

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION 11  
101 MARIETTA STREET, N.W., SUITE 2900  
ATLANTA, GEORGIA 30323-0199

August 8, 1996

SUBJECT: STATUS REPORT OF REGION II REVIEW OF OAK  
RIDGE  
POTENTIALLY NATIONAL LABORATORY (ORNL) LIST OF  
CONTAMINATED SITES

The quarterly status reports for those Region II sites contained on the ORNL list of formerly licensed sites identified as potentially contaminated are contained in Attachments I through 4. The status reports for those sites with an ORNL final score greater than 300 which remain open are in Attachment I and those with a score from 5 to 300 which Region II has reviewed and remain open are listed in Attachment 2. The status reports for those sites which are recommended for deletion are listed in Attachment 3. The information required for the Monthly Information Status Report is in Attachment 4. A tabular summary of all files assigned to Region II is in Attachment 5.

Region II has requested, but has not received the sealed source files identified in the previous report (Attachment 6). The sealed source files at Region II have been divided among the staff for review and action as appropriate. We expect to complete the sealed source file reviews by the end of December, 1996.

If you have any questions regarding these reports or our evaluations, please contact Mr. Jay L. Henson of my staff at (404) 331-0344.

- Attachments:
- (1) Reports for sites >300 (remain open)
  - (2) Reports for sites <300 (remain open)
  - (3) Reports for sites <300 (recommend deletion)
  - (4) Monthly Information Status Report
  - (5) Tabular summary for all Region II sites
  - (6) List of sealed source files not in Region II

MEMORANDUM TO:

Donald A. Cool, Director  
Division of Industrial and Medical  
Nuclear Safety  
Office of Nuclear Material Safety  
and Safeguards

FROM:

Bruce S. Mallett, Director  
Division of Nuclear Materials Safety



>300

STATUS REPORTS FOR SITES WITH ORNL SCORE

(Remain In Open Status)

Attachment

I

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Docket No. 070-00784

License No. SNM-00724

Licensee Name: Union Carbide Corporation

Site Name: Carbon Products Division

Site Address: 3 miles south of Lawrenceburg, TN

City: Lawrenceburg State: TN Zip: 38464

Regional Contact: Jay L. Henson Phone: (404) 331-0344

Status Summary:

ORNL Final Score: 15,456

Background

- \* On August 26, 1963, Union Carbide-Lawrenceburg was issued an SNM license authorizing possession of up to 500 grams of fully-enriched (<94%) uranium for testing of equipment and processes in their Lawrenceburg Fuel Development Facility.
- \* On May 22, 1964, the license was amended to authorize possession of 150 kilograms of U235 to make graphite-coated uranium-thorium carbide particles and graphite-matrix fuel elements.
- \* The possession limit was increased to 475 kg. on June 12, 1964.
- \* On December 6, 1964, a capsule containing 93% enriched uranium exploded in a furnace used to convert uranium oxide to uranium dicarbide. One additional capsule ruptured after being ejected from the furnace by the explosion. The two ruptured capsules contained 10.9 kg. of uranium. The licensee's description of the cleanup and associated sampling/monitoring performed after the incident does not clearly state the quantity of material that was recovered from the ruptured capsules. Soil samples were taken outside the fence around the facility, but there is no indication that soil samples were taken within the restricted area.
- \* Liquid wastes containing "small amounts" (undefined) of non-recoverable licensed material were piped to two settling basins after being fluorometrically measured. Daily samples were also taken of liquid exiting the basin prior to entering Shoal Creek.



**REGION II TERMINATED SITES  
LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

Union Carbide Corporation  
724

License No. SNM-

Lawrenceburg, TN  
00784

Docket No. 070-

By letter dated February 4, 1974, the licensee submitted closeout survey information and requested that License No. SNM-724 be terminated and the facility be released for unrestricted use. (NOTE: The submitted survey does not include soil or settling basin sampling.)

In a March 15, 1974 memo, the Chief, Fuel Fabrication and Reprocessing Branch, AEC, stated that the submitted survey appeared to meet AEC guidelines for decontamination of facilities prior to release for unrestricted use, but desired that Region II perform a confirmatory survey.

On April 5, 1974, Region II performed a closeout inspection which was documented in Inspection Report 70- 784/74-1. Region II recommended that the license be terminated and the facility released for unrestricted use. (NOTE: The report does not include soil or settling basin sampling.)

By AEC letter dated June 4, 1974, License No. SNM- 724 was terminated and the facility released for unrestricted use.

Assessment

Region II evaluated the available survey data to determine if the information is sufficient to conclude that the building meets existing guidelines for unrestricted use. Region II determined that sampling of the soil in the former restricted area as well as the settling basins should be performed.

Union Carbide (UCAR) submitted a survey/sampling plan in 11/11/94. Region II reviewed the plan and sent comments back to UCAR on 1/12/95. UCAR expects to submit a revised sample plan in 4/95.

UCAR submitted their revised sampling plan in a letter dated April 20, 1995. Region II personnel reviewed the plan and prepared a response which included comments regarding some changes which must be made to the plan before it could be approved. The Region II letter to UCAR was forwarded to the State of Tennessee for their review and comment on May 31, 1995. Their comments were forwarded to Region II on June 18, 1995, and are under review. Region II will send a letter to UCAR with comments regarding the revised sampling plan in July, 1995.

## REGION II **TERMINATED SITES** LIST

### SITE STATUS REPORT

AUGUST 8, 1996

Union Carbide Corporation  
Lawrenceburg, TN

License No. SNM-724  
Docket No. 070-00784

#### Assessment

Region II's comments to the UCAR sampling plan were forwarded to UCAR in a letter dated August 3, 1995. UCAR's response to Region II's comments was received on October 26, 1995. Region II is reviewing this response and expects to complete the review by November 3, 1995.

UCAR response to comments reviewed and RII approved plan 11/95. Licensee contacted on February 5, 1996, for report on current status. Licensee has completed contract for survey performed in accordance with decommissioning plan. Survey is tentatively scheduled to begin in the second calendar quarter of 1996.

UCAR began the facility survey in April, 1996. During the week of April 22-26, 1996, Region II staff observed the sampling of the sediment and soil from the bottom of the two settling ponds and obtained split samples from some of the sampling locations for analysis by ORISE. UCAR expects to complete the survey in June, 1996. Region II personnel will conduct inspections of the decommissioning effort and perform some confirmatory surveys prior to completion of the survey.

A Region II inspector conducted an inspection in **June, 1996, at the UCAR facility** while the UCAR survey contractor obtained core soil samples around the facility and performed surveys of the upper walls and ceiling in the High Bay end of Building 10. UCAR now expects to complete its survey by the end of August, 1996, and hopes to submit a final report by the end of September, 1996.

STATUS REPORTS FOR SITES REVIEWED WITH SCORES <300  
(REMAIN IN OPEN STATUS)

Attachment 2

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Docket No. 040-01957

License No. SUB-00081

Licensee Name: Homer Laughlin China Company

Site Name: Homer Laughlin China Company

Site Address: \_\_\_\_\_

City: Newell State: WV Zip: 26050-1299

Regional Contact: Jay L. Henson Phone: (404) 331-0344

Status Summary:

ORNL Final Score: 115

Background

- \* In February, 1959, the Homer Laughlin China Company was issued Source Material License No. C-4475. This license authorized possession of 100,000 pounds of source material for use in manufacturing glazed ceramic tableware (glaze to contain not more than 20% uranium).
- \* In February, 1961, this license was renewed and the license number was changed to SUB-00081.
- \* Records indicate that licensed activities were performed in Plant No. 4 and materials were stored in a vault adjacent to the dispensary at Plant No. 8. Records also indicate that the rinse water from washing equipment used to transport uranium glaze entered the city sewer system and in some cases was washed into a storm drain that emptied directly into the Ohio River. Inspection records indicate that these effluents were estimated to be approximately 40% of the regulatory limits.
- \* In a letter dated February 28, 1972 Homer Laughlin China (HLC) requested termination of their license and stated that all remaining licensed materials had been returned to their supplier. On March 29, 1972, the AEC terminated the license.



## **REGION II TERMINATED SITES LIST**

### **SITE STATUS REPORT**

**AUGUST 8, 1996**

Homer Laughlin China Company

License No. SUB-00081

Newell, WV

Docket No. 040-01957

In August, 1994, the former licensee discovered that it possessed approximately 500 pounds of uranium oxide (U308). Subsequent to this discovery, the licensee hired a contractor to survey areas where licensed materials were used and stored. Several areas of significant contamination were discovered during this characterization survey. HLC sent the results of this survey to Region II on September 28, 1994.

On November 4, 1994, Region II issued a Confirmatory Action Letter (CAL) to HLC to ensure that the uranium oxide was properly stored and secured and that adequate control measures were implemented to protect personnel from the contamination discovered in the facility. On November 17, 1994, a Region II inspector visited the site to determine if HLC had implemented adequate protective measures. HLC had secured the material and the contamination areas as required by the CAL.

On January 5, 1994, HLC submitted their decommissioning plan for the facility. On January 9, 1994, Region II forwarded comments on the plan to HLC. HLC submitted a revised plan on January 10 and Region II approved the plan on January 12.

HLC and its decommissioning contractor began decommissioning effort after approval of the plan. The contractor has completed the decontamination of the majority of the facility and is currently working to complete decontamination of some equipment. HLC and its contractor are having some difficulty in finding an acceptable means to dispose of the waste and bulk material.

#### Assessment

Region II will continue to monitor HLC's progress in decommissioning this facility. A confirmatory survey will be scheduled upon completion of HLC's decommissioning effort and review of their final survey report.

HLC's efforts to decontaminate/decommission their facility continues. Most of the building surfaces have been decontaminated, but some contaminated equipment remains to be removed and either decontaminated or disposed as radioactive waste. Region II has visited the site on two occasions to survey floor areas in some currently operational areas which HLC needed to have released for operational safety reasons. Based upon the Region II surveys, these floor surfaces were determined to not meet the free release criteria and were not approved for release for

## REGION II TERMINATED SITES LIST

### SITE STATUS REPORT

AUGUST 8, 1996

Homer Laughlin China Company  
Newell, WV

License No. SUB-00081  
Docket No. 040-01957

#### Assessment

unrestricted use. HLC and their contractor, Applied Health Physics, are evaluating the conditions which resulted in these areas not meeting the release criteria. Region II will continue to monitor HLC's decommissioning effort.

In a letter dated August 1, 1995, HLC stated that they had completed their decontamination and decommissioning efforts, but had some areas which could not be remediated to the current criteria for release for unrestricted use. HLC enclosed a risk analysis report with the letter with a request that the NRC review the report for the purpose of approving a variance on release of specified equipment and areas from the current release criteria. Region II has completed a preliminary review of the documents submitted by HLC and requested some additional information before a final review is completed. Once this additional information is received, the request will be forwarded to NMSS via a TAR for review and approval.

The HLC request was forwarded for review in a TAR on November 1, 1995. DLWM personnel expect to reply to the TAR by February 16, 1996. From a preliminary review, DLWM expects to have additional questions for HLC to answer before a final decision is rendered.

Region II personnel performed a survey of some floor areas within the HLC facility in December, 1995. The licensee had requested a release survey of some floor areas in a busy area of the facility so that the floors could be repaired. The licensee was concerned about personnel injuring themselves when trying to walk over these floor areas. As a result of this survey, these areas were declared suitable for release for unrestricted use and the licensee initiated repairs to the floors.

NMSS responded to the TAR in a letter dated March 22, 1996. In the TAR response, NMSS requested that HLC respond to fifteen comments before a decision is made regarding the approval of alternate unrestricted use limits for surface contamination. Region II forwarded the comments to HLC in a letter dated April 5, 1996. In a phone call on May 13, 1996, the HLC contractor reported that he is working on a response to the comments and should complete the response by June, 1996.

**HLC was contacted on August 6, 1996, to determine the status on its response to the April 5, 1996 letter. Due to financial concerns, HLC has not completed their response. RII staff have scheduled an inspection for August 13, to review the status of the facility and the decommissioning effort.**

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Docket No. 030-09859

License No. 45-10085-03

Licensee Name: Roanoke College

Site Name: Physical Science and Life Science Buildings

Site Address: North College Avenue

City: Salem State: VA Zip: 24153

Regional Contact: Jay L. Henson

Phone: (404) 331-0344

Status Summary:

ORNL Final Ranking: 66

Background

- \* In June, 1974, Roanoke College was issued Byproduct Material License 45-10085-03 authorizing the possession of the following:
  - (1) any byproduct material between Atomic Nos. 3 and 83, inclusive, in any form, with a possession limit of 10 mCi of each, inclusive, except 1 mCi each of Strontium 90 and Iodine 131, and a total possession limit of 100 mCi for all materials
  - (2) Americium 241 as sealed sources or electroplated discs with an activity limit of 1 microcurie
  - (3) Cobalt 60 as foils with an activity limit of 30 mCiThe authorized use for (1) and (2) was instruction and laboratory research and for (3) was experiments in surface physics and sputtering.
- \* In December, 1979, this license was amended to a storage only license pending disposition of the licensed materials.
- \* A NRC-314 form dated November 3, 1981, indicated that all materials procured and/or possessed under this license were transferred to the Virginia Polytechnic Institute and State University under their license (45-09475-30). The license was not formally terminated but was simply allowed to expire in July, 1981. There are no records of a final survey performed by the licensee of the facilities where licensed activities were conducted in the docket file and no indication that the NRC performed a closeout survey.



REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Roanoke College  
Salem, VA

License No. 45-10085-03  
Docket No. 030-09859

\* In August, 1985, Roanoke College was issued Byproduct Material License No. 45-10085-04 which authorized them to possess 1 mCi of Carbon 14 in any form for use in laboratory research studies. In December, 1986, their license was amended to authorize a maximum possession limit of 2 mCi. This license is currently active.

\* The authorized locations of use under the 45-10085-03 license compared to those locations authorized under License No. 45-10085-04 are listed below:

<u>Building</u>	<u>45-10085-03</u>	<u>45-10085-04</u>
Physical Science	176, 177A, 177B, 178, 179  266B, 266C, 266D  462	266B, 266C, 266D
Life Sciences	215, 217  410	215, 217,  201A, 201B, 217A, 218E  410, 409A, 410A

201,

In a December, 1986, amendment to the current license (45-10085-04), the licensee deleted rooms 266C and 266D in the Physical Science Building and room 409A in the Life Sciences building as areas of use.

Assessment

Many of the facilities where licensed activities were performed under License No. 45-10085-03 continue to be utilized for similar activities authorized under the current license (45-10085-04). In a December 4, 1979, letter contained in the 45-10085-03 docket file, the licensee stated that it would submit a report of the surveys conducted in the areas where materials have been stored when all materials were disposed or transferred. This report, if submitted, is not in the docket file.

Region II will send Roanoke College a letter requesting that they send copies of any reports of final surveys performed in those facilities where licensed activities were performed under License No. 45-10085-03 to demonstrate that when this license expired, all facilities met the criteria for unrestricted release. If Roanoke College cannot produce these reports, then Region II will request that Roanoke College



**REGION II TERMINATED SITES  
LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

Roanoke College  
03  
Salem, VA

License No. 45-10085-

Docket No. 030-09859

perform these surveys in those facilities where licensed activities were performed under License No. 45-10085-03, excluding those facilities where licensed activities are currently performed under License No. 4510085-04. Copies of the Region II and Roanoke College correspondence regarding this matter will be placed in the 45-10085-04 docket file for reference regarding the future decommissioning of these facilities.

Region 11 forwarded a letter to Roanoke College on March 30, 1995, requesting information on the radiological status of those facilities used under this terminated license which are not being used under their current license (License No. 45-10085- 04). As of June 30, 1995, Roanoke College has not responded to this letter. After several attempts, on October 25, 1995, Region II personnel were able to telephonically reach an individual at Roanoke College who will respond to the letter.

Licensee personnel were contacted on February 6, 1996, for update on status. Licensee has contacted former employees who used material under the terminated license. Licensee is waiting for information from one user before determining what further action to take. Licensee is considering performing additional surveys of formerly utilized laboratories.

In a telephone conversation on May 8, 1996, licensee personnel reported that they had completed their investigation into the status of the former use areas and would submit a report of their findings by the end of the month. They stated that based upon their investigation, only short half-life materials was used in the areas in question.

**As of August 6, 1996, the report had not been received. Mr. Jay Henson of the RII staff contacted the licensee on August 6 to determine the status of the response. Licensee staff stated that they would try to submit a response by the end of August. RII staff will contact the licensee at that time to verify status of response.**

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Docket No. 030-01746

License No. 16-00380-03

Licensee Name: Department of the Army

Site Name: Medical Research Laboratory

Site Address: \_\_\_\_\_

City: Ft. Knox State: KY Zip: 40121-5520

Regional Contact: Jay L. Henson Phone: (404) 331-0344

Status Summary:

ORNL Final Score: 31

Background

- \* In January, 1957, the U.S. Army Medical Research Laboratory (USAMRL) was issued Byproduct Material License No. 16-00380-03 which authorized possession of up to 1 Ci of any byproduct material from Atomic No.s 3 to 83, except Sr-90, Co-60 and Tm-170, in any form for research and development purposes. It does not appear that the licensee ever possessed quantities approaching the 1 Ci limit for any material authorized.
- \* In later years, the license was amended to limit the possession to 50 mCi of any form of any byproduct material with Atomic Nos. 3-83, inclusive, possession of I-131 in any form to 500 mCi, and possession of H-3 in any form to 500 mCi. These materials were used for in vitro and in vivo (animal) research and development activities. Materials were used and/or stored in ten buildings during the life of the license.
- \* In August, 1977, the licensee requested termination of the license and on November 16, 1977, the NRC terminated the license.
- \* Records indicated that materials were transferred to a waste disposal firm for disposal or sent to the Letterman Army Institute, San Francisco, California. The USAMRL activity was relocated to this facility.



## REGION II TERMINATED SITES LIST

### SITE STATUS REPORT

**AUGUST 8, 1996**

Department of the Army  
Medical Research Laboratory  
Ft. Knox, KY

License No. 16-00380-03  
Docket No. 030-01746

The U.S. Army Environmental Hygiene Agency (USAEHA) conducted surveys at USARML in April, 1974 and in April, 1977, to demonstrate that the facilities at Ft Knox could be released for unrestricted use. The NRC conducted a confirmatory survey in September, 1977. No contamination above the criteria for release for unrestricted use was detected during any of the above surveys. Surveys included scans with survey meters and contamination smears.

In February, 1994, the U.S. Army Office of the Surgeon General requested that Region II provide guidance on how to proceed with the demolition of one of the buildings used (1025) for licensed activities. The Army had the building surveyed and on September 29, 1994, a Region II inspector conducted a confirmatory survey of the facility. The building was found to meet the criteria for unrestricted use and was subsequently demolished.

On January 23, 1995, The U.S. Army Medical Department Activity at Ft. Knox sent a letter to Region II describing their proposal regarding any further surveys and disposition of the remaining buildings that were used under this terminated license. On February 27, 1995, Region II responded to the Army's January 23 letter with comments regarding their proposal.

#### Assessment

It appears that the final survey performed by USAEHA in 1977 and the confirmatory survey performed by the NRC thereafter were adequate at the time to demonstrate that the facilities met the criteria for release for unrestricted use. However, to demonstrate this compliance based upon current guidance, the Army intends to conduct some additional surveys of some of the remaining facilities (2nd quarter, CY95). Region II will continue to monitor the Army's progress. Region II will schedule confirmatory surveys of these facilities after review of the Army's final survey report.

Ft. Knox personnel forwarded a revised final survey plan for review and approval by Region II in a letter dated June 9, 1995. Region II personnel will complete their review of this plan in July, 1995.

Region II completed its review of the survey and decommissioning plan and forwarded its approval to Fort Knox personnel in a letter dated July 27, 1995. Army personnel are tentatively scheduled to begin the survey in early FY 96.

## **REGION II TERMINATED SITES LIST**

### **SITE STATUS REPORT**

**AUGUST 8, 1996**

Department of the Army  
Medical Research Laboratory  
Ft. Knox, KY

License No. 16-00380-03  
Docket No. 030-01746

Survey delayed due to reorganization of Army survey agency. Survey is now tentatively scheduled for the second calendar quarter of 1996. Region II personnel plan to be present during the survey to perform confirmatory measurements as the survey progresses.

Army survey team performed survey during first week in April, 1996. Army personnel failed to notify Region II staff that survey would be performed at that time, therefore no Region II personnel were present during the survey. Army personnel reported in a telephone call on May 14, 1996, that no levels of contamination above the criteria for release for unrestricted use were detected during the survey. The Ft. Knox licensee representative will forward the report of the survey results as soon as it is received from the Army survey agency. Region II will perform confirmatory survey after receipt and review of the Army survey report.

The final survey report is under review by Army staff and is expected to be sent to RII by the end of August, 1996.

STATUSREPORTS FOR SITES WITH SCORES <300  
(RECOMMENDED FOR DELETION)

Attachment 3

Status Summary:

ORNL Final Score:

11

Background

License No. 10-01125-01 was issued on September 13, 1956 authorizing the possession of up to 100 millicuries each of carbon-14 and iodine-131, in any form, for field and laboratory studies in plants and trees. The license was amended in May, 1957, to include up to 100 millicuries of phosphorus- 32. Licensee application described the facility as including a fume hood with a stainless steel top, waxed plastic floor tiles, air conditioner, porcelain sink, and benches. It did not identify the facility by name or building number.

The licensee was originally authorized to dispose of solid laboratory waste by burial at a University forest site 6 miles from town. The burial ground was described as a six foot by six foot hole which was six feet deep located in the center of 1/10 of an acre that was double-fenced and posted with standard radiation signs. Liquid wastes were disposed by release into the sanitary sewer. In April, 1961, the license was amended to authorize the disposal of byproduct material by incineration.

In a letter dated September 24, 1964, the licensee informed the AEC that it no longer wished to continue licensed activities under this license. The licensee also stated that the principal investigator (PI) had disposed of the licensed material before leaving the employment of the licensee and that a Form WA-277 had been forwarded to the AEC at that time. A copy of this form is

**REGION II TERMINATED SITES LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

Docket No. \_\_\_\_\_

License No. 10-01125-01

Licensee Name: University of Georgia

Site Name: School of Forestry

Site Address: \_\_\_\_\_

City: Athens State: GA Zip: \_\_\_\_\_

Regional Contact: Jay L. Henson

Phone: (404) 331-0344

**REGION II TERMINATED SITES  
LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

University of Georgia  
01  
School of Forestry  
Athens, GA

License No. 10-01125-

Docket No.

not in the file, but a letter from the PI to the AEC dated August 13, 1964, is in the file. The PI states in this letter that he had notified the AEC of the termination of licensed activities under this license approximately one year before the date of this letter.

A memo in the file indicates that the AEC canceled the license on October 10, 1964.

Assessment

Mr. Jay Henson contacted the State of Georgia Radioactive Materials Program Office (RMPO) on August 5, 1996 to discuss this site. The University of Georgia is currently a broad scope licensee of the State of Georgia. The Georgia RMPO staff are aware of a burial site which both the University of Georgia and the RMPO staff monitor on a periodic basis. After discussions with the RMPO staff, it was agreed that this site file be referred to the State for further investigation and action as they deem appropriate. Mr. Henson forwarded a copy of the documents contained in the retired docket file for this license to the Georgia RMPO on August 6, 1996. It is recommended that the terminated sites status for this site be changed from "open" to "closed".

## Status Summary:

ORNL Final Score:

11

### Background

License No. 51-12758-02 was issued in May, 1973, and authorized the possession of any byproduct material between atomic numbers 1 and 83, inclusive, in any form, in quantities not to exceed 1 millicurie per radionuclide. Higher possession limits were authorized for cesium 137 (36 mCi) and cobalt 60 (21 mCi)(both sources were sealed sources). The authorized use for these materials was instrument checking and calibration.

The licensed materials were used aboard the floating nuclear power plant, US Sturgis, (MH-IA). The Sturgis was stationed at Fort Davis, Panama Canal Zone during the life of this license. The license application included a drawing of the Radiochemistry Laboratory aboard the Sturgis where materials authorized by this license would be used. The laboratory work area included a fume hood and stainless steel work surfaces. Radioactive wastes were disposed by transfer to an authorized disposal facility.

This license was inspected on February 5, 1974 (AEC Form 591 violation, failure to post notice to workers) and April 9, 1975 (AEC Form 591, no violations).

On November 16, 1977, this license was terminated. The license was superseded by License No. 45-17819-01 when the Sturgis was moved from Fort Davis to Fort Belvoir, VA.

### Assessment

Since this license was superseded by License No. 45-17819-01, and the facility where material was used was a ship which was transferred to the new license address, it is recommended the terminated sites status of License No. 51-12758-02 be changed from "open" to "closed".

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

AUGUST 8, 1996

Docket No. \_\_\_\_\_

License No. 51-12758-02

Licensee Name: Department of the Army, 535th Engineer Detachment

Site Name: U.S. Sturgis

Site Address: Fort Davis, Panama Canal Zone

City: APO State: NY Zip: 09829

Regional Contact: Jay L. Henson Phone: (404) 331-0344

Status Summary:

ORNL Final Score:

14

Background

License No. SUB-00432 was issued on September 14, 1961 for the possession of 300 pounds of uranium which would be removed from approximately 200 tons of contaminated stainless steel scrap metal by smelting in an arc furnace.

The scrap metal was generated in the demolition of the Destrehan Street Plant in St. Louis by the Arch Wrecking and Salvaging Company. The demolition was performed under a contract (AT-/232/-44) from the AEC office in Weldon Spring, Missouri.

The metal was to be smelted in a 60-ton capacity, closed top, submerged arc furnace which was located in an open, shed type building. The uranium was expected to be removed with the slag. The slag would be stored separately and would remain the property of the AEC for either shipment to an authorized disposal area or abandoned at the smelter if low enough in activity. The AEC, St. Louis Area Office was responsible for all radiation safety control at the smelting facility.

The licensee was notified in a letter dated January 29, 1962, that its license expired on February 28, 1962. In a Certification of Status of Source Material Program Under United States Atomic Energy Commission dated February 2, 1962, the Plant Manager of the Calvert City facility certified that no source materials had been procured and/or possessed by the licensee.

**REGION II TERMINATED SITES LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

Docket No. 040-06578

License No. SUB-00432

Licensee Name: Pittsburgh Metallurgical Co., Inc.

Site Name: \_\_\_\_\_

Site Address: Site in Calvert City, KY; Parent company in Niagara Falls, NY

City: Calvert City State: KY Zip: \_\_\_\_\_

Regional Contact: Jay L. Henson

Phone: (404) 331-0344

**REGION II TERMINATED SITES  
LIST**

**SITE STATUS REPORT**

**AUGUST 8, 1996**

Pittsburgh Metallurgical Co., Inc.  
00432

License No. SUB-

Calvert City, KY

Docket No. 040-06578

The retired docket file does not contain any information on the close-out surveys which may have been performed by either the licensee or the AEC after the license expired and was terminated. If the certification of no materials possessed was accurate, then no surveys would have been required.

Assessment

The facility formerly operated by Pittsburgh Metallurgical Co.(PMQ is currently operated by SKW Metals and Alloys **(502-395- 7633)**. Bobby Smith, a former employee of PMC and a current employee (Plant Engineer) of SKW was contacted on July 31, 1996, to determine if he could confirm that PMC never received and smelted the contaminated stainless steel and never possessed licensed material as certified by the former Plant Manager on February 2, 1962. Mr. Smith stated that he was employed by PMC in 1959 and that he remembered discussions in the early 1960's regarding the possible smelting of the contaminated steel, but that the contaminated steel was not sent to PMC for smelting. He said the equipment that would have been used to smelt the metal was removed from the facility approximately 15 years ago. He also stated that SKW has radiation monitors at the facility and that if any contaminated metal or slag existed at the facility, it would be detected.

Based upon the fact  
that,

- (1) the former Plant Manager certified that no source materials had been procured and/or possessed by the former licensee under this license in a "Certification of Status of source Material Program Under United States Atomic Energy Commission" form dated February 2, 1962,
- (2) that the AEC was directly involved in the decommissioning and transfer of the contaminated steel from its point of origin and the disposal of any source material that would have been contained in the slag possessed by the former licensee had it smelted the steel, and
- (3) that another former employee who was employed at the facility before it was licensed and is currently employed at the same site as the Plant Engineer, remembers the proposed smelting project involving the contaminated steel and was able to verify that the contaminated steel was not received by the former licensee,

it is recommended that the terminated sites status for this site be changed from "open" to "closed".

REGION II MONTHLY INFORMATION STATUS REPORT

STATUS OF SITES IDENTIFIED BY ORNL

	Total	Sites Eliminated	Total Sites Pending	Pending Sites Contaminated
> 300	7	6	1 <sup>2</sup>	0 <sup>1</sup>
5-300	40	21	19 <sup>2</sup>	1
Total	47	27	20	1

1 - Contamination at one of these sites is undetermined

2 - Three <300 recommended for change to "closed" status in this report (3rd quarter, FY 96).

STATUS OF LICENSES WITH SEALED SOURCES NOT ACCOUNTED FOR

	Total	Eliminated or Transferred	Pending
> 300	0	0	0
< 300	75	5	70
Total	75	5	70

Note: Total Region II sealed source files reviewed and scored by ORNL was 71. Disposition/status of the files is:

3 - Transferred to other Region or HQ for resolution (status unknown)

2 - Deleted from list after Region II review

55 - At Region II awaiting review

11 - Returned to NRC archives by ORNL which have not been sent to Region II

Region IV transferred four files from Navy facilities for resolution by Region II.

TABULAR SUMMARY OF REGION II TERMINATED SITES

Attachment 5



## REGION II TERMINATED SITES, SCORES > 300

As of 05/14/96

LICENSE NO.	LICENSEE NAME	CITY, STATE	OAK RIDGE SCORE	STATUS
SNM-00724	Union Carbide	Lawrenceburg, TN	15,456	Open (note 3)
SNM-00730	B&W NNFD	Lynchburg, VA	7,346	Closed by RII action
SNM-00260	Lockheed-Georgia	Dawsonville, GA	6,534	Closed by RII action
SNM-00109	American Lava	Chattanooga, TN	6,140	Closed by RII action
45-14090-02	EPA	Vienna, VA	750	Closed by RII action
SUB-00587	David Witherspoon	Knoxville, TN	346	Closed by RII action
STB-00440	AMAX Spec.Metals	Washington, WV	321	Closed by RII action

### NOTES:

(Changes printed in bold typeface)

1. Original list had seven sites with scores >300.
2. Six sites have been removed from list through RII-supplied information.
3. UCAR submitted survey/sampling plan 11/94. RII comments to UCAR 1/12/95. UCAR response received 5/95. RII response forwarded to State of Tennessee for review 6/95. State comments received 6/95 and are under review. RII comments forwarded to UCAR 08/03/95. UCAR response to comments reviewed and RII approved plan 11/95. Licensee has tentatively scheduled survey to begin in the spring of 1996. UCAR started survey in April, 1996 and expected to complete in June. **Expected completion date changed to end of August, 1996.**

## REGION II TERMINATED SITES, SCORES < 300

As of 08/08/96

LICENSE NO.	LICENSEE NAME	CITY, STATE	OAK RIDGE SCORE	STATUS
01-02861-01	US Army Chem.Corps	Ft. McClellan, AL	240	Closed by RII action
SMB-00720	Union Carbide	Lawrenceburg, TN	219	Consolidated with SNM-724 (>300)
39-00743-05	Medical College of South Carolina	Charleston, SC	205	Closed by RII action
SNM-01315	US Nuclear	Oak Ridge, TN	180	Closed by RII action
10-01937-15	Georgia Tech	Atlanta, GA	163	Deleted by NMSS
32-00632-16	Duke Univ.Med.Cntr.	Durham, NC	148	Closed by RII action
SMA-00227	Vitro Chemical	Chattanooga, TN	123	Closed by RII action
SUB-00081	Homer Laughlin China	Newell, WV	115	Open (note 7)
09-07428-02	Florida Power & Light	Ft. Pierce, FL	84	Closed by RII action
C-03465	B&W NNFED	Lynchburg, VA	81	Closed by RII action
45-10085-03	Roanoke College	Salem, VA	66	Open (note 3)
52-13137-01	Dept.of HEW	San Juan, PR	48	Open
C-05317	Knoxville Iron Co.	Knoxville, TN	45	Closed by RII action
45-00953-02	US Army	Ft. Belvoir, VA	40	Closed by RII action
STB-00058	E.I.DuPont de Nemours	Belle, WV	37	Open
C-03469	American Lava	Chattanooga, TN	33	Closed by RII action
16-00380-03	US Army Med.Res.Lab.	Ft. Knox, KY	31	Open (note 5)
SNM-00842	EPA (Eastern Env.Rad. Facility)	Montgomery, AL	19	Closed by RII action

REGION II TERMINATED SITES, SCORES <300 (As of 08/08/96)

LICENSE NO.	LICENSEE NAME	CITY, STATE	OAK RIDGE SCORE	STATUS
47-17725-01	Appalachian Reg.Hosp. Facility)	Beckley, WV	13	Deleted by NMSS (note 6)
51-12758-02	US Army (535th Engineer Detachment)	Fort Davis Canal Zone, Panama	11	Open (Same as one below)(note 10)
45-17819-01	US Army (535th Engr.Det.)	Ft. Belvoir, VA	11	Open
39-12662-01	Jerry Walker and Charles Lee	Clemson, SC	7	Deleted by NMSS (note 6)
09-02747-04	US Air Force	Eglin AFB, FL	6	Deleted by NMSS (note 6)
SUB-00432	Pittsburgh Metallurgical Co.	Calvert City, KY	14	Open (note 8, 10)
C-03569	Kingston Pencil Corp.	Chattanooga, TN	10	Open (note 8)
SUB-00921	Atlantic Research Corp./Research and Ordnance Division	Alexandria, VA	22	Closed by RII action
C-03523	National Advisory Committee for Aeronautics	Langley Field, VA	8	Open (note 8)
C-04922	Carborundum Company	Parkersburg, WV	84	Closed by RII action
C-04327	Fostoria Glass Co.	Moundsville, WV	15	Open (note 8)
SUC-00628	Fostoria Glass Co.	Moundsville, WV	9	Open (note 8)
C-04345	Wheeling Tile Co.	Wheeling, WV	7	Open (note 8)
C-04576	Hercules Powder Co.	Ridgely, WV	6	Open (note 8)
SNM-00430	Radiochemistry, Inc.	Louisville, KY	10	Open (added 3/11/94)

REGION II TERMINATED SITES, SCORES <300 (As of 08/08/96)

LICENSE NO.	LICENSEE NAME	CITY, STATE	OAK RIDGE SCORE	STATUS
SUC-01047	Portsmouth Terminal	Portsmouth, VA	64	Closed by RII action
10-01125-01	University of Georgia	Athens, GA	11	Open (note 4, 10)
01-00126-13	Army-Redstone Arsenal	Huntsville, AL	14	Open (note 4)
39-01285-03	University of South Carolina	Columbia, SC	18	Closed by RII action
32-06655-07	Duke University	Durham, NC	32	Closed by RII action
09-01708-01	Orlando Research, Inc.	Orlando, FL	40	Open (note 4)
04-02579-01	Naval Postgraduate School	Monterey, CA	19	Closed by RII Action

NOTES:

(Changes printed in bold typeface)

1. Original list contained 22 sites with scores <300. Current list total is 40 separate license files.
2. **Seventeen have been removed from the list based on RII action.**
3. Information on radiological status of facilities used under terminated license not used under the current license requested 3/95. No response received as of 9/30/95. Licensee has contacted former authorized users for information on material used and surveys performed in formerly utilized laboratories. Licensee to forward results of contacts to RII by end of May, 1996. Licensee had not forwarded results by August and was contacted to determine status. Licensee contact unavailable, but assistant to try and determine if response prepared and forward to RII.
4. Additional 5 sites forwarded by ORNL 5/95.
5. Based on previous survey data by both the Army and NRC, Region II accepted proposal to resurvey two buildings. New survey protocol received 6/13/95 for review. Region II approved revised survey plan in July, 1995. Army scheduled to survey 3rd quarter FY 96. Army performed survey in April, 1996. **Army expects to forward final report by end of August, 1996.**
6. Four sites were deleted by NMSS based on additional contractor review.

## REGION I | TERMINATED SITES, SCORES <300 (As of 08/08/96)

7. Homer Laughlin's remediation efforts continue. New estimated date for completion is July/August, 1995. HLC submitted request for approval of alternative release criteria for fixed contamination in some areas of facility and on some equipment. Request reviewed by RII personnel. Forwarded to NMSS for review and approval in 11/95. Some areas at facility surveyed and released by RII personnel in 12/95. NMSS requested additional information from licensee before decision on TAR. Licensee preparing response and expects to forward in June, 1996. Response not received. RII has scheduled inspection of former licensee facility to determine status of facility and progress on response.
8. Additional 8 sites forwarded by ORNL 12/94.
9. Nineteen sites with scores <300 remain to be worked.
10. Sites recommended for deletion in this report period.



SEALED SOURCE FILES WHICH HAVE NOT BEEN FORWARDED TO  
REGION II

ORNL No.	License No.	Docket No.	Licensee
18	09-11579-01		Q.C. Laboratories Inc.
19	04-07326-02		Aerospace Corporation
22	16-17692-01		Mason & Hanger Silas Mason Co.
34	52-18076-01		Chevron Chemical Co. of Puerto Rico
35	52-09574-01		Puerto Rico Water Resources
Authority			
55	45-07740-01		U.S. Naval Weapons Station
60	GL-00337		Cottrell Electronics Corp.
66	SNM-00522	070-00574	Dept. of the Interior-Bureau of
Mines			
68	47-09638-05		Charleston General Hospital
69	47-17428-01		Allied Chemical Co.
70	47-17517-01		Preston Contractors, Inc.

Attachment  
6