

JUN 24 1986

Waste Management, Inc.  
ATTN: Dave Miller  
District Engineer  
22200 W. Nine Mile Road  
Southfield, MI 48034

Gentlemen:

Attached are the results of samples collected at the Michigan DNR and Waste Management Inc. sites in Kawkawlin, Michigan, by Messrs. M. C. Schumacher and K. E. Andre of this office on November 5, 1985. The analyses performed by the Radiological and Environmental Sciences Laboratory (RESL) in Idaho Falls, Idaho, included gross alpha and beta, gamma scan, and isotopic thorium for samples showing gross alpha in excess of five picocuries per liter (pCi/l).

The results, except for INS-2 inside the slurry wall which showed elevated gross beta activity and possibly four others that showed apparently statistically significant actinium-228 or thallium-208 levels in the gamma scan, appear consistent with EPA guidelines for radioactivity in drinking water. These samples will be analyzed specifically for the radium-228 daughter of thorium. We will forward those results to you when we receive them.

In accordance with our agreement with the Michigan Department of Public Health, we plan to again collect samples in November 1986. We request that you notify this office at least two weeks in advance of your planned sampling so that we can arrange our schedule to accommodate yours.

Please feel free to contact me or Mr. M. Schumacher (312 790-5514) for further discussion of this matter.

Sincerely,

15/

W. D. Shafer, Chief  
Emergency Preparedness and  
Radiological Protection Branch

Attachments:

1. Description of Sampling Location
2. Map of Sampling Locations
3. Results of 11/5/85 Sampling

cc w/attachments:  
W. Crow, FC, NMSS  
D. Cool, FC, NMSS  
RIII

Schumacher/as

RIII

Shafer

9301080278 920526  
PDR FOIA  
MAYFIEL92-128 PDR

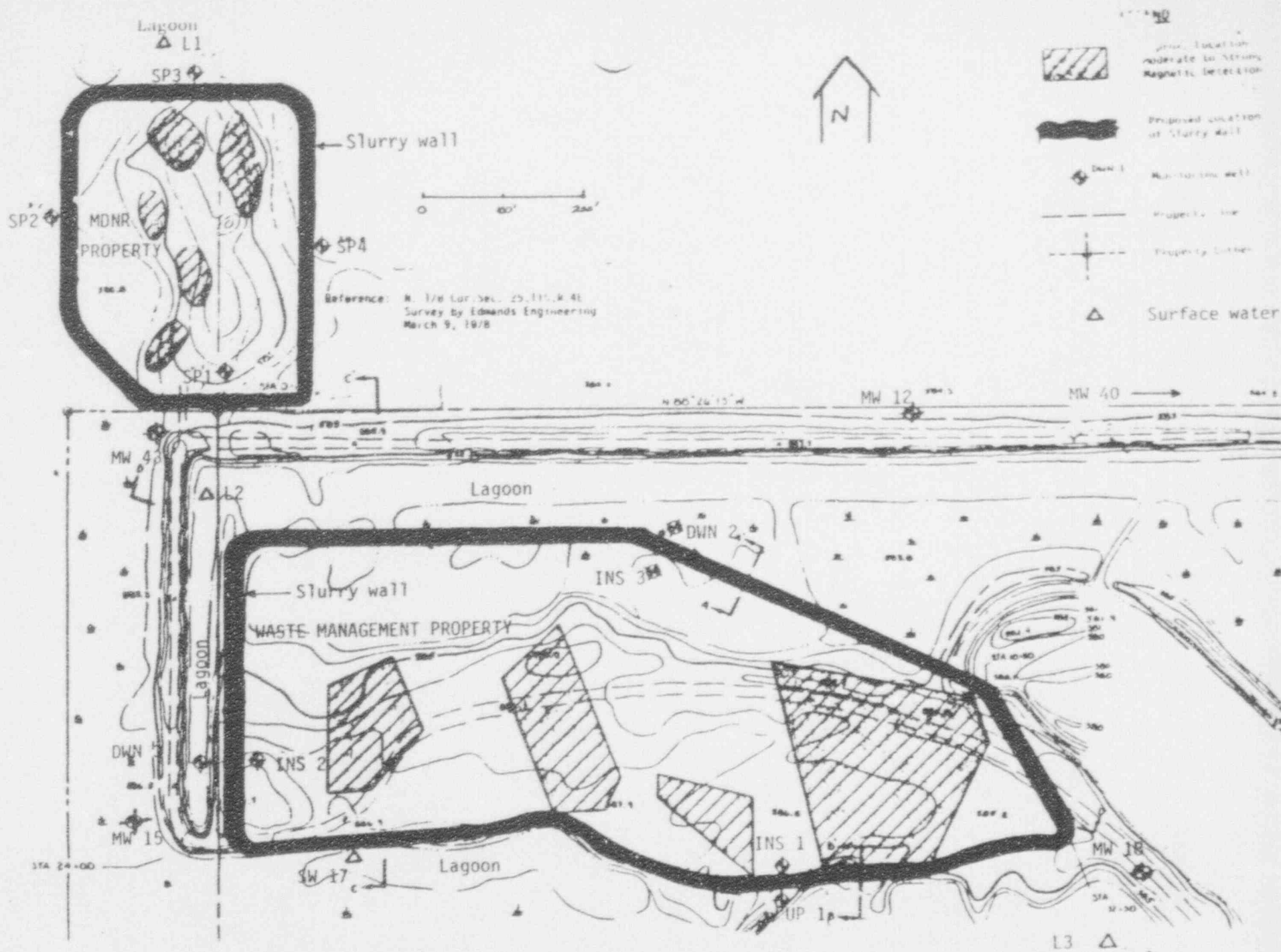
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# ATTACHMENT 1

## Description of Water Sampling Locations

<u>Location*</u>	<u>Description</u>
SP-1	Well inside DNR slurry wall
SP-2	Well outside (west) DNR slurry wall
SP-3	Well outside (north) DNR slurry wall
SP-4	Well outside (east) DNR slurry wall
MW-43	Well between DNR and SCA slurry walls
MW-12	Well near boundary between DNR and SCA sites
INS-1	Well inside SCA slurry wall (south)
UP-1	Well outside SCA slurry wall (south)
INS-2	Well inside SCA slurry wall (west)
DWN-3	Well outside SCA slurry wall (west)
INS-3	Well inside SCA slurry wall (north)
DWN-2	Well outside SCA slurry wall (north)
MW-15	Well outside and west of SCA slurry wall
MW-18	Well outside and east of SCA slurry wall
L1	Surface water from lagoon north of DNR slurry wall
L2	Surface water from lagoon between DNR and SCA slurry walls
SW-17	Surface water from lagoon south of SCA slurry wall
L3	Surface water from lagoon near Beaver Road

\* Location designations except L1, L2, and L3 are those used by WMI and DNR.



ATTACHMENT 2. SELECTED MONITORING LOCATIONS  
WASTE MANAGEMENT-MDNR SITES, KAWKAWLIN, MI.

L3 at Beaver Rd.

ATTACHMENT 3  
WASTE MANAGEMENT/MDNR SITE KAWKAWLIN, MI  
WATER SAMPLES OF 11/5/85  
RESULTS IN pCi/LITER: UNCERTAINTY ONE STANDARD DEVIATION

LOCATION	SAMPLE NO.	GROSS ACTIVITY		ISOTOPIC THORIUM			GAMMA SCAN	
		Alpha	Beta	Th 232	Th 228	Th 230	Ac 228	Tl 208
SCA Well INS-2	85-536	2±1	340±40				20±90	
SCA Well DWN-3	85-537	1.3±0.9	0±20				40±90	
Surface Water L2	85-538	1.1±0.4	17±13				20±90	220±60
SCA Well DWN-2	85-539	4.7±1.3	30±20				70±70	
SCA Well INS-3	85-540	9±2	30±30	.08±.04	.26±.07	-.28±.10	70±70	
Surface Water SW-17	85-541	.7±.3	14±7				-20±70	
SCA Well UP-1	85-542	2±1	12±14				80±80	
SCA Well INS-1	85-543	1.8±0.7	27±14				90±70	
Well MW-18	85-544	.6±.4	33±13				260±90	
MDNR MW SP-1	85-545	SAMPLE NOT AVAILABLE						
MDNR Well SP-2	85-546	3.4±0.9	17±13				-20±90	
MDNR Well SP-3	85-547	7±1	21±13	.11±.04	.13±.08	-.27±.12	40±60	
MDNR Well SP-4	85-548	15±2	13±13	.12±.04	.17±.07	-.27±.12	90±70	
Surface Water L1	85-549	.6±.2	21±11				20±50	
SCA Well MW-40	85-550	10±3	12±66	0±.03	.04±.06	-.35±.11	-20±100	
SCA Well MW-12	85-551	.2±.5	14±14				170±80	
SCA Well MW-43	85-552	4.2±1.4	14±3				-130±90	
SCA Well MW-15	85-553	1.1±0.7	30±20				20±90	
Surface Water L3	85-554	1.1±0.3	4±12				100±70	
Gilman, Pond	85-555	.28±.14	12±11				210±90	
P. Schubert, Well	85-556	0.2±1.1	15±15				90±80	