

December 22, 2004

Edgar D. Bailey, C.H.P., Chief  
Radiological Health Branch, MS 7610  
Division of Food, Drug & Radiation Safety  
California Department of Health Services  
PO Box 997414  
Sacramento, CA 95899-7414

SUBJECT: NUCLEAR REGULATORY COMMISSION AND ENVIRONMENTAL  
PROTECTION AGENCY MEMORANDUM OF UNDERSTANDING WITH  
RESPECT TO GENERAL ATOMICS

Dear Mr. Bailey:

On June 15, 2004, Nuclear Regulatory Commission (NRC) staff met with the California Department of Health Services (DHS) staff and General Atomics (GA) staff at GA's site in San Diego, CA, to discuss the status of decommissioning actions at the site. One of the issues discussed at the meeting was NRC's implementation of the Memorandum of Understanding (MOU) between the NRC and the Environmental Protection Agency (EPA) concerning consultation and finality on decommissioning and decontamination of contaminated sites (67 FR 65375). After the meeting, the NRC held a number of internal meetings and conference calls to determine whether the NRC needed to consult with EPA on future GA decommissioning actions in accordance with the MOU. The enclosed technical evaluation summarizes NRC's determination concerning the need for consultations, and concludes that consultation is not needed with EPA at this time.

If you have questions concerning the technical evaluation, please call Julie Olivier, the Fuel Cycle Facilities Branch Project Manager for the GA license, at (301) 415-8098 or via e-mail to [jao@nrc.gov](mailto:jao@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams/html>.

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at (800) 397-4209 or (301) 415-4737 or [pdr@nrc.gov](mailto:pdr@nrc.gov).

Sincerely,

/RA/

Gary S. Janosko, Chief  
Fuel Cycle Facilities Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 70-734

License No.: SNM-696

Enclosure: NRC Technical Evaluation to Determine the Need to Consult with EPA on the Decommissioning of General Atomics in San Diego, CA

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**NUCLEAR REGULATORY COMMISSION  
TECHNICAL EVALUATION  
TO DETERMINE THE NEED TO CONSULT WITH EPA  
ON THE DECOMMISSIONING OF  
GENERAL ATOMICS IN SAN DIEGO, CA**

HISTORY

- Under U.S. Nuclear Regulatory Commission (NRC) license, SNM-696, General Atomics (GA) was authorized to possess and use special nuclear material (SNM) for activities related to nuclear research, fuel development, and fuel fabrication.
- Under the State of California (CA) Radioactive Materials License 0145-80, GA was authorized to use byproduct and source material for activities related to the fusion program, use of sources for calibration of instrumentation, and other research and development activities.
- In September 1996, GA submitted the same decommissioning plan (DP) to the NRC and CA for review, which included a table of the decommissioning criteria for various radionuclides (SNM, source, and byproduct material). The DP was revised in April 1997; the revisions included revised release criteria for natural uranium and depleted uranium. The NRC approved the DP and included it in GA's license by License Amendment 45, dated April 29, 1998. CA also approved the DP.
- GA is currently decommissioning its site and is pursuing partial site releases of areas of its site (per the approved DP), as it completes remediation of these areas. Thirteen partial site releases were requested by GA and approved by the NRC since the time that the Memorandum of Understanding (MOU) between NRC and the U.S. Environmental Protection Agency (EPA) was finalized (October 9, 2002).

BACKGROUND

- On June 15, 2004, an open meeting was held between the NRC, GA, and CA to discuss the status of decommissioning activities at the GA site and the status of decommissioning reviews by the NRC and CA.
- The NRC and CA discussed the implications of the October 9, 2002, MOU between the EPA and the NRC, regarding consultation and finality on decommissioning and decontamination of contaminated sites, on the GA site.
- Under the MOU, EPA agrees to continue its Comprehensive Environmental Response, Compensation, and Liability Act deferral policy of not listing sites on the national priorities list that are subject to NRC's licensing authority. Also, the deferral extends to sites where the NRC license was terminated and sites where certain criteria was met. The NRC will consult with the EPA if a site triggers any of the following criteria: (1) radioactive groundwater contamination above EPA's maximum contaminant levels; (2) radioactive soil concentrations exceed the values provided in Table 1 of the MOU; (3) license termination under either restricted release (10 CFR 20.1403) or alternate criteria provisions (10 CFR 20.1404) in the license termination rule.

- Under the MOU, the NRC will consult with EPA on any site where either the planned level of residual radioactive soil concentrations in the DP or the actual residual level of radioactive soil concentrations in the final status survey (FSS) exceed the radioactive soil concentrations in Table 1 of the MOU ("consultation triggers").
- CA discussed the possibility of GA remediating the wasteyard to levels below the MOU consultation triggers. CA also discussed the possibility of GA revising its DP to include clean-up levels corresponding to the MOU consultation triggers, as the FSSs may already demonstrate that the actual levels of residual radioactivity are less than the MOU trigger concentrations.
- The action items resulting from the meeting were: the NRC will provide clarification on any actions needed to meet the MOU, regarding the GA site. CA will discuss the issue internally. Until the parties can further discuss this issue, GA will not revise its DP.

## DISCUSSION

- The staff reviewed GA's approved release criteria for NRC-licensed material (1996 DP, with subsequent revisions). The other radionuclides, for which the DP includes release criteria, are licensed by CA, and therefore, are not under the purview of the MOU.
- GA's criteria for plutonium (Pu) cleanup levels are less than the EPA/NRC MOU trigger values for both residential and industrial/commercial land use. Therefore, consultation with EPA would not be required for Pu.
- For known enrichments and typical isotopic ratios of uranium isotopes in areas of the site where enriched uranium is present as soil contamination, GA's criteria for uranium cleanup levels are also less than the EPA/NRC MOU trigger values for both residential and industrial/commercial land use.
- The staff also compared the actual levels of residual uranium, as determined by the FSSs for the partial site releases, to the MOU trigger levels. For the requests of the partial site releases dated after the MOU was finalized, the actual levels of residual radioactivity for the uranium isotopes and their daughter products are less than the MOU trigger concentrations. Therefore, consultation with EPA is not required for the uranium isotopes and their daughter products.

## CONCLUSION

- At this time, consultation is not needed with EPA because none of the following factors are present at the GA site: (1) radioactive groundwater contamination above EPA's maximum contaminant levels; (2) radioactive soil concentrations exceed the values provided in Table 1 of the MOU; (3) license termination under either restricted release (10 CFR 20.1403) or alternate criteria provisions (10 CFR 20.1404) in the license termination rule. As the NRC staff continues to receive requests from GA for releases of land from its license, the staff will review the FSSs to determine whether the actual levels of residual radioactivity at the site for the NRC-licensed material trigger the MOU. If any of the levels do trigger the MOU, the NRC staff will consult with EPA, as established in the MOU.