AN ACTIVE FACILITY THAT USES HYDROCHLORIC FOR PROCESSING. ZIRCONIUM OXIDES

Principal Disposal Method (type and location): LAGOONS (3), NEUTRALIZED WASTE ARE DUMPED INTO MAN-MADE CREEK.

Unusual Features (dike integrity, power lines, terrain, etc.): RR TRACK SURROUND 2 SIDES OF THE FACILITY. 5 LARGE STORAGE TANKS SEEN AT CENTER OF COMPLEX.

Status: (active, inactive, unknown) CORNING EMPLOYS ~97 PEOPLE. BARBED-WIRE FENCE WAS TAKEN DOWN ON THE NORTH SIDE ALONG THE LAGOONS, ALLOWING ACCESS.

History: (worker or non-worker injury; complaints from public; previous agency action): A HYDROFLOURIC ACID TANK (5000 GAL.) EXPLODED ON APRIL, 1972. THE SPILL WAS HOSED DOWN AND COLLECTED IN A LARGE LAGOON. SAMPLE ANALYSIS DETERMINED HF CONCENTRATION AT 2.2 mg/l. FUTURE PLANS INCLUDE THE REMOVAL OF THE LAGOONS. LAGOONS ARE probably unlined.

C. HAZARD EVALUATION

(Use Hazard Evaluation of Chemicals sheets for specific or representative chemicals present.):

HF } 68,805 TONS/YEAR
HCl }
WASTE OIL - 16,800 LBS/YEAR
SOLVENTS - F001 75 LBS/YEAR
Zr

LEVEL OF PROTECTION: A ___ B ___ C ___ D X

MODIFICATIONS: LEVEL 'D' WITH POSSIBLE UPGRADE TO LEVEL 'C' IF MONITORING EQUIPMENT LEVELS FOR UPGRADE ARE MET.

SITE SAFETY PLAN ON FILE AT E & E: YES ___ NO X

A SITE SAFETY PLAN WILL BE ON FILE BEFORE THE SITE INSPECTION AS PER E&E'S POLICY

D. FIELD WORK REQUIRED

PERIMETER ESTABLISHMENT: MAP/SKETCH ATTACHED? YES X NO ___

Perimeter Identified? YES X NO ___

Zone(s) of Contamination Identified? YES X NO ___

Geophysical Work: YES ___ NO X

Type: Magnetometry ___ Seismic Refraction ___ GPR ___ Resistivity ___ Other___

Comments: _____

Drilling: YES ___ NO X

Well Location Identified: YES ___ NO X

Drill Plan/Well Installation Plan Attached: YES ___ NO X

Sampling Required: YES ___ NO X

Type: GW ___ SW ___ Air ___ Soil ___ Waste ___ Other ___

Sampling Locations Identified: YES ___ NO X

SUMMARY OF SAMPLING PROCEDURES: (Special Equipment, Facilities, or Procedures)

NO SAMPLING REQUIRED - SEE COMMENTS

E. ANALYTICAL SERVICES REQUIRED

NA

RAS ___ SAS ___ CRL ___

F. QAPP

REQUIRED: YES ___ NO ___

IF NO, EXPLAIN: NO SAMPLING REQUIRED, SEE COMMENTS BELOW.

G. SI WORK TEAM SIZE/LIMITATION

TEAM MEMBER	DISCIPLINE	RESPONSIBILITY
TO BE DETERMINED		

WORK LIMITATIONS (Time of day, etc.): WORK DAYLIGHT HOURS ONLY, OBSERVE THE 'BUDDY SYSTEM' AT ALL TIMES, MONITOR TEAM MEMBERS FOR HEAT STRESS.

COMMENTS: NO SAMPLING IS REQUIRED BECAUSE THE HF SPILL IN 1972 GIVES US A WASTE CHARACTERISTIC OF 9 AND QUANTITY OF 5000 GAL. ZIRCONIUM AND FLUORIDE CONCENTRATIONS ARE EXPECTED IN THE UNLINED LAGOONS. TOXIC / PERSISTANCE VALUES FOR Zr ALTHOUGH >9 DO NOT CAUSE THE SCORE (Sm) TO EXCEED 28.5. SAMPLING OF Zr OR F WOULD REQUIRE QAPP AND SAS. THIS ADDITIONAL WORK MAY NOT BE REQUIRED.

IF AIR RELEASE WERE OBSERVED; SCORE COULD BE 36.69. TEAM MEMBERS TO SCAN WITH HNU TO SEE IF AIR SAMPLING IS WARRENTED DURING THE SITE INSPECTION. IF SO, FOLLOW UP AIR SAMPLING BE NECESSARY. CORNING GLASS HAS AIR PERMITS.

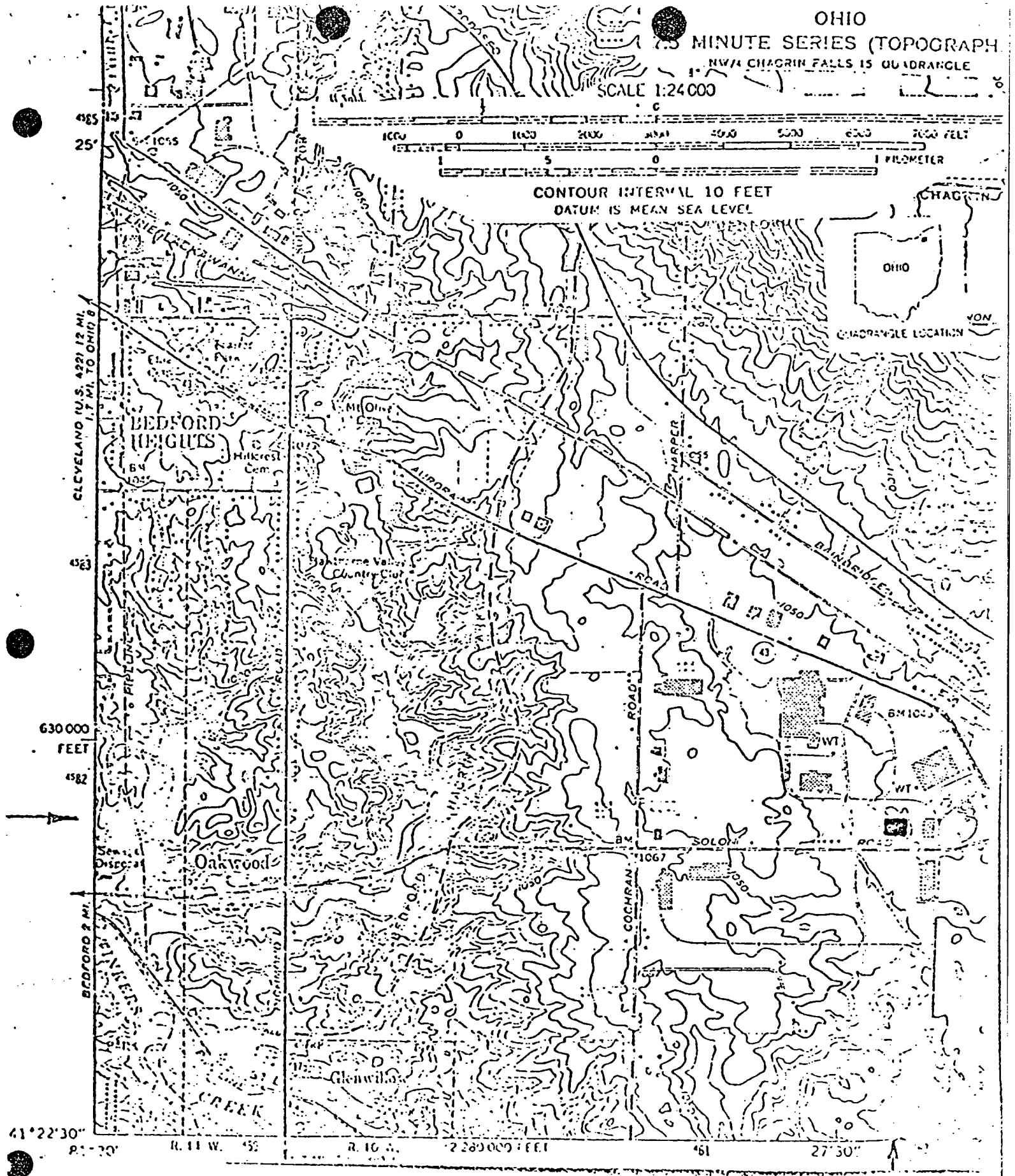
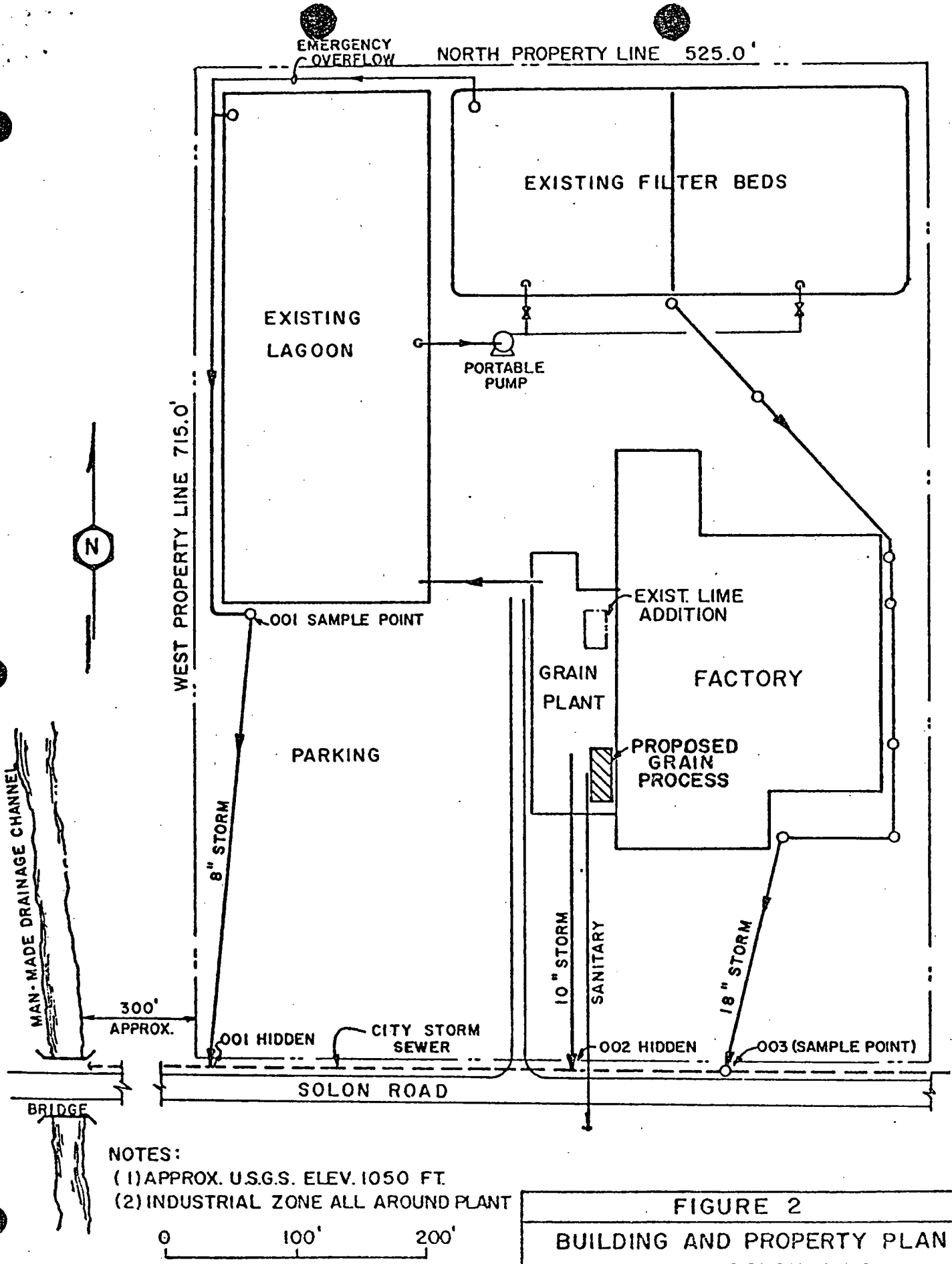


FIGURE 1
TOPOGRAPHICAL MAP
ZIRCOA, SOLON, OH.



NOTES:
(1) APPROX. U.S.G.S. ELEV. 1050 FT.
(2) INDUSTRIAL ZONE ALL AROUND PLANT

FIGURE 2

BUILDING AND PROPERTY PLAN
ZIRCOA - SOLON, OHIO

Post Site Inspection

Site Name: Corning Glass I.D. Number OHD 097947097

Date of Inspection: 6-16-87

Was Work Plan Followed (Y) N
If no, explain briefly:

Were Samples Collected? Y (N)
Residential Wells Sampled? Y (N)

Anticipated Analysis Report From:

CRL NA

CLP NA

Anticipated SI Completion: 6-30-87

Removal Investigation Recommended Y (N)
If yes, explain briefly:

Unanticipated Problems Encountered Y (N)
If yes, explain briefly:

Follow-up site work necessary Y (N)
If yes, explain briefly: