

Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: April 4, 2000
In Reply Refer To: ESH-18/WQ&H:00-0130
Mail Stop: K497
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Ms. Barbara Hoditschek
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502



SUBJECT: MANAGEMENT PROCEDURES FOR SWS FACILITY SANITARY TREATMENT SOLIDS

Dear Ms. Hoditschek:

Per your request, I have am providing you with a copy of Los Alamos National Laboratory's *Interim Management Procedures for Sanitary Treatment Solids*. These procedures address the handling, storage, sampling, analysis, and disposal of sludge, grit, and screenings generated at the Laboratory's TA-46 Sanitary Wastewater Systems (SWS) Facility. Under these procedures all sanitary treatment solids generated at the SWS Facility are managed as PCB contaminated waste.

Please contact me at (505) 667-7969 should you have any questions regarding this enclosure.

Sincerely,

Bob Beers
Water Quality and Hydrology Group

BB/tml

Enclosures: a/s

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**Sanitary Wastewater Systems (SWS) Facility
Interim Management Procedures for Sanitary Treatment Solids
Los Alamos National Laboratory**

Introduction

In November 1997 the Laboratory changed the disposal practices for SWS Facility sanitary solids due to the one time detection of PCBs greater than 50 ppm resulting from a suspected spill. Land application of sludge and the disposal of grit/screenings at the Los Alamos County landfill were suspended and all sanitary solids will be managed and disposed of as PCB contaminated waste. The Laboratory's *Administrative Procedures for the Handling, Disposal, and Reuse of Sanitary Treatment Solids* (LANL-ESH-18-602) do not adequately address these changed conditions. As a result, these interim management procedures were drafted. These interim management procedures have been prepared as an addendum to the LANL-ESH-18-602 Procedures until such time as a comprehensive revision of the procedures can be completed. These procedures are not intended to stand-alone but to be used in conjunction with the existing LANL-ESH-18-602 Procedures.

Handling and In-Process Storage

Grit/screenings collected from the entrance works to the SWS Facility shall routinely be deposited directly into a dumpster or roll-off container located on the asphalt pad at the Facility for in-process storage. The storage container must be outfitted with a secure cover. Signage shall clearly display the following information:

- (1) The contents are a *PCB Contaminated Waste* (See Attachment A),
- (2) The *Open Date* of the container (the date when storage began)
- (3) The *Closed Date* of the container (the date the container was declared full), and
- (4) The contents are a *Bio-Hazard*.

The *Closed Date* is critical since all in-process storage containers must be removed from the SWS Facility within 30 days of the *Closed Date*. *Containers stored at the SWS Facility for more than 30 days constitute a violation of 40 CFR 761 regulations.*

Sludge shall be air dried on the sand beds for a minimum of 90 days to reduce pathogens. At least 60 of the 90 days must have a daily average temperature above 0° Celsius. While pathogen reduction is not a requirement for TSCA disposal, it is required at the SWS Facility prior to sampling or bed cleaning as a Best Management Practice (BMP) to reduce the risk of infection. After air drying on the sand beds, the sludge shall be cleaned from the beds and directly deposited in a covered dumpster or roll-off container for in-process storage. The storage container must be labeled with the same information required for grit/screenings storage containers. In addition, the sludge batch numbers for all sludge deposited in a container must be clearly displayed.

Under no circumstances shall sludge be stored in piles on the asphalt pad. All sludge must be stored in covered, labeled, containers.

Since grit/screenings and sludge will be co-mingled during transportation and final disposal, it is recommended that the co-mingling of these two wastes be permitted during in-process storage. Co-mingling will allow for greater efficiency and cost savings during in-process storage and transportation.

**Sanitary Wastewater Systems (SWS) Facility
Interim Management Procedures for Sanitary Treatment Solids
Los Alamos National Laboratory**

Sampling and Analysis

Grit/Screenings. A minimum of two (2) grit/screenings grab samples shall be collected annually from the entrance works to the Facility following the procedures set forth in Section 4.1.1 of the LANL-ESH-18-602 Procedures with the following exception:

- (1) Samples shall be submitted to the contract analytical laboratory in accordance with Table 1.0 below.

Sludge. A minimum of two sludge beds shall be sampled annually. Samples shall be collected only from those sludge beds meeting the pathogen reduction requirement (see Handling and In-Process Storage). Sludge sampling shall follow the procedures set forth in Section 4.1.2 of the LANL-ESH-18-602 Procedures with the following exceptions:

- (1) A single grab sample shall be collected from each sludge bed being sampled by dividing each bed into a grid of 2460 cells (30 ft X 82 ft, cell size: 1 square foot). Use a random number generator to determine which cell should be sampled for each sludge bed. Samples shall be submitted to the contract analytical laboratory for analysis in accordance with Table 1.0 below.

Table 1.0 Summary of SWS Facility Sanitary Solids Annual Sampling Plan

SOLIDS TYPE	REQUIRED ANALYSES	ANALYTICAL METHOD	SAMPLING GROUP	ANALYTICAL LABORATORY
Grit & Screenings	TCLP Suite ¹	SW846 Method 1311, Leaching	HENV	Contract Lab
	PCBs	SW846 8080	HENV	Contract Lab
	Rad Field Screen		ESH-1	ESH-1
	Rad Analysis ³	LANL Requirements	HENV	CST-9
	Paint Filter Test	SW846 Method 9095	SWS	SWS Lab
Dry Sludge	TCLP Suite ¹	SW846 Method 1311, Leaching	HENV	Contract Lab
	PCBs	SW846 8080	HENV	Contract Lab
	Total Metals ²	SW846 Method 6010/7000	HENV	Contract Lab
	Rad Field Screen		ESH-1	ESH-1
	Rad Analysis ³	LANL Requirements	HENV	CST-9
	Paint Filter Test	SW846 Method 9095	SWS	SWS Lab

¹ TCLP metals (6010/7000), volatiles (8240), semi-volatiles (8270), pesticides (8080), and herbicides (SM509B0).

² As, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Zn

³ Gross alpha, gross beta, gross gamma

ATTACHMENT A

THIS LABEL SHALL BE CLEARLY DISPLAYED ON ALL
CONTAINERS RECEIVING SWS FACILITY SANITARY
TREATMENT SOLIDS

CAUTION
CONTAINS
PCBs
(Polychlorinated Biphenyls)
A toxic environmental contaminant requiring
special handling and disposal in accordance with
U.S. Environmental Protection Agency Regulations
40 CFR 761. For Disposal Information contact
the nearest U.S. E.P.A. Office.

In case of accident or spill, call toll free the U.S.
Coast Guard National Response Center:
800:424-8802
EM&R AT 667-6218
ESH-8 AT 665-2288
CST-7 AT 665-3081