Preliminary Radiological Survey Report on the Former Canadian Radium and Uranium Corporation Facility in Mt. Kisco, New York

11/3/88

OBJECTIVE

conducted on November 3 1988

The objectives for this preliminary radiological survey, were to ascertain the following:

1. The extent of contamination, if any, in the sanitary and storm sewers downstream from the former Canadian Radium and Uranium Corporation facility.

2. The extent of residual contamination at the site.

3. Collect swipe samples from the sewers.

BACKGROUND

The Canadian Radium and Uranium Corporation (Can-Rad) operated a facility at 69 Kisco Avenue, in Mt. Kisco, New York, from the 1940's to the early 1960's. During the period of November 14 to December 15, 1966, the facility was decontaminated and demolished for urban renewal purposes, by ISOTOPES and its sub-contractor Rossi-Halmar Construction, according to specificiations set forth in the ISOTOPES license application No. 2238. This decontamination and demolition was limited to the building and the immediate area where the building once stood. The contaminated debris from this project was buried at the Croton Point Dump as agreed in the protocols for the project. The sanitary and storm sewers downstream from the facility were not included in the project. Furthermore, the Bureau of Radiation received information that the sewers might have been contaminated during the decontamination and demolition of the facility.

Therefore, it was decided that a further investigation of the site was warranted. Arrangements were finalized and the following personell participated in the survey Dr. Paul Merges, Dr. John Matusek (DOH), Ed Johnson, John Abunaw and Mr. Zane (Village Supervisor, Mt. Kisco).

INSTRUMENTATION

The following radiation instruments were utilized in this survey:

1. The Ludlum Model 77-3 Stretch Scope

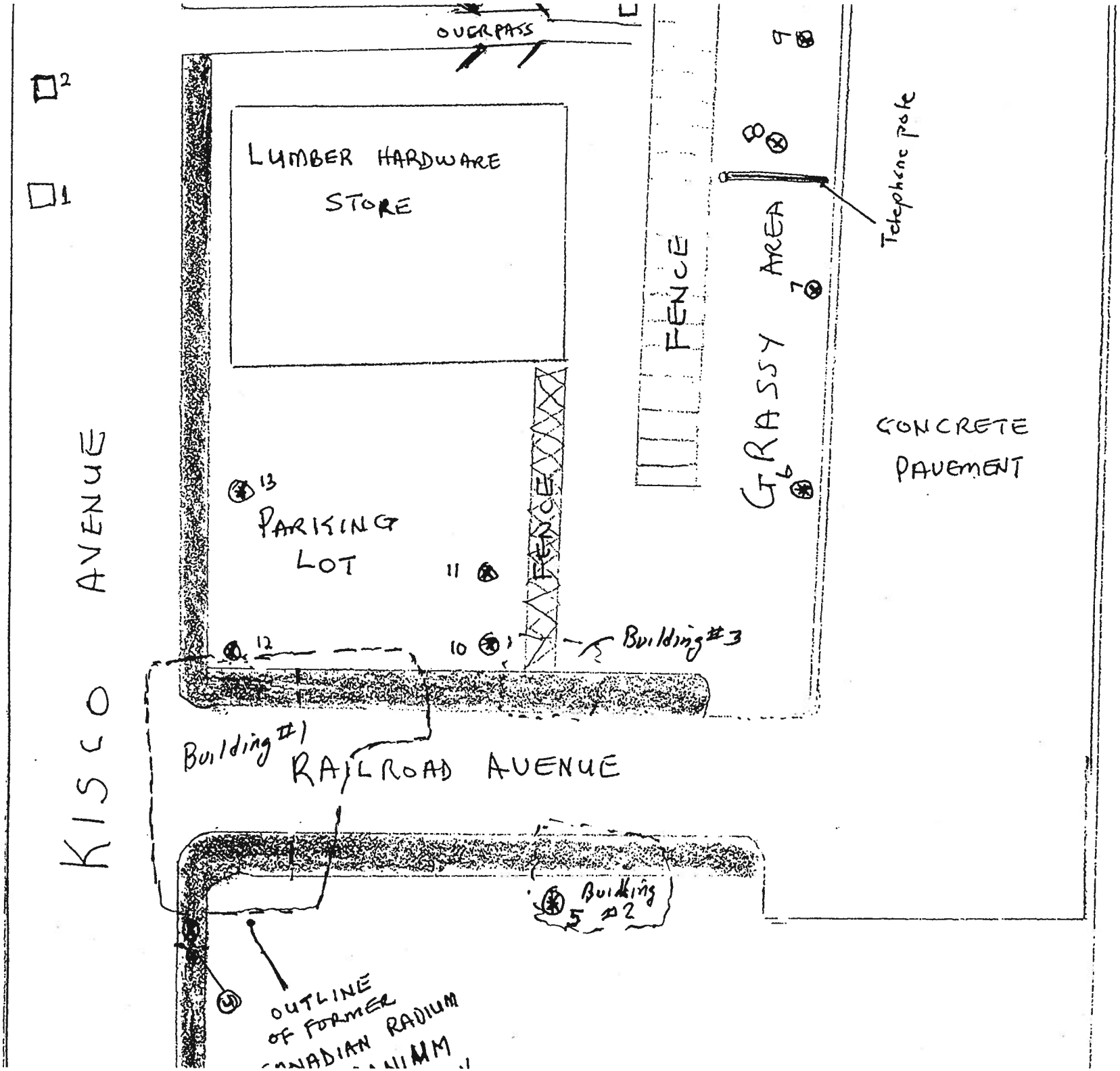
2. Eberline Smart Portable Model ESP-IV connected to a NaI 1x1 Scintillator detector

3. Ludlum Micro-R Meter to determine exposure rates from external gamma radiation

MAP OF SURVEYED AREA

Attached is the map of the survey areas numbered 1 through 13. A brief description of the areas is given as follows:

AREAS	DESCRIPTION
1, 2	These are new sewers that were constructed after the facility had been deomolished.
3	The only sewer remaining from the original sewers downstream from the former Can-Rad facility.
4, 5, 6	These are areas that encompass the former facility and its immediate surroundings.
7, 8, 9, 10	These are areas near the railroad tracks, directly behind the site of the Can-Rad facility.
11, 12, 13	These areas include the wall adjacent to hardware store next to the former facility. It is now a parking lot.


OVERPASS
LUMBER HARDWARE STORE
FENCE
GRASSY AREA
Telephone pole
CONCRETE PAVEMENT
RAILROAD TRACKS
KISCO AVENUE
PARKING LOT
FENCE
Building #3
Building #1
RAILROAD AVENUE
Building #2
OUTLINE OF FORMER CANADIAN RADIUM

RESULTS

AREAS	LUDLUM STRETCH PROBE	EBERLINE SMART PORTABLE 1X1 NaI	MICRO-R METER
	BKGT: 10 μR/HR	20 E +4 CPM	10 μR/HR
1	-	2.2 E +4	-
2	-	2.4 E +4	-
3	-	2.2 E +4	-
4	-	8.0 E +4	20.0
5 *	-	3.0 E +5	50.0
6	-	-	75.0
7	-	-	140.0
8 **	165.00	-	160.0
9	-	-	280.0
10	-	-	15.0
11	-	-	12.0
12	-	-	10.0
13	-	-	11.0

* The battery for the Eberline Smart Portable went dead. No more readings could be obtained.

** Stretch probe utilized to survey near the telephone pole.

*** It should be noted that all readings were obtained at ground level except at areas 1,2, and 3, where readings were obtained about 2 inches above the bottom of the sewer and 3-4 inches below the top of the sewer.

CONCLUSIONS

No significant contamination was found in the sewers. There were a few hot spots, but these were well within limits set in Part 380.4 (Permissible Dose in Uncontolled Area).

E.J.