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STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
KNOXVILLE FIELD OFFICE  
3711 MIDDLEBROOK PIKE  
KNOXVILLE, TENNESSEE 37921  
PHONE (865) 594-6035 FAX (865) 594-6105/5253

November 14, 2011

Mr. Mark Smith  
University of Tennessee, Austin Peay Bldg.  
916 22nd Street  
Knoxville, Tennessee 37996-3509

RE: University of Tennessee, Austin Peay Bldg., EPA ID TN0 00-087-9809, Knox County

October 26, 2011, follow-up inspection to the August 16, 2011, initial inspection, according to the applicable statutes and rules established by or contained in Tennessee Hazardous Waste Management Act, T.C.A. 68-212-101, *et. seq.*, and the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 1200-1-11.

Dear Mr. Smith:

The Division of Solid Waste Management (DSWM) appreciates the cooperation shown by your staff during the referenced inspection. The attached Hazardous Waste Inspection Report details the observations made by the DSWM personnel during the unannounced hazardous waste inspection

No violations of the applicable statutes and rules governing hazardous waste management in Tennessee were cited as a result of this inspection.

Please contact me at 865-594-5467, if there are any questions or additional information is needed.

Sincerely,

*Craig Smith*  
Craig Smith  
Environmental Protection Specialist  
Division of Solid Waste Management

UT letb 8 16 11.doc

cc: Dennis Woodson, DSWM, Nashville Central Office  
Teresa Boyer, DSWM, Nashville Central Office

# **FOLLOW-UP HAZARDOUS WASTE INSPECTION**

## **FACILITY / PHYSICAL LOCATION:**

Name: University of Tennessee, Austin Peay Bldg.  
Knoxville, Tennessee

County: Knox  
EPA ID Number TN0 00-087-9809

## **RESPONSIBLE OFFICIAL / TITLE**

Mark Smith / Director, Environment Health & Safety

## **MAILING ADDRESS**

University of Tennessee, Austin Peay Bldg.  
916 22nd Street  
Knoxville, TN 37996-3509

## **PRIMARY CONTACT**

April Case, Senior Environmental Coordinator, E H & S

## **TELEPHONE NUMBER**

865-974-5084

## **DATE / TIME OF INSPECTION**

October 26, 2011 / 9:30 AM

## **INSPECTION PARTICIPANTS/TITLES/AFFILIATIONS**

April Case / Senior Environmental Coordinator, EH&S / University of Tennessee  
Chuck Payne / Team Leader, EH&S / University of Tennessee  
Craig Smith / Division of Solid Waste Management, KFO

## **REPORT PREPARED BY**

Craig Smith  
Division of Solid Waste Management  
3711 Middlebrook Pike  
Knoxville, Tennessee 37921  
Phone: (865) 594-5467

## PURPOSE OF INSPECTION

To perform a follow-up evaluation of University of Tennessee, Austin Peay Bldg., in compliance with the applicable requirements of the Rules and Regulations promulgated pursuant to the Hazardous Waste Management Act, T.C.A. 68-212-101 *et seq.*, and Hazardous Waste Reduction Act, T.C.A 68-212-301 *et seq.*

## ALLEGED VIOLATIONS FROM INITIAL INSPECTION

Based on visual observations and other evidence gathered during the August 16, 2011 inspection, University of Tennessee, Austin Peay Bldg. is alleged to have violated the following Rules Governing Hazardous Waste Management in Tennessee. See attachment for photos of some of these containers.

- 1) Rule 1200-3-11-.03(4)(e)5(i) [CFR 262.34(c)(1)]

A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acute hazardous waste listed in Rule 1200-1-11-.02(4)(b), (c), or (d)5, in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with part 2 of this subparagraph provided he:

**Initial observation:** During the initial inspection, I observed a container in a lab numbered 204-F, Dabney-Buehler Hall, which appeared to have waste on top of the container and in the spill-collection pan. Minor contained spills do not violate any regulation, but the situation was observed at a time when no one was present in the lab, and so must be considered as hazardous waste that is not stored within a container.

**Follow-up observation:** On 10/26/11, I observed that the waste spilled into the pan in 204-F had been cleaned-up. However, one of the two cans had some oily residue on the top and sides, such that there is still room for improvement.

- 2) Rule 1200-1-11-.05(9)(d)1 included by reference at Rule 1200-1-11-.03(4)(e)5(i)(I) [CFR 262.34(c)(1)(i)]

A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

**Initial observation:** During the initial inspection, I observed that the majority of satellite containers were closed, but approximately eleven of the hazardous waste satellite accumulation containers were not closed. These include open containers, containers with funnels instead of lids, and bottles that receive hazardous waste via tubes connected to laboratory equipment, which enter the container through an open top. Such containers with the tube connections should be lidded, and the connecting-tubes should fit through holes drilled to fit the tubes as closely as reasonably possible, or other equivalent set-up.

**Follow-up observation:** On 10/26/11, I observed that the formerly open containers were closed, with one exception: in room 558 of Dabney Buehler Hall (DBH), the plastic 55-gallon drum which had been open on 8/17/11, was open again on 10/26/11. However, there was less than one inch of accumulation in this container, and so it is defined as 'empty' for regulatory purposes, and not in violation.

- 3) Rule 1200-1-11-.03(4)(e)5(i)(II) [CFR 262.34(c)(1)(ii)]

Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

**Initial observation:** During the initial inspection, I observed two satellite collection containers of hazardous waste that were not labeled.

**Follow-up observation:** On 10/26/11, I observed that all hazardous waste containers were properly labeled.

#### INSPECTION FINDINGS FOR FOLLOW-UP INSPECTION

Based on visual observations and other evidence gathered during the October 26, 2011 inspection, I observed that all of the violations alleged as a result of the original inspection on August 16, 2011 have been corrected.

#### COMMENTS

Waste-collection bottles in some labs, including DBH 558 and 632, were arranged to collect hazardous waste from various instruments via filament-tubes threaded loosely through lids with relatively much larger holes punched through those lids. This type of arrangement was not cited in violation during the initial inspection, but does not effectively close the container. UT environmental administration personnel are currently developing guidelines for keeping these containers closed. In future inspections, such containers will be expected to adhere to official guidelines, or may be cited as "open".

Craig Smith 11/14/11  
 Craig Smith Date  
 Environmental Protection Specialist  
 Division of Solid Waste Management

#### CONCURRENCE

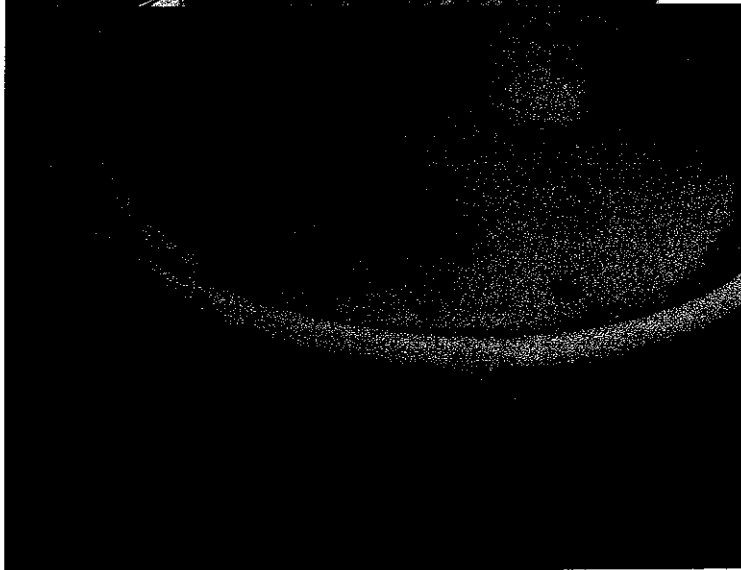
R. Awasthi 11/14/11  
 Revendra Awasthi Date  
 Environmental Field Office Manager  
 Division of Solid Waste Management

cc: Dennis Woodson, DSWM, Nashville Central Office

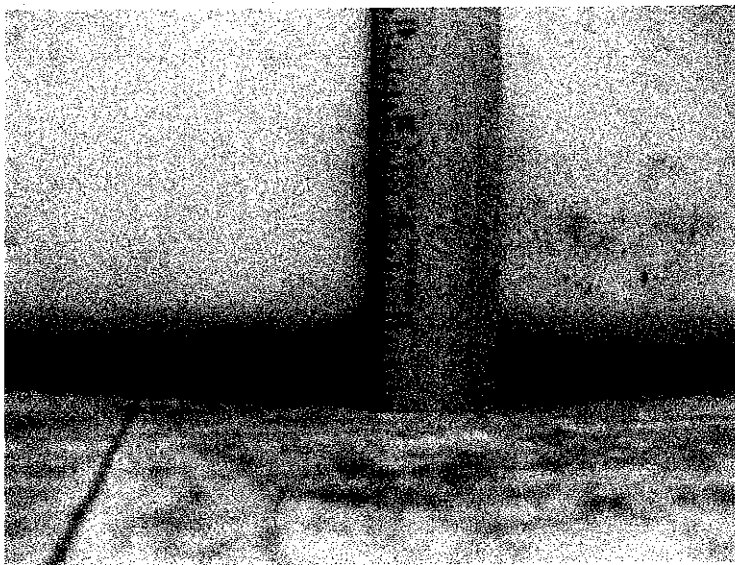
## Attachment: inspection photos



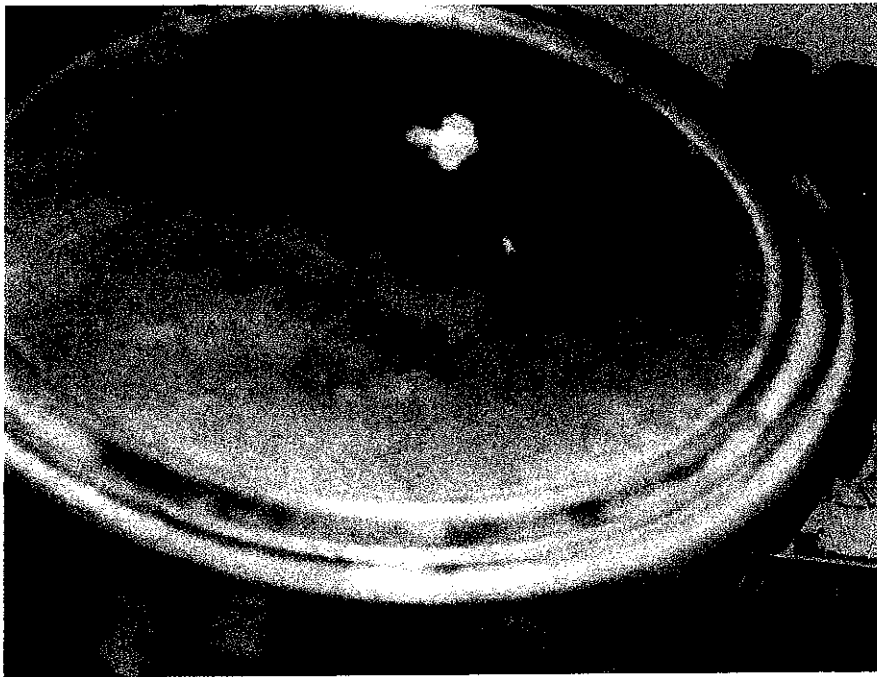
Dabney-Buehler Hall, Room 558: open container on initial inspection, 8/16/11 (note funnel inserted into bung)



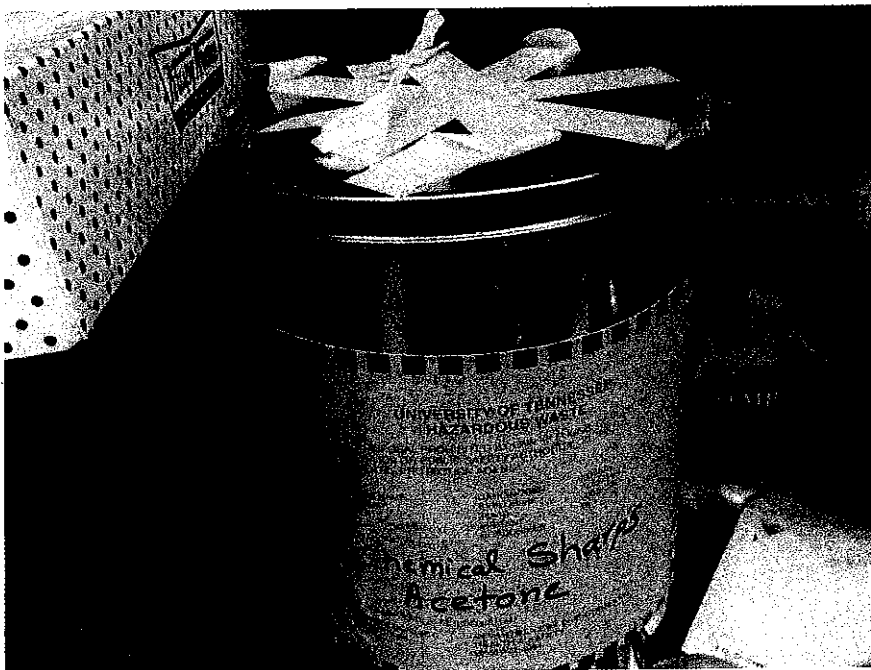
DBH, room 558: new container, open, as observed during follow-up inspection on 10/26/11.



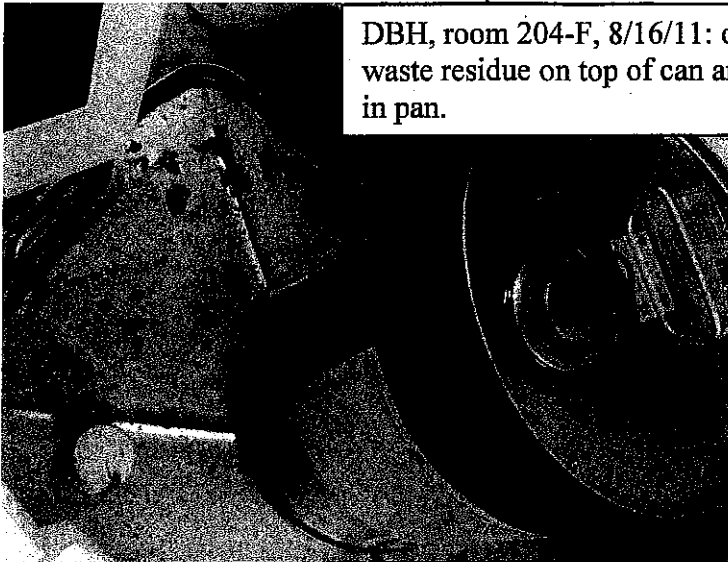
DBH 558: same container on 10/26/11, note less than one inch of accumulation.



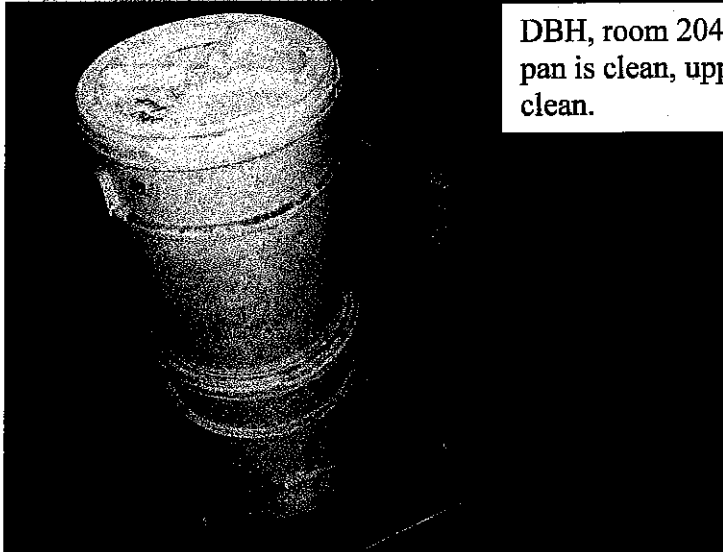
Dabney-Buehler Hall, Room  
558, 8/16/11: open container  
on initial inspection



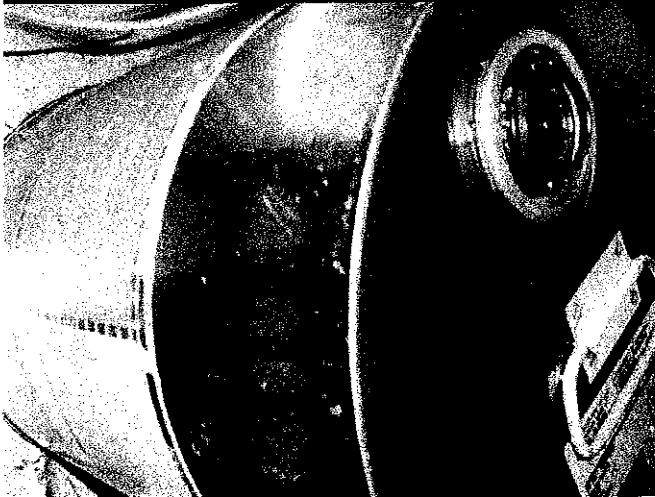
DBH 558, 10/26/11: same  
container on, closed.



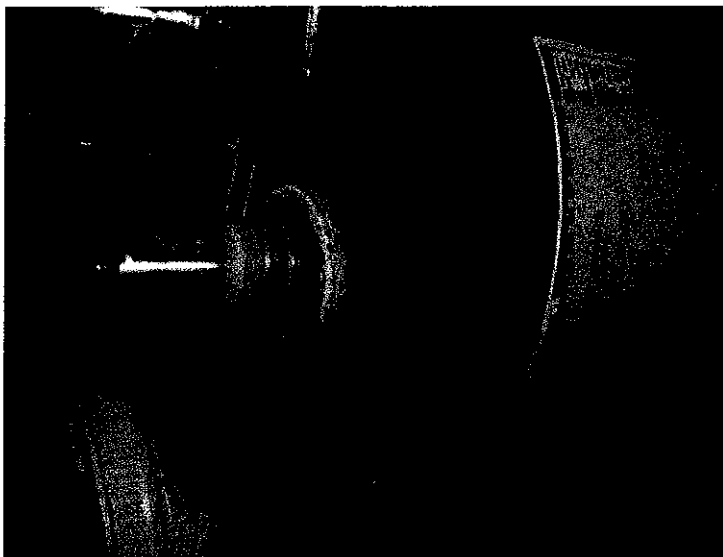
DBH, room 204-F, 8/16/11: oily waste residue on top of can and in pan.



DBH, room 204-F, 10/26/11: pan is clean, upper container is clean.



DBH, room 204-F, 10/26/11: Slight oily residue remains on lower container.



DBH 631 on 8/16/11: container  
is not properly closed (inverted  
flask does not form a seal).

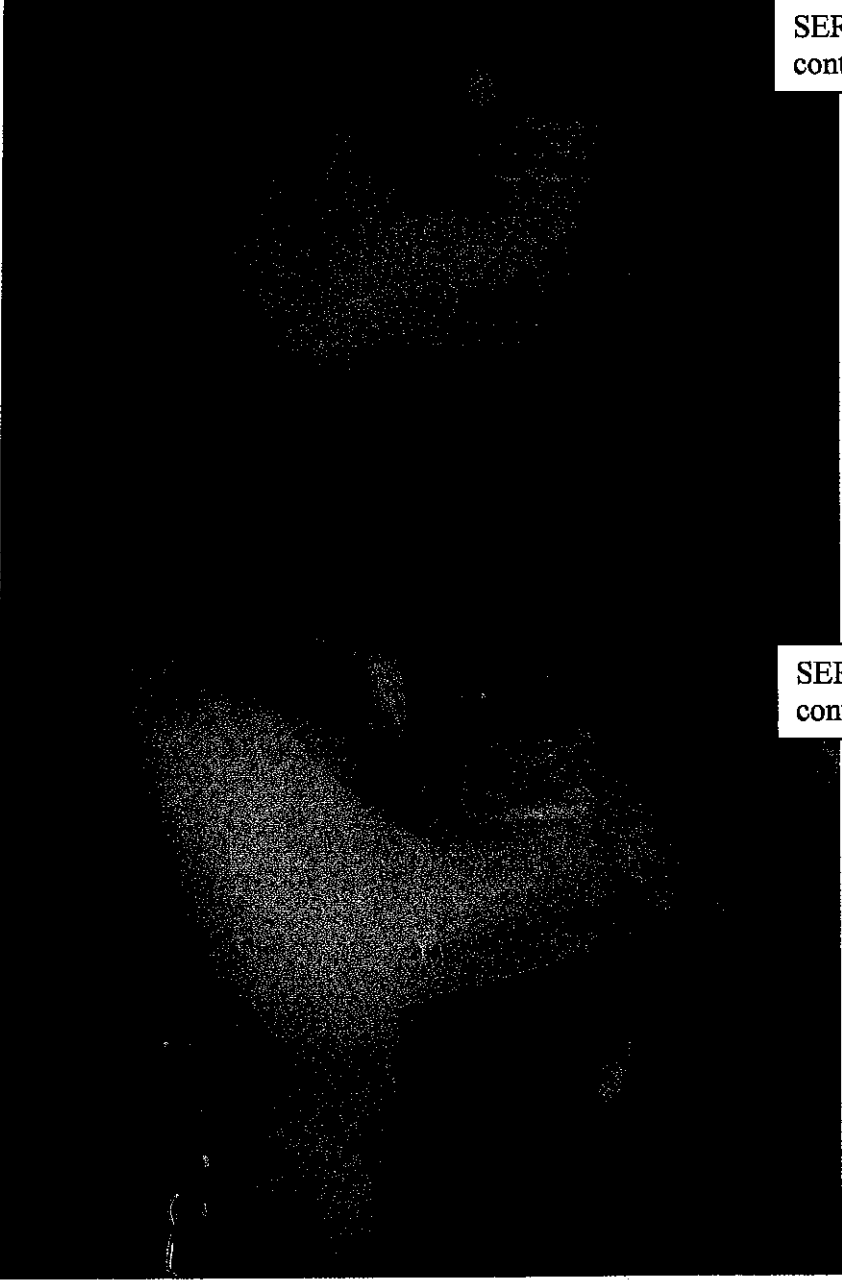


DBH 631 on 8/16/11:  
Hazardous Waste container is in  
unacceptable condition.



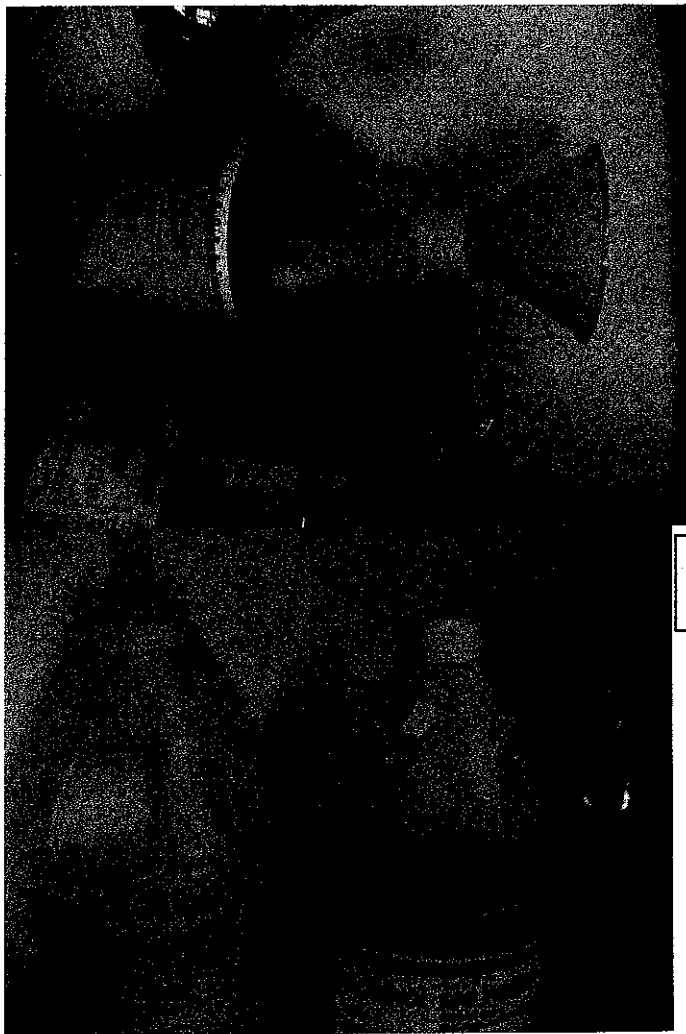
DBH 631 on 10/26/11:  
Containers are closed and in  
good condition





SERF 705 on 8/16/11: open  
container\

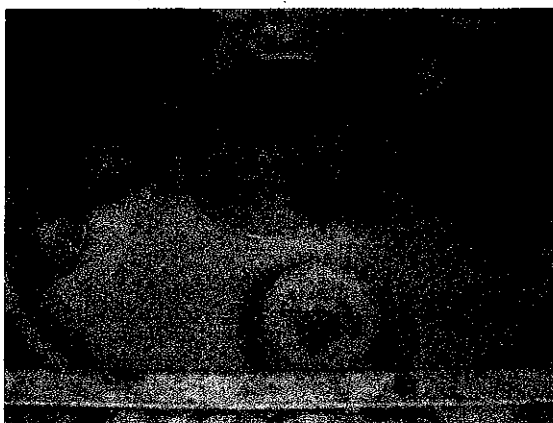
SERF 705 on 10/26/11: same  
container, closed.



SERF 635 on 8/16/11: open  
container

SERF 635 on 10/26/11: same  
container, closed.

More closed containers, observed 10/26/11, which had been open on 8/16/11:



SERF 217, 10/26/11



SERF 723, 10/26/11



Walters Life Science (WLS)  
C407, 10/26/11



WLS C411, 10/26/11



WLS E308, 10/26/11