

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 040-08724/90001

License No. SUB-1357

Licensee: Chemetron Corporation
c/o Sunbeam/Oster Company, Inc.
Two Oliver Plaza
Pittsburgh, PA 15222

Facility: Bert Avenue Landfill
Cleveland, Ohio

Inspection: October 3, 1990, and follow-up on October 19, 1990

Inspector: W. P. Reichhold
W. P. Reichhold
Radiation Specialist

16 November 1990
Date

Approved By: John A. Sreniawski
for P. J. Sreniawski
Project Manager
Fuel Facilities and
Contaminated Sites

11-16-90
Date

Inspection Summary

This was a special inspection performed on October 3 and 19, 1990 (Report No. 040-08724/90001)

Areas Inspected: The inspection was performed to evaluate the physical security at the Bert Avenue Landfill. The inspection included a walk around the fenced area, taking photographs of the fence, and interviews with a security guard and the site supervisor.

Results: One apparent violation was found: 10 CFR 20.207(a) licensed material in an unrestricted area was not secured against unauthorized removal from the place of storage. In addition to the above violation, the inspectors recommended that additional radiation warning signs be posted.

DETAILS

1. Persons Contacted

Paul Terp, Site Supervisor (Nuclear Energy Services)
Barry Koh, Technical Consultant
Officer George Koczwarra, Security Guard
Tim Walker, Ohio State Department of Health
Kevin Driesbach, Ohio State Department of Health
Todd Brady, Cuyahoga County Board of Health

2. Purpose of Inspection

This special inspection was performed to evaluate the physical security at the Bert Avenue Landfill (see sketch).

The inspection included walking around the outside of the fenced area, and interviews with a security guard and the site supervisor.

3. Inspection Findings

The Bert Avenue Landfill was surrounded by a 6-foot fence and in some locations it was topped with strands of barbed wire. The 27th Street entrance to the site had two large chain link gates secured with a chain and lock.

Just inside the gate was a parking area and house trailers that served as offices. There was an additional 6 foot chain link fence that separated the area contaminated with depleted uranium. This fence was topped with strands of barbed wire and had a chain link gate.

The inspectors walked around the outside of the fence surrounding the area that is contaminated with depleted uranium. Along the west boundary, there were at least two areas where the barbed wire and fencing had been bent over at the top, which would make it easier to climb over the fence. Behind a neighbor's garage there were metal folding steps and a two step wooden platform, which would also make it easier to climb over the fence. At the west boundary next to the playground, there were holes in the fence and debris piled against the fence which also reduced the effectiveness of the barrier (Photos 1, 2, and 3). There was also a shelter built from debris that looked like a playhouse. The playhouse was not in the restricted area but was near the fence (Photos 4 and 5).

A new 6-foot chain link fence had been erected at the top of a slope just to the north of the landfill. Along the north boundary there was an area where the soil had eroded, leaving a hole large enough so that a person could easily squeeze under the fence (Photo 6). The new chain link fence is connected to a 6-foot welded wire fence. There was a gap under the fence where the chain link and welded wire fence were joined (Photo 7).

The east side of the site had a 6-foot welded wire fence. The fence was supported with metal posts that are sunk in the gravel. In certain locations this fence could be lifted up allowing access under it. There was also an area along the east boundary where the soil had eroded leaving a hole where a person could squeeze under the fence (see Photo 9). The top of the fencing was bent in on the gate along the east boundary (Photo 8).

The welded wire fence met a new chain link fence at the southeast corner. At this corner there was a gap where a person could easily squeeze between the fence posts (Photo 10).

The new fencing along the east boundary of the site is attached to an old fence. At this junction, the new fence was not attached to the top of the old fence and it could be bent down about one and a half feet. The gate at the end of 29th Street was secured with a chain but had a gap large enough for a child to squeeze through.

The gate at the end of Bert Avenue and areas of the fence next to that gate were overgrown with vegetation. The inspectors were unable to perform a detailed inspection of this area because of the vegetation growing on the fence. The effectiveness of the fence is decreased because the vegetation makes it easier to climb over.

Chemetron would be unable to maintain control of access to licensed materials at the site because there were gaps in the fence that would allow an individual to enter the landfill. Therefore, this area constitutes an unrestricted area.

Failure to secure licensed material stored in an unrestricted area against unauthorized removal from the place of storage is an apparent violation of 10 CFR 20.207(a).

During the third week of September, off-duty policemen were hired as added security and they have been patrolling the fenced boundary in their vehicles and walking around the outside of the fence. Watchman's key clocks were mounted on the welded wire fence on the east side and on the inner chain link fence on the south side. The off duty policemen patrol the area from 9:00 a.m. to 4:00 p.m. Monday through Friday. Private security guards patrol the area from 4:00 p.m. to 7:00 a.m. Nuclear Energy Services personnel are at the site at 7:00 a.m. Off-duty police and private security guards watch the site on the weekend. On the day of the inspection, a police officer was stationed at the front gate permitting entry and exit from the area.

The fence was posted with radiation warning signs, but the inspector recommended that additional signs be posted. The site supervisor stated that there had been more radiation signs on the fence, but some had been stolen. The site supervisor stated that additional radiation warning signs had been ordered and to prevent theft they planned to mount the

radiation warning signs inside the fence. During a telephone discussion on October 19, 1990, Mr. Barry Koh (technical consultant) stated that additional radiation warning signs had been posted.

One apparent violation was found.

Attachments:

1. Sketch of Bert Avenue
Landfill
1. Photographs 1 through 10

CHEMETRON
BERT AVENUE
SITE

LTV
STEEL
Co.

NORTH

WEST

EAST

PLAYING
FIELD

PLAY
HOUSE

HOLES ALONG THIS
SIDE OF FENCE.

TOP OF FENCE
BENT DOWN IN
AREAS ALONG FENCE.

DEBRIS PILED ALONG
THIS SIDE OF FENCE.

RESTRICTED
AREA

GAPS
UNDER
FENCE

GATE

FENCE
BENT
DOWN

WATCHMAN'S
KEY
CLOCK



GAP
UNDER
FENCE

FENCE
BENT
DOWN

GAP
IN
BETWEEN
GATE

FENCE
BENT
DOWN

GAP
BETWEEN
FENCE
POSTS
OF OLD
AND NEW
FENCE.

TOP OF
NEW FENCE
NOT ATTACHED
TO OLD FENCE.

FENCE
OVER GROUND
WITH
VEGETATION

BERT
AVE.

TRAILER

WATCHMAN'S
KEY
CLOCK

SMALL
CONTAMINATED
AREA ROPED
OFF.

INNER
FENCE

GATE

GATE

PARKING
LOT

TRAILERS

FENCE
BENT
DOWN

FENCE
BENT
DOWN

GATE

29th
STREET

FENCE
BENT
DOWN

27th

ANIMAL
HOLES
UNDER
FENCE

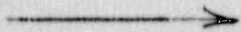
FOLDING
STEPS
PLATFORM
STEPS

DRAWING IS NOT
TO SCALE.

FEATURES ARE NOT
IN THE EXACT LOCATION
SHOWN ON DRAWING.

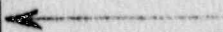
1

DEBRIS AGAINST FENCE



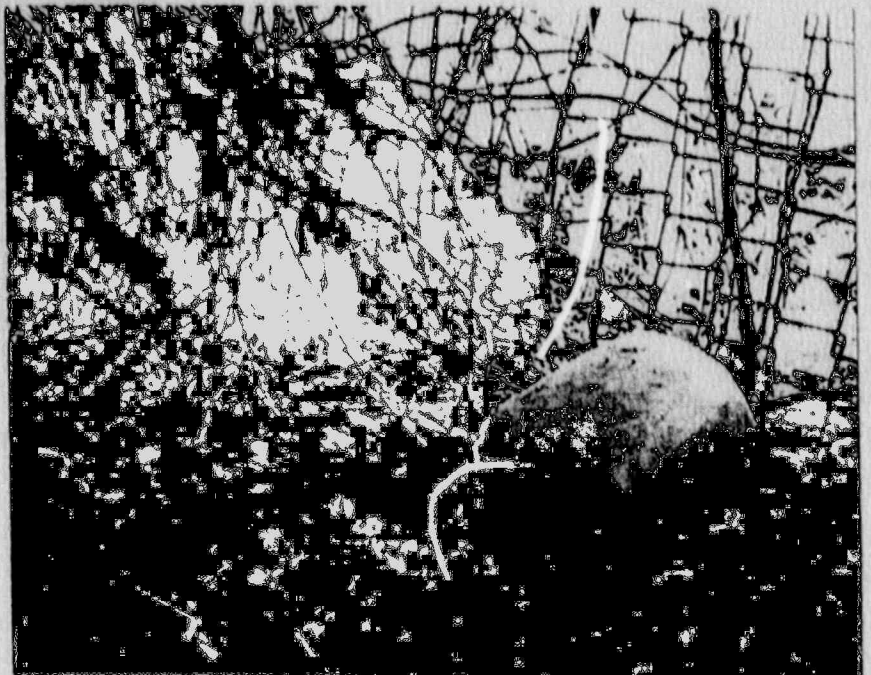
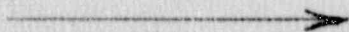
2

TOP OF FENCE BENT DOWN



3

HOLE IN FENCE





4

← PLAYHOUSE

5

TOP OF FENCE BENT DOWN →





↑
6

HOLES UNDER FENCE

7
↓





8

← TOP OF FENCE BENT IN



9

HOLE UNDER FENCE →



10

← GAP BETWEEN FENCE POSTS