

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 at Attachment I and those with a score from 5 to 300 are at Attachment 2. The status reports for those sites with an ORNL final score greater than 300 which Region II recommends be closed are at Attachment 3 and those with a score from 5 to 300 are at Attachment 4. The information required for the Monthly Information Status Report is at Attachment 5. A tabular summary of all files assigned to Region II is at Attachment 6.

A detailed description of the actions Region 11 has taken to evaluate the status of the two sites associated with the former American Lava Corporation (License No. SNM-00109, ORNL Score 6,140 and License No. C-03469, ORNL Score 33) is at Attachment 7. Region II recommends that the terminated sites status for both these sites be changed from "open" to "closed." We ask that you review these documents as soon as possible so that we may notify the current site owners/occupants of the results of our evaluations and recommendations.

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) Reports for sites <300 (recommend deletion)
  - (5) Monthly Information Status Report
  - (6) Tabular summary for all Region II sites
  - (7) American Lava Evaluations



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

November 6, 1995

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

SUBJECT:

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

STATUS REPORTS FOR SITES REVIEWED WITH SCORES <300

(RECOMMENDED FOR DELETION)

**REGION II TERMINATED SITES  
LIST**

**SITE STATUS REPORT**

**OCTOBER 31, 1995**

Docket No. 040-00575  
3469

License No. C-

Licensee Name: American Lava  
Corporation

Site Name: Central Research  
Building

Site Address: 25 Cherokee  
Boulevard

City: Chattanooga  
Regional Contact: Jay L. Henson  
0344

State: TN      Zip: 37405  
Phone: (404) 331-

Status Summary:

ORNL Final Score:  
33

Background

In April 1956, American Lava was issued Source Material License No. C-3469 authorizing possession and use of 200 pounds of refined source material for experimental purposes.

On June 7, 1957, the license was amended to authorize possession and use of 600 pounds of refined source material for fabrication into ceramic fuel for reactors and for experimental purposes.

On August 27, 1957, an inspection was conducted at the facility. At that time the licensee had received a total of 450 pounds of THO and 220 pounds of UO<sub>2</sub> under the license. The inspector described the operation as consisting of two rooms in the rear of the licensee's Central Research Building located a few blocks from the processing plant. In the Preparation Room, material was weighed, ball milled, mixed, dried, and then compressed in a 65,000 p.s.i. press. In the Kiln Room, pellets received from the Preparation Room were heated in a hydrogen atmosphere. The Kiln Room was vented to a vacant lot behind the building. No information on the quantity of material processed through the laboratory was given. This operation was essentially a testbed for the production facility subsequently licensed under SNM-00109. No other inspection reports are in the file.

On February 19, 1959, the possession limit was increased to 11,500 pounds.

## REGION II TERMINATED SITES LIST

### SITE STATUS REPORT

OCTOBER 31, 1995

American Lava Corporation  
(A subsidiary of 3M)  
Chattanooga, TN

License No. **C-3469**  
Docket No. **040-00575**

By letter dated June 28, 1960, the licensee requested **termination of** Source Material License No. C-3469. The licensee stated that no source material was on hand at the time, but provided no information concerning disposition of material or decontamination/closeout surveys of the research facility.

By AEC letter dated July 13, 1960, the license was terminated.

Former American Lava employees have stated that the former research building still stands at the corner of Cherokee Blvd. and Ames Ave. in Chattanooga. They believe it is occupied by elements of the Hamilton County government.

#### Assessment

There was a potential for contamination of the laboratory and adjoining vacant lot. There are no records concerning closeout surveys or facility cleanup.

On March 2, 1995, Region II personnel performed a followup inspection of this facility. It is currently occupied by the Southeast Tennessee Development District and elements of the Hamilton County Sheriff's Office. Access to original surface areas in the building was limited. The radiation levels of those surfaces which were accessible and surveyed were less than two times the background radiation level. These surfaces included concrete and painted brick materials. It was not possible to determine if the levels of radiation detected above background were due to formerly licensed material or naturally occurring materials in the concrete and brick.

The results of the survey were documented in a report sent to NMSS for concurrence. Based upon the results of the inspection/survey, and the history of the facility, Region II is recommending that this facility be deleted from the terminated sites list. A final decision on this recommendation will be rendered after review of the inspection report by NMSS.

**Based on the comments from the NMSS/LLW review, Region II will return to this facility in July, 1995, to obtain additional survey data to support and clarify Region II's conclusion that this facility meets the criteria for release for unrestricted use. Once this survey is complete, a final report will be forwarded to NMSS with Region II's recommendations regarding the deletion or need for additional review/assessment of this site.**

REGION II TERMINATED SITES LIST

SITE STATUS REPORT

OCTOBER 31, 1995

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(A subsidiary of 3M)  
Chattanooga, TN

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Docket No. 040-00575

Region II personnel performed an additional survey of this facility in July, 1995. The inspectors found no evidence of contamination **above the** release criteria during this inspection. Additional survey data obtained in unaffected areas of the facility supported the conclusion that the levels of radiation detected in the previous survey from the surface of the original building brick/block surfaces were due to naturally occurring materials in the bricks/blocks.

The July survey report and conclusions and recommendations are included with the 4th quarter, FY 95 site status report. Based upon the information in this report, it is recommended that the status of this terminated site be changed from "open" to "closed".