UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

00076

137763

DATE: 12 AUG 1982

SUBJECT: Calculation of Waste Volume for Manville Site, Waukegan, Illinois

FROM: Norman Niedergang
Environmental Engineer

TO: File

Three alternative techniques have been used to calculate the waste quantity at the above subject site:

1. Landfill capacity (per the facility Part A RCRA Permit Application)

   =600 ac. ft. = 96,800 cu. yd.

   This would score an 8 by the HRS.

2. Waste generation volume (per the facility Part A RCRA Permit Application)

   = 5 tons/yr. X 60 yrs. = 300 tons

   This would score a 5 by the HRS.

3. Wastepile volume using physical description which includes a 50 ft. height with 2:1 sideslopes:

   = 19390 cu. yd.

   This would score an 8 by the HRS.

Based on the above, I have assigned a score of 8 for the waste quantity.

4/28/92

1:19 A.M. P.M.

raph By:

Don Woods

F5-8203-2-03

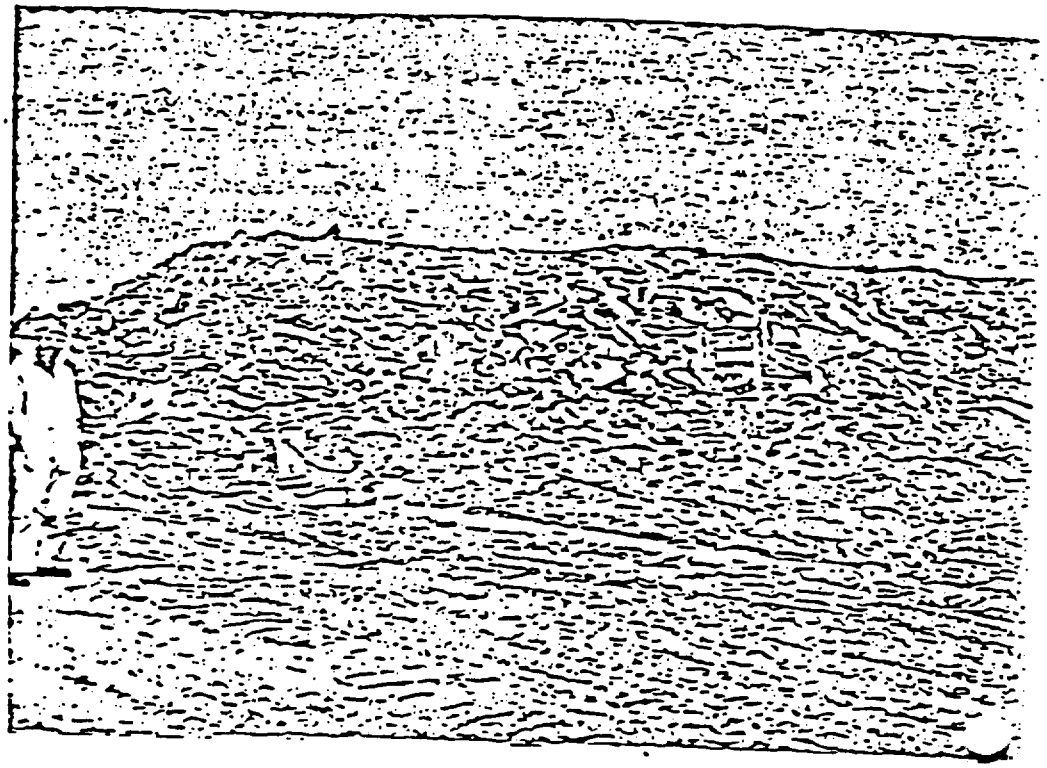
- Illinois Mitre

s Mansville/ Waukegan

ts: Photograph taken

the North of Midsite

tion



4/28/92

1:17 A.M. P.M.

raph By:

Don Woods

F5-8203-2-03

- Illinois Mitre

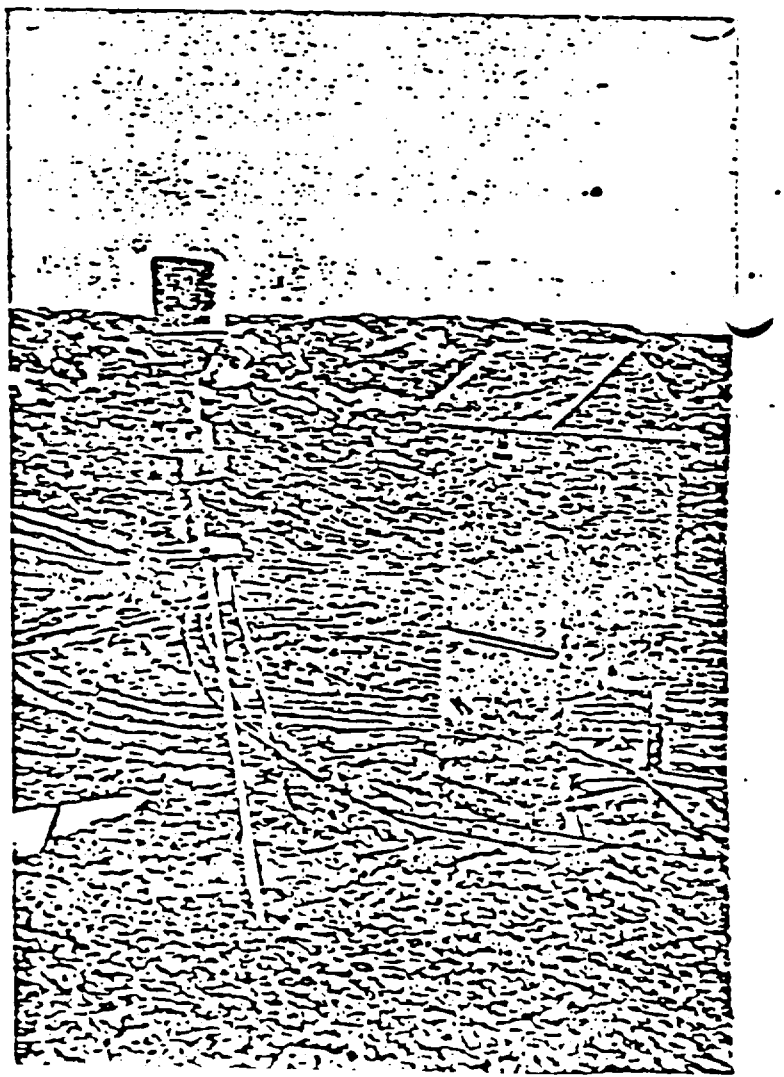
s Mansville / Waukegan

ts: Photograph taken

the EAST - Midsite

ntaminous Samples on left

l Samples Right (John Mansville's)



4/29/82

11:46 (A.M.) P.M.

aph By:

Don Woods

F5-8203-2-03

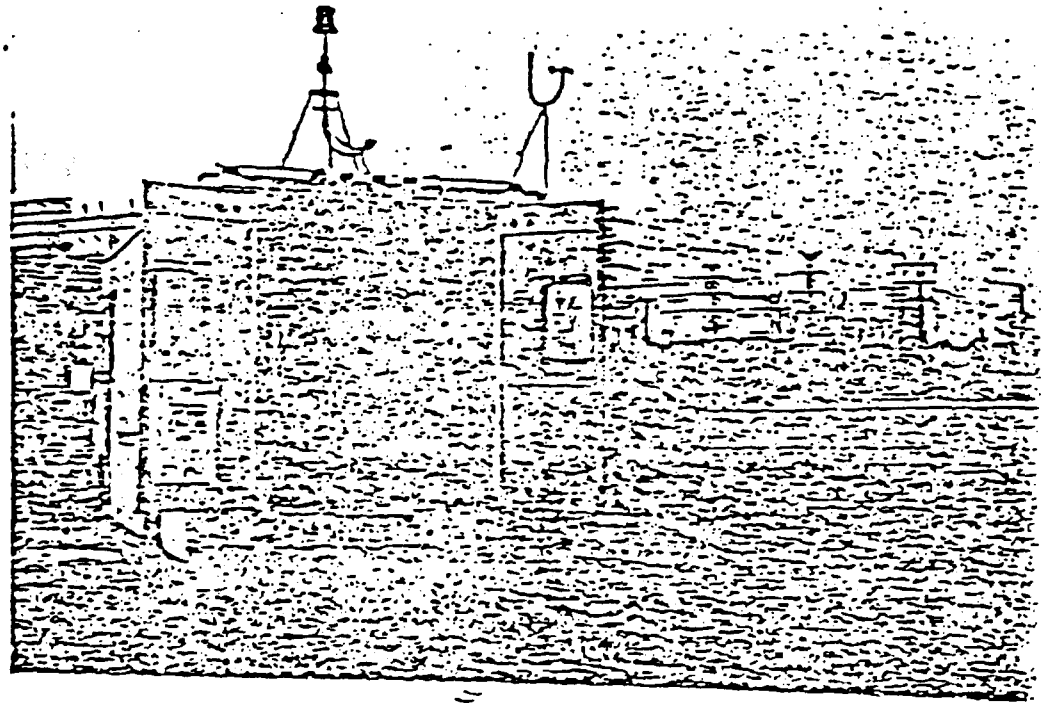
Illinois MITRE

s Mansville/ Waukegan

: Photograph taken

th South

unwind STATION



4/29/82

11:45 (A.M.) P.M.

ra By:

Don Woods

F5-8203-2-03

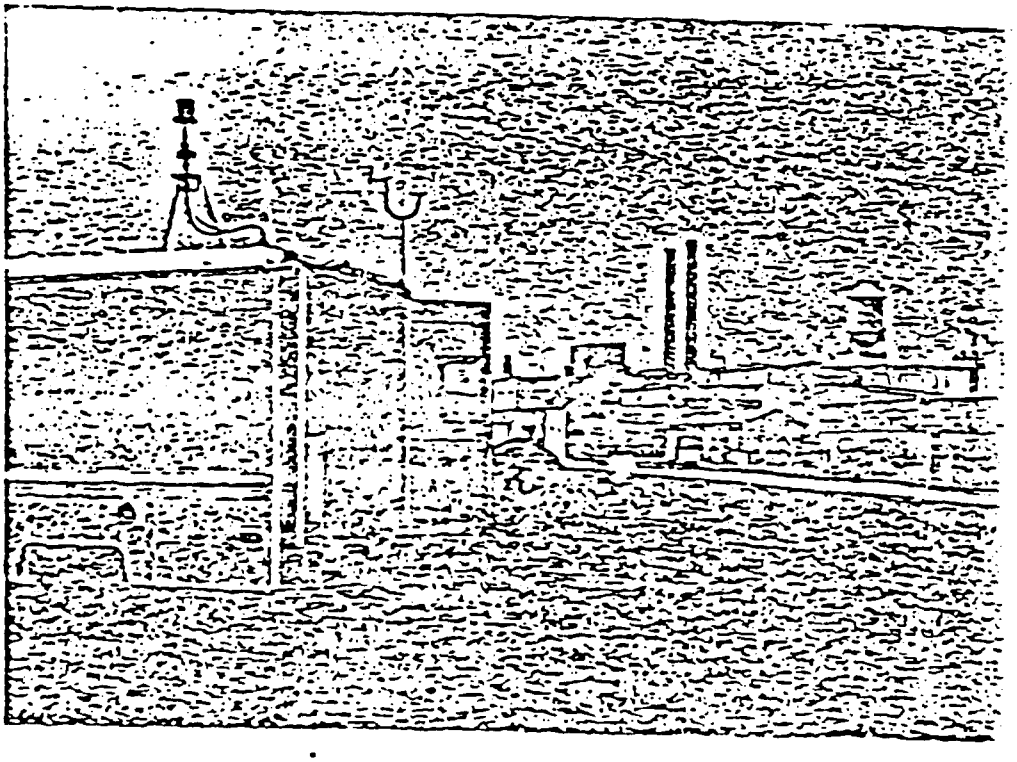
e- Illinois MITRE

s Manville/ Waukegan

ts: Photograph taken

the West

unwind STATION



: 4/25/82

: 1:20 A.M. (P.M.)

ograph By:

Don Woods

E F5-8203-2-03

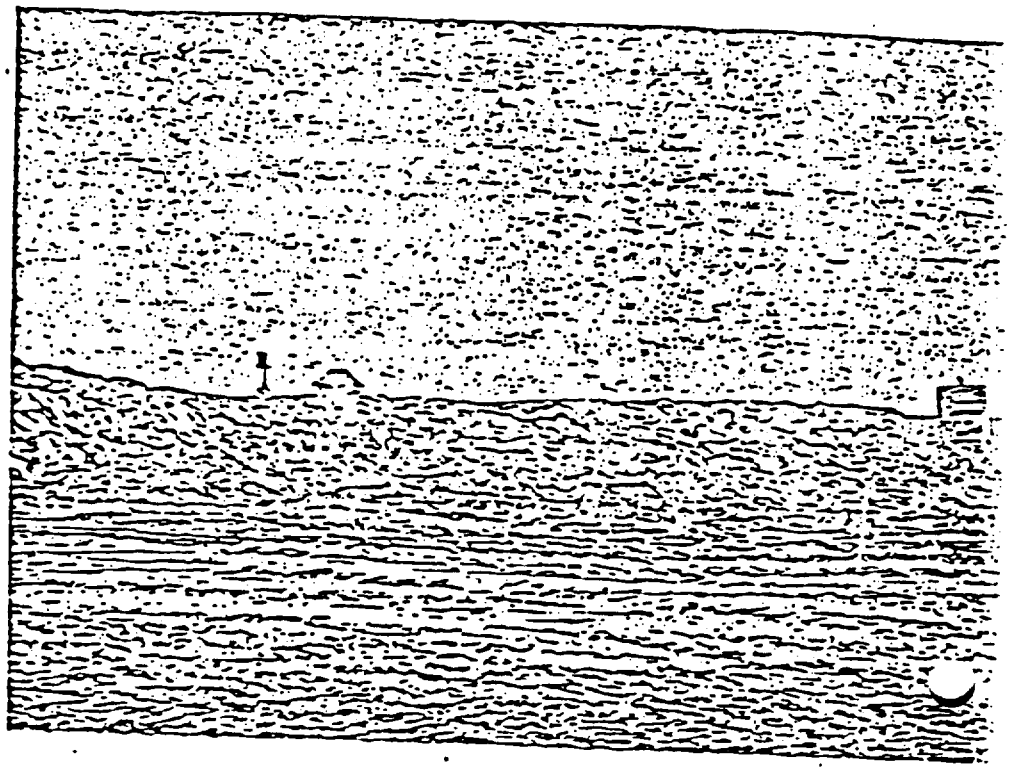
te- Illinois Mitre

ohns Manville / Waukegan

ents: Photograph taken

re the EAST of

dsite STATION



: 4/28/82

: 1:21 A.M. (P.M.)

ograph By:

Don Woods

DE F5-8203-2-03

ite- Illinois Mitre

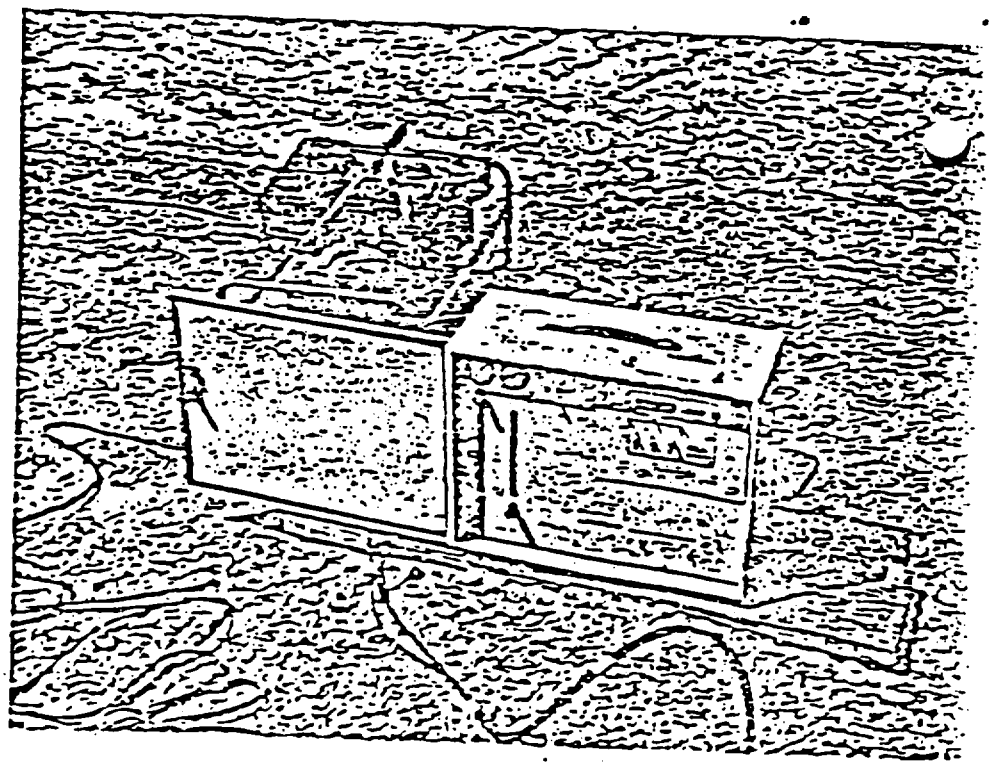
lins Manville / Waukegan

ents: Photograph taken

re the Close of Midsite

diatomous Sampler pump

and Generator



4/28/82

1:25 A.M. P.M.

;raph By:

Don Woods

FS-8203-2-03

:- Illinois MITRE

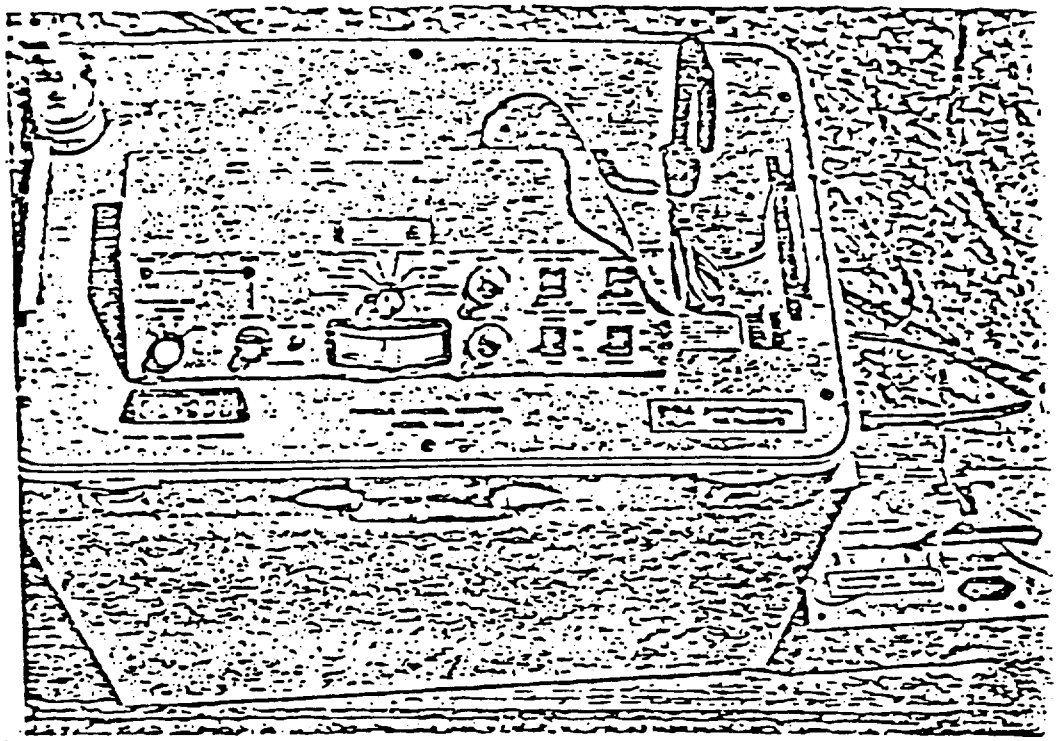
ns Manville / Waukegan

ni Photograph taken

d in Close up @ Midsite

ion - FAIM-1 (Fibrous

xol Monitor)



4/29/82

1:26 A.M. P.M.

gr By:

Don Woods

FS-8203-2-03

:e- Illinois MITRE

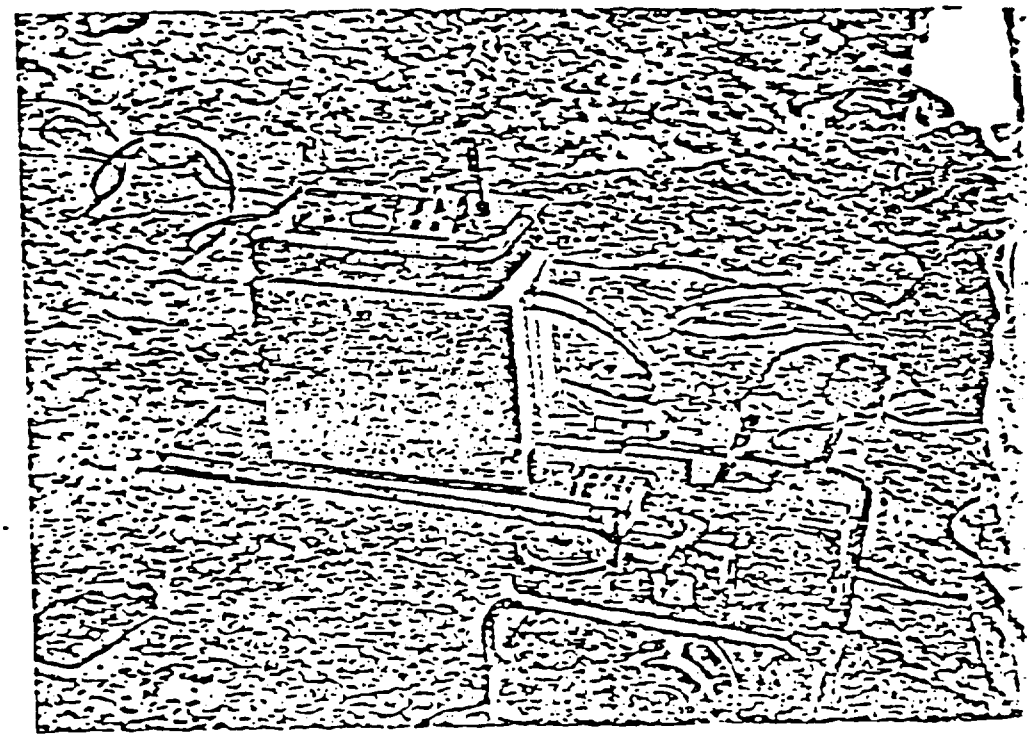
ns Manville / Waukegan

nts: Photograph taken

d the Refueling 3-KW

reactor @ Midsite

STATION



4/25/82

1:10 A.M. (P.M.)

;raph By:

Don Woods

F5-8203-2-03

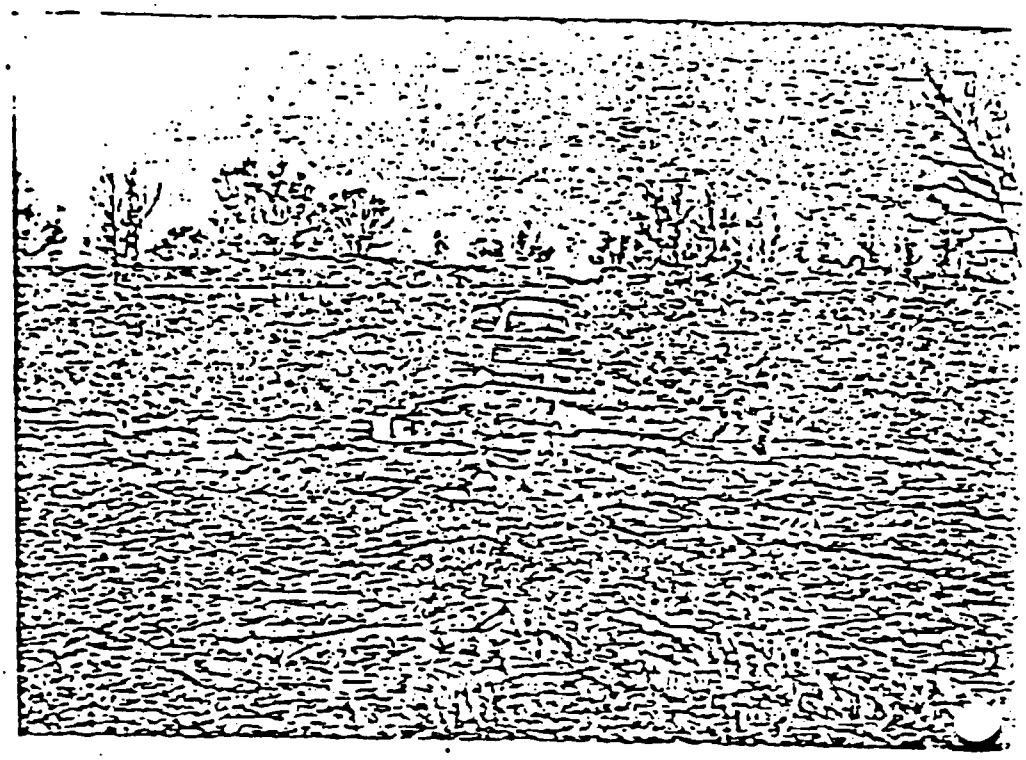
:- Illinois

ns Manville/ Waukegan

nt: Photograph taken

d the West

) Wind STATION



4/25/82

2:15 A.M. (P.M.)

graph By:

Don Woods

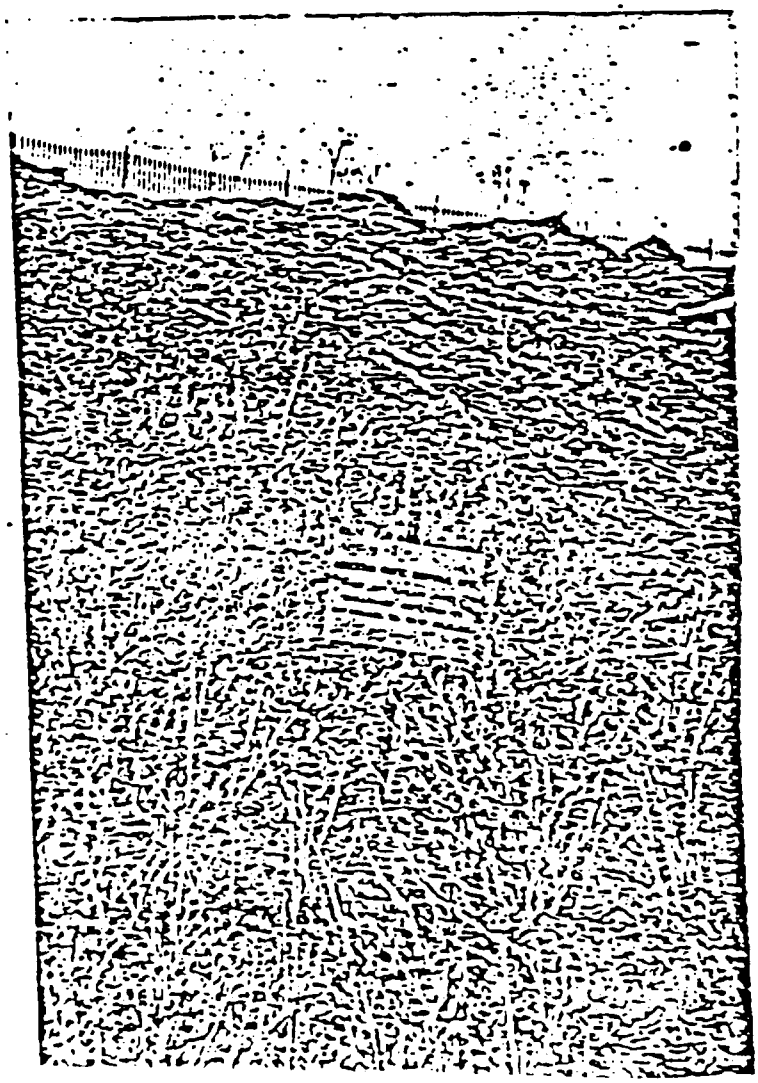
F5-8203-2-03

te- Illinois Mitre

ns Manville / Waukegan

nts: Photograph taken

d the North



4/28/82

8:35 (A.M.) P.M.

graph By:

DAN COZZA

F5-8203-2-03

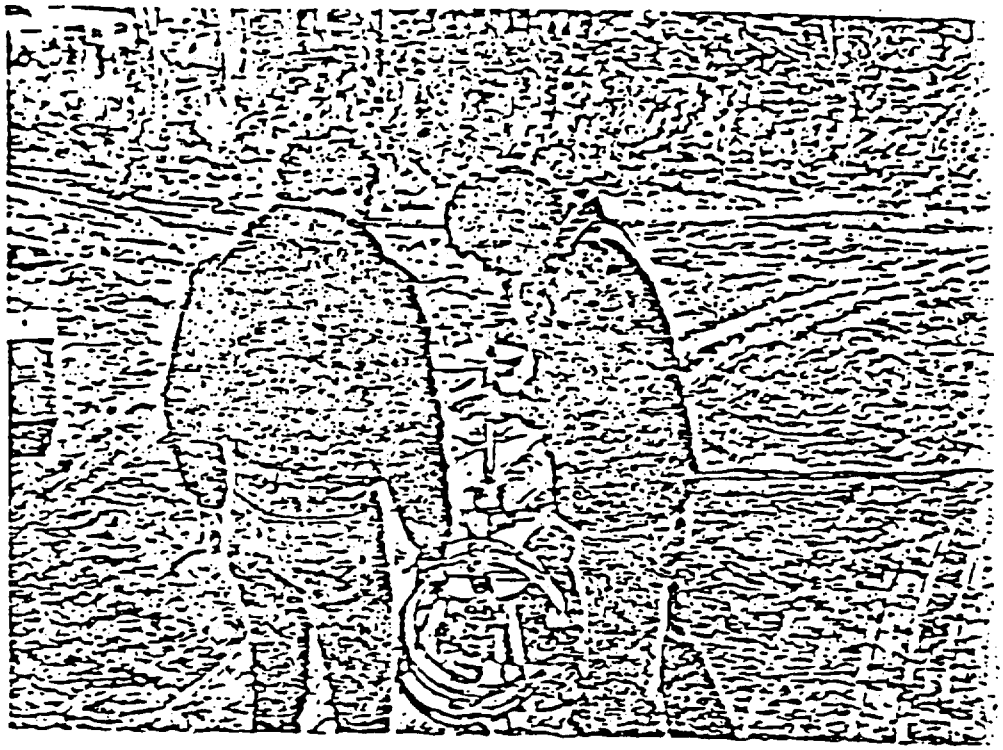
e- Illinois MITRE

s Mansville Waukegan

: Photograph taken

d t EAST

etting up Sampler



4/28/82

1:05 A.M. (P.M.)

graph By:

Don Woods

F5-8203-2-03

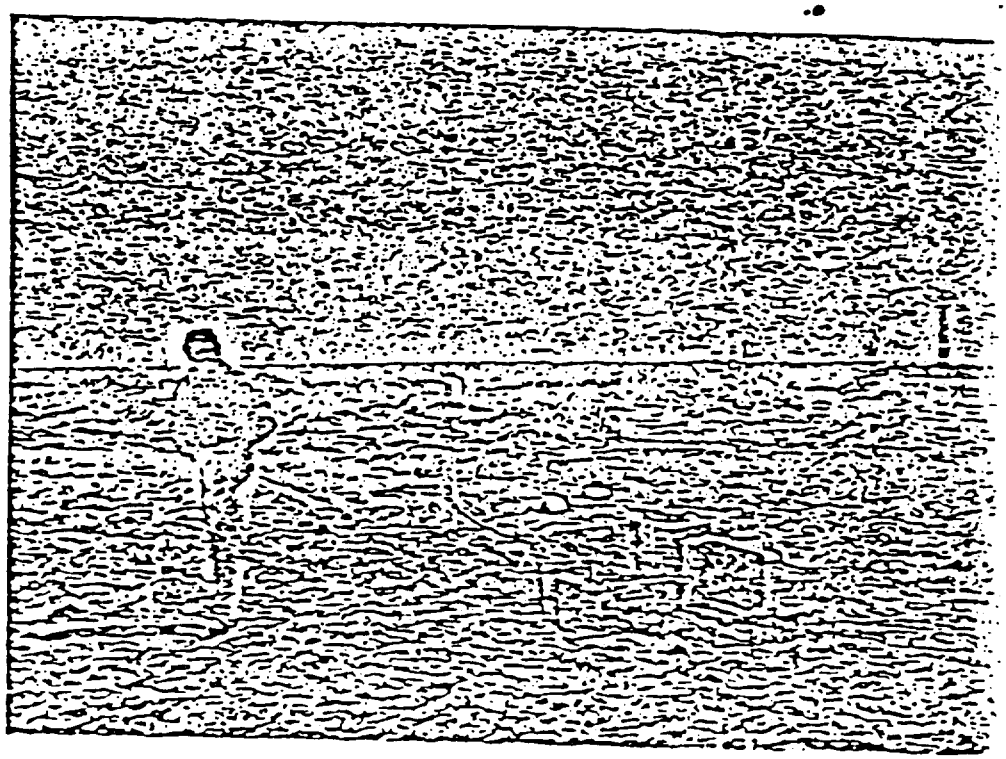
e- Illinois MITRE

s Mansville/ Waukegan

nts: · Photograph taken

d the EAST

wind STATION



Toxicity

Most toxic compound:

FRIABLE ASBESTOS → SAX LEVEL 2

Hazardous Waste Quantity

Total quantity of hazardous waste:

UNKNOWN

Basis of estimating and/or computing waste quantity:

(SEE ATTACHED MEMO)

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

CITY OF WAUKEGAN ALONE IS 67,653 PEOPLE ACCORDING TO THE 1980 CENSUS WHICH MAX'S THE POPULATION IN THIS RADIUS. (SMALLER RADII EXCLUDE THE MAJOR POPULATION AREAS AND WOULD RESULT IN AN OVERALL LOWER SCORE.) - FROM TOPO MAP - WAUKEGAN QUAD. AND CITY OF WAUKEGAN PLANNING DEPT. -

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

NOT APPLICABLE

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

SEE p. 9 OF THIS FORM

Distance to critical habitat of an endangered species, if 1 mile or less:

NONE KNOWN

Land Use

Distance to commercial/industrial area, if 1 mile or less:

INDUSTRIAL AREA ADJACENT (< 1/4 MILE)

(AERIAL PHOTO'S ; TOPO MAP - WAUKEGAN QUAD)

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

ILLINOIS BEACH STATE PARK ADJACENT (< 1/4 MILE)

(TOPO MAP - WAUKEGAN QUAD)

Distance to residential area, if 2 miles or less:

RESIDENTIAL AREA (1/4 - 1/2 MILE)

(TOPO MAP - WAUKEGAN QUAD)

Distance to agricultural land in production within past 5 years, if 1 mile or less:

NONE

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

NONE

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

NONE

OBSERVED INCIDENT

— NONE DOCUMENTED —

ACCESSIBILITY

AS PER TOM WOODS (FIT - SITE INSPECTION TEAM MEMBER) FENCE AROUND SITE DOES NOT EXTEND ALONG THE ENTIRE EASTERN EDGE OF THE SITE (LAKESIDE) AND ACCESS IS POSSIBLE FROM THAT SIDE.

CONTAINMENT

PILES, NOT COVERED WITH PROPER COVER MATERIAL (ie - EARTHEN MATERIAL) - PILES SUSPECT TO CONTAIN FRIABLE ASBESTOS DUE TO EARLY DISPOSAL TECHNIQUES

WASTE CHARACTERISTICS - TOXICITY

FRIABLE ASBESTOS → SAX LEVEL 3

TARGETS

POPULATION (1-MILE RADIUS): ① INDUSTRIAL AREA (WEST AND SOUTHWEST) PLUS ② HEAVIER RESIDENTIAL AREA (WEST) 65 STRUCTURES X 3.8 = >247 PEOPLE

TOTAL: 1000 - 2000 ESTIM.

(FROM AERIAL PHOTO'S / TOPO MAP)

DISTANCE TO A CRITICAL HABITAT:

NO KNOWN ENDANGERED SPECIES