GENERAL ATOMICS

August 24, 1990
696-1612

Mr. George H. Bidinger, Section Leader
Uranium Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Docket No. 70-734: SNM-696; Submittal of Additional Information in Support of Request for SVA Decommissioning Plan Approval

REFERENCES: 1) Bidinger, George H. letter to General Atomics, ATTN: Dr. Keith E. Asmussen, dated July 24, 1990

2) Asmussen, K. E. letter no. 696-1534 to Charles J. Haughney, "Submittal of SVA Decommissioning Plan", dated March 30, 1990

Dear Mr. Bidinger:

This submittal is in response to your letter dated July 24, 1990 (Ref. 1), requesting additional information in support of General Atomics' (GA's) previously submitted request for approval of its SVA Decommissioning Plan (Ref. 2).

With only minor exception as discussed below, the requested additional information has been incorporated into the SVA Decommissioning Plan as revised pages. The added information appears on numerous pages of Sections 2, 3 and 4, as well as in the "Introduction and Summary." Further, as a result of certain of these changes, the pagination of subsequent pages in these sections were affected. Thus, for ease of revising your copies of the plan, enclosed are complete revised versions of Sections 2, 3 and 4, as well as the "Introduction and Summary" and the "Table of Contents." Please update your copies of the SVA Decommissioning Plan by discarding those sections of the plan (with pages dated April 1, 1990) in their entirety and replacing them with the corresponding enclosed entire sections whose pages are dated August 22, 1990.

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Revisions are indicated by shading. Pages whose content remains unchanged but whose page number has changed, have only the page number itself shaded. Pages on which neither the content nor the page number have changed have no shading whatsoever on them, but are dated August 22, 1990, as are all pages in the sections containing revisions.

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The following paragraphs address three items of requested additional information that were not completely incorporated into the plan itself.

The first item is in regard to the comment: "In addition to the contamination action levels in Table 3.3-1, the licensee should commit to the alpha contamination limits in Table 2 of Regulatory Guide 8.24 for skin, protective clothing worn in controlled areas, and personal clothing worn outside restricted areas."

Table 3.3-1 has been revised to include a commitment to the alpha contamination limits in Table 2 of Regulatory Guide 8.24 for skin and personal clothing worn outside restricted areas. The limit of Table 2 of Regulatory Guide 8.24 for protective clothing worn only in controlled areas has not been included in Table 3.3-1. The justification for this exception is as follows: Decommissioning workers will change out of their personal clothing into protective clothing prior to entering the controlled area. Their personal clothing will be stored outside the controlled area. During tasks which could result in a potential for high surface contamination levels, two pairs of coveralls will be worn; one pair will be removed immediately after the task is completed, the inner pair (which is unlikely to be contaminated) will be worn for tasks involving a low potential for surface contamination.

A second comment included the question: "What is the minimum negative pressure differential allowed for glove box atmospheres?" GA's response is that it does not express its criteria in terms of differential pressure. Rather, it imposes a limit in terms of a minimum flow rate. Specifically, a flow rate of at least 100 linear feet per minute is required across any opening.

The only other comment for which GA's response is not totally included as revised pages to the plan, is: "In addition, the licensee should commit to testing final HEPA filters in portable and fixed ventilation systems, as well as vacuum cleaners, annually and after any maintenance or filter change in accordance with ANSI 510-1980 (or latest revision)."

In response, the last paragraph of Section 3.3.4.3 "Ventilation Systems" was revised to add commitments to perform the following tests:

1) Visual inspection to verify housing integrity shall be performed during changing of the filters.

2) Weekly checks of the Magnehelic gauges to determine if the filters require changing.

In addition, the following commitments were incorporated as the last paragraph of the revised Section 3.3.4.3:

> Every operating task used in the facility will be monitored. The samples are to be collected and analyzed weekly. Each result above an alert level (>10% of the Maximum Permissible Concentration) will be investigated and corrective action taken.

The justification for not conducting additional tests of ventilation systems is based upon the established performance history of the SVA HEPA filters exhaust system and the controls that will be imposed upon decontamination work in the facility.

Since commencing fuel production operations, tens of thousands of kilograms of coated particle fuel have been processed through the equipment in the SVA facility. Those operations involved an annual throughput of many kilograms of enriched uranium and thorium. A review of releases from the facility for a period of several years prior to shutdown demonstrates that releases during fuel fabrication operations were minimal. When the facility was shut down in 1985, all equipment was cleansed of radioactive material. The only potential source of radioactivity that remains is in the form of radioactive contamination. Stack monitoring has continued after the shutdown of the facility; in fact, samples have continued to be collected and analyzed on a weekly basis. The results indicate negligible, if any, radioactivity.

All activities in the facility are carefully planned. In particular, any job/task which has potential for involving radioactive contaminates will be planned and conducted with special attention given specifically to controlling and locally containing any airborne radioactivity.

The exhaust from portable HEPA system units will, in most cases, be connected to SVA's main HEPA filtered exhaust system and not exhausted to room air. The use of a portable HEPA system unit not exhausting to the main HEPA filtered exhaust system will require prior review and approval on a case-by-case basis.

Based upon the above commitments and considerations, it is extremely unlikely that radioactive releases from the SVA facility could be significant, and it is concluded that no other testing of the ventilation systems is warranted.

Attached is a copy of your comments/requests for additional information (Ref. 1). This copy has been annotated with references to where GA's response to each comment/request can be found.

We trust you will find the information herein supplied to be sufficient and responsive, and we look forward to your early approval of the SVA Decommissioning Plan.

If you should have any further questions or require any additional information, please do not hesitate to contact me at (619) 455-2823.

Very truly yours,

Keith E. Asmussen

Keith E. Asmussen, Manager
Licensing, Safety and
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Enclosures as stated

cc: Ms. Merri Horn, U.S. NRC Hdqtrs. (3 copies of encl.)
Mr. Donald Kasun, U.S. NRC Hdqtrs. (letter only)
Dr. Gerard Wong, State of Calif., Dept. of Health Services,
Radiologic Health Branch (1 copy of encl.)
Mr. David Speed, State of Calif., Dept. of Health Services,
Environmental Management Branch (1 copy of encl.)
Mr. John Martin, Administrator U.S. NRC Region V (letter only)