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NSTC GREAT LAKES, IL
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LETTER REGARDING UNMONITORED POINT SOURCE DISCHARGE WITH TRANSMITTAL
FORT SHERIDAN IL
11/14/1996
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY



State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
(217) 785-7728
(FAX) 782-3258

2200 Churchill Road, Springfield, IL 62794-9276

November 14, 1996

Ms. Colleen Reilly
Fort Sheridan BRAC Office
3155 Blackhawk Drive Suite 17
Fort Sheridan, IL 60037-1289

Re: Unmonitored Point Source
Discharge to Lake Michigan

0970555001/Lake County
Fort Sheridan (BRAC)
Superfund/Technical

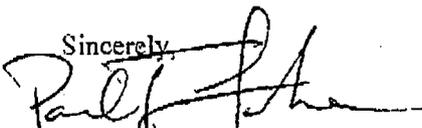
Dear Ms. Reilly:

The purpose of this letter is to address monitoring the ongoing release of contaminants to Lake Michigan via the storm sewer which underlies Landfills 6 and 7 at Fort Sheridan.

Consistent with its authority to establish recording, reporting, monitoring and sampling requirements for National Pollutant Discharge Elimination System (NPDES) permits (35 Illinois Administrative Code (IAC) Part 309), the Illinois Environmental Protection Agency (Agency) requires that the U.S. Army immediately begin routine monitoring of this point source discharge. Compliance with 35 IAC 309 and Section 12(f) of The Illinois Environmental Protection Act (The Act) are mandated by Section 120(a)(4) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Routine monitoring of the effluent is necessary to comply with the substantive requirements of an NPDES permit and to determine the NPDES related terms and conditions that will be in the Record of Decision (ROD) for Landfills 6 and 7. Routine monitoring must be continued until the discharge is stopped. The specific monitoring requirements are attached.

Should you have any questions regarding this information, please do not hesitate to contact me at (217) 785-7728.

Sincerely,


Paul T. Lake, Remedial Project Manager
Remedial Project Management Section
Bureau of Land

PTL:LS:a:\npdes.mon

cf: Owen Thompson, USEPA (HSRL-5J)
Chuck Lechner, USAEC
Jenny Berman Ross, US Navy - EFA Midwest
Mona Reints, US Army Reserve
Susan Toutant, USACE-Louisville
Rose Marie Cazeau, IAG

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Comments:

The storm sewer conveys, and has conveyed for at least the past 10 years, storm water co-mingled with leachate from Landfills 6 and 7 to Lake Michigan. The Army's own estimate in the Final Focused Feasibility Study (FFS) for Landfills 6 and 7 (page 22, by ESE, July 1996) is that each day 14,400 gallons (10gpm) of leachate infiltrate the storm sewer and are released to the lake, i.e., at a minimum under dry weather conditions. Lake Michigan is the source of drinking water for the communities immediately adjacent to Fort Sheridan and the entire Chicago metropolitan area.

The Agency previously stated that this discharge apparently violates State of Illinois statutes and regulations, reference comment #5 in the Agency's February 9, 1996 comment letter. The continued discharge of leachate to waters of the State is an apparent violation of Sections 12(a) and 12(f) of The Act. As documented in the FFS, previous gas vent sampling found the following analytical parameters in the leachate to be in Violation of Water Quality Standard 35 IAC, Subtitle C, Section 304.105: BOD, TDS, TSS, Iron, Zinc, Mercury, Copper, Phosphorous, Chromium (Hexavalent), Cyanide and Manganese. The concentrations of these contaminants exceed effluent standards (35 IAC Part 302). Landfill 7 storm drain and storm drain outfall sampling found Mercury, Iron, Boron, TDS, Chloride and Sulfate to be in violation of 35 IAC Parts 302 and 304 (FFS, pages 51-56).

35 IAC 309.102 requires the Army to obtain an NPDES permit for the continuing point source discharge of Landfills 6 and 7 leachate to Lake Michigan pursuant to Section 12(f) of The Act and the federal Clean Water Act. An NPDES permit is required for off-site point source discharges at all regulated facilities, regardless of their being subject to CERCLA. The Army must apply for an NPDES permit for this discharge or comply with the substantive requirements of such a permit. Incorporation of the substantive terms and conditions of an NPDES permit, as determined by the Agency, will be required for the ROD as part of the closure of Landfills 6 and 7 under CERCLA. The terms and conditions in the ROD may terminate when the discharge is eliminated.

The following monitoring should be performed for the stream prior to entering Landfills 6 and 7 (influent) and also at the point of exit from the landfills (effluent) to meet the substantive requirements of an NPDES permit:

1. The facility shall monitor the influent and effluent for the following parameters. Samples shall be taken at weekly intervals at the indicated detection limit or better and consist of a composite sample unless otherwise specified below.

<u>STORET CODE</u>	<u>PARAMETER</u>	<u>Min. Detection Limit</u>
01097	Antimony	0.070 mg/L
01002	Arsenic	0.050 mg/L
01007	Barium	0.500 mg/L
01012	Beryllium	0.005 mg/L
01027	Cadmium	0.003 mg/L
01032	Chromium (hcx-grab not to exceed 24 hrs)	0.010 mg/L
01034	Chromium (total)	0.050 mg/L

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01042	Copper	0.005 mg/L
00718	Cyanide (grab)(weak acid dissociable)	0.010 mg/L
00720	Cyanide (grab)(total)	0.010 mg/L
00951	Fluoride	0.100 mg/L
01045	Iron (total)	0.500 mg/L
01046	Iron (dissolved)	0.500 mg/L
01051	Lead	0.050 mg/L
01055	Manganese	0.500 mg/L
71900	Mercury	0.0002 mg/L
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equiv.; grab)	1.000 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.002 mg/L
01077	Silver (total)	0.003 mg/L
01059	Thallium	0.300 mg/L
01092	Zinc	0.050 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether dissolved, elemental or combined including all oxidation states. Where constituents are measured as other than total, the phase is so indicated. A composite sample is defined as a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8 hour period. Volumetric flow measurements (measured in gallons per minute) should be obtained during each composite sampling event.

2. The facility shall also monitor the influent and effluent for:

<u>STORET CODE</u>	<u>PARAMETER</u>
00310	Biochemical Oxygen Demand (BOD ₅)
00530	Total Suspended Solids
70300	Total Dissolved Solids
00400	pH
00094	Specific Conductance

3. The facility shall also conduct monthly monitoring and analysis of the influent and effluent for the CERCLA Contract Laboratory Program (CLP) Target Compound List (TCL) in accordance with the Overall Quality Assurance Project Plan (OQAPP) for Fort Sheridan. Samples for the analysis of SVOCs, Pesticides and Herbicides shall be composites. Five grab samples shall be collected each monitoring day to be analyzed for the volatile organic compounds. A single analysis for volatile organics may be run for each monitoring day by compositing equal volumes of each grab sample directly in the GC purge and trap apparatus in the laboratory, with no less than 1.0 ml of each grab included in the composite. Volumetric flow measurements should be obtained during each monthly sampling event.

Monthly monitoring reports should be submitted to the Agency within 45 days of sampling, including

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a narrative with locations, dates and times of sampling, equipment and field techniques used. Data tables with laboratory methods, detection limits, and analytical results should be submitted in the monthly reports as well. The monitoring frequency and the routine monitoring parameters to be included in the Record of Decision may be different from those presented here based on sampling results obtained before the Record of Decision is finalized.