



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 18, 2004

Docket Nos. 03005980
03005982
Control Nos. 134920
134921

License Nos. 37-00030-02
37-00030-08

Larry Harmon
Plant Manager
Safety Light Corporation
4150-A Old Berwick Road
Bloomsberg, PA 17815

SUBJECT: SAFETY LIGHT CORPORATION, REQUEST FOR ADDITIONAL
INFORMATION CONCERNING APPLICATION FOR RENEWAL OF LICENSE,
CONTROL NOS. 134920 AND 134921

Dear Mr. Harmon:

This is in reference to your letters (ML041310318 & ML041310328) dated April 22, 2004 requesting to renew Nuclear Regulatory Commission License Nos. 37-00030-02, and 37-00030-08. To accommodate a more efficient review, this letter combines our requests for additional information regarding both application. A Notice of License Renewal Application and Opportunity to Request a Hearing was published in the Federal Register on June 30, 2004 (Volume 69, Number 125, pages 39515 - 39517). We have completed the acceptance review of your applications for renewal of these licenses, and are prepared to continue with the full review.

In order to continue our review, we need the following additional information:

1. 10 CFR 30.32(i)(3) describes the information required for an emergency plan for responding to a release of radioactive material. The most recent update of your plan, titled "Radiological Contingency Plan," was submitted to the NRC on October 28, 1999. This plan describes the Safety Light facility, activities, accident scenarios, detection and response procedures, only as relates to the tritium processes of License No. 37-00030-08. The regulations specify that an emergency plan must include identification of each type of radioactive materials accident for which protective actions may be needed, which would include consideration of the stored radioactive waste and other materials of decommissioning. Provide confirmation that your Radiological Contingency Plan has been updated, is ready to implement, and includes consideration of the other regulated material on-site (i.e., stored silo waste).

2. 10 CFR 30.32(i)(3)(xii) describes the requirement to perform “biennial onsite exercises to test response to simulated emergencies.” Section 7.2 of your most recent Radiological Contingency Plan (dated October 29, 1999, ML003727436) states that you perform an annual evacuation drill which, biennially, is expanded into such an exercise. Provide the date and results of your last-performed Contingency Plan exercise, along with the scheduled date for your next drill and your next exercise.
3. Condition 18 of License No. 37-00030-08 requires that radioactive waste generated after January 1, 2000 from operations under that license be disposed of within two years of generation, providing a waste disposal site is open. Additionally, Condition 19 requires that waste generated prior to January 1, 2000, be disposed of or otherwise removed from your site by December 31, 2004. In your application dated April 22, 2004, you state that you have not been able to dispose of waste generated under License No. 37-00030-08 due to the diversion of all waste-disposal funds to the remediation conducted under License No. 37-00030-02. Although you have provided previous submissions detailing radioactive waste generation, this request is for a single, consolidated submission. Please provide:
 - a. A table showing all waste generated under License No. 37-00030-08, by year, since the license renewal in 1999. Include curie content and volume, as well as a description of the work-activity which resulted in the generation of the waste.
 - b. A table showing all waste generated under License No. 37-00030-08 that has been shipped since the last license renewal in 1999. This table should include shipping date, curie content, and volume.
 - c. An inventory of all waste generated under License No. 37-00030-08 currently held in storage, characterized by type of waste (e.g., columns, foils, paper waste, etc.), curie content, and volume. This inventory should be decay-corrected to show a curie content as of a specific date in 2004.
 - d. A detailed estimate of the cost for disposal of all tritium waste currently on the site, and a discussion of what waste cannot be disposed under current conditions, and why it cannot be disposed.
 - e. A discussion of how you handle, recycle, and/or dispose of returned signs containing tritium, including a statement of the curie content and volume of tritium signs that have been returned since the last renewal in 1999.
 - f. A discussion of actions you have taken to dispose of all waste generated under License No. 37-00030-08, any additional efforts that can be made to dispose of this waste, and your actions to minimize the generation of additional radioactive waste.

4. 10 CFR 20.1101(b) requires a licensee to implement procedures and engineering controls to achieve occupational doses As Low As Reasonably Achievable (ALARA). In consideration of this criterion, provide a discussion of the additional exposure to workers under License No. 37-00030-08 from the silo waste stored pursuant to License No. 37-00030-02.
5. 10 CFR 20.1302(b)(2)(i) requires demonstration of compliance with the annual dose limit for individual members of the public by maintaining releases of gaseous and liquid radioactive effluents below specified levels in table 2 of Appendix B to part 20. NUREG-1556, Vol. 12 "Consolidated Guidance About Materials Licenses : Program-Specific Guidance about Possession Licenses for Manufacturing and Distribution," Section 8.10.5 and Appendix M contain additional discussion of this subject. Provide a table summarizing all releases of radioactive material to the environment from activities under License No. 37-00030-08 since the last renewal in 1999. Please include a description of the release pathway, radionuclide(s) released, release amount (in curies and volume), and the estimated annual dose.
6. 10 CFR 30.33(a)(2) requires that a licensee's equipment and facilities adequately "protect health and minimize danger to life or property." NUREG-1556, Vol. 12, Section 8.9 and Appendix G provide a description of the information to submit in support of this requirement. Using this guidance, provide the following information:
 - a. Provide a map of your facility clearly showing the locations of the Restricted Area(s) and Unrestricted Area(s), as defined in 10 CFR 20.1003. (Note, a Restricted Area is one to which access is restricted by the licensee to prevent undue exposure to radiation and radioactive materials).
 - b. With respect to the material controlled under License No. 37-00030-02, provide a description of the areas that are designated as Radioactive Material and/or Radiation Areas as defined by 10 CFR 20.1003 and 10 CFR 20.1902.
 - c. Describe any planned facility changes and provisions to maintain exposures ALARA. In particular, describe plans to improve the storage condition for the containers of packaged silo waste that are stored outside. The containers should be protected from weathering, so that the drums remain intact and the labels are legible. Facility changes should also address possible dose rate controls to reduce exposure to workers and to the public.
7. 10 CFR 20.1003 requires that a licensee control access to Restricted Areas. Related to this requirement, please provide the following information:
 - a. Your document, "Procedure For Controlling Access to Restricted Industrial Area Owned by Safety Light Corporation," (dated 4/9/1999, ML 003727438) states that all entrances to the restricted area will be locked "other than during normal working hours." Describe how access to the Restricted Area is controlled when the entrances are unlocked. Also, describe the frequency with which the fenced boundaries are inspected for vulnerabilities or evidence of tampering.

- b. The "Procedure For Controlling Access to Restricted Industrial Area Owned by Safety Light Corporation" and the Health and Safety Program state that visitors to the Restricted Area are accompanied by an employee. The General Employee Training (dated 4/9/1999, ML 003727438) states that contractor personnel or visitors may be permitted unescorted access if they have the same knowledge and qualifications as Safety Light Corporation Employees. Describe how visitors are processed and what access or exposure controls apply to such individuals.
 - c. Describe how access to areas with radioactive material or radioactive waste are controlled to prevent the unauthorized removal of radioactive material. Include an accountability program for assuring that the licensed material remains in secure storage (e.g., an annual inventory, record and audit of inventory records).
 - d. Describe the control of keys to the gates bounding the restricted area, and to the six locked buildings. Include the title of the individual responsible for the keys and describe any tracking performed of keys issued.
- 8. 10 CFR 20.1301(a)(2) requires licensees to conduct operations such that the dose in any unrestricted area does not exceed 0.002 rem in any one hour. Describe the frequency with which Restricted Area Boundaries are surveyed to ensure compliance with this requirement. NUREG-1556, Vol.12, Appendix M provides additional discussion on this subject and may assist in your response.
- 9. 10 CFR 20.1802 states that a licensee shall control and maintain constant surveillance of licensed material that is located in an unrestricted area and is not in storage. Describe the staging locations for incoming and outgoing radioactive material shipments. If these locations are outside the Restricted Area, describe the controls used for the materials. If the locations are within the Restricted Area, describe the access controls used for the carriers during the shipments.
- 10. 10 CFR 19.12 describes the instruction that must be provided to workers likely to receive in excess of 100 mrem of occupational exposure in a year. Identify the individuals who will be responsible for maintaining control of the radioactive material and radioactive waste under License No. 37-00030-02. In general, the responsible individual should have a working knowledge of basic radiation safety practices and the regulatory requirements associated with the material being stored (cesium-137, tritium, strontium-90, americium-241, and radium-226). Also, describe how the individuals responsible for this radioactive material will be monitored or evaluated for purposes of occupational personnel exposure monitoring and controls.

11. Describe your contamination control program with respect to activities performed under License No. 37-00030-02, and measures to prevent the spread of contamination. Include the following:
 - a. Describe your contamination survey schedule for work and storage areas, and the criteria for remediation of areas that are accessible to workers and the public.
 - b. Describe your procedures for entry into contaminated areas that may be required to enter in response to emergency conditions, affects from storm damage, or vandalism.
12. With respect to your request for exemption of the decommissioning funding program, please provide the basis for reducing the funding level from \$9000 per month to \$5000 per month. Demonstrate that projected profits over the next two to five years support this funding level.
13. Please describe your plans to deal with potential impacts to operations under both licenses if the Environmental Protection Agency (EPA) were to initiate remediation activities during the period of the requested license renewal.
14. Since you may not be able to conduct further site characterization and decommissioning, we are considering whether to issue License No. 37-00030-02 for possession-only rather than for characterization and decommissioning. However, it is the current NRC policy for Possession-Only licenses to be reviewed and renewed every two years. Please comment on whether this change in license authorization is appropriate and describe the impacts (e.g., financial, labor, and/or material resources) of having to renew this license every two years.

The identified information should be provided within 30 days of the date of this letter. Please note that the technical review may identify additional omissions in the submitted information or technical issues that require additional information.

L. Harmon
Safety Light Corporation

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In accordance with 10 CFR 2.790, a copy of this letter and your response will be placed in the NRC Public Document Room and will be accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html>.

If you have any questions regarding this letter, please call Marjorie McLaughlin at (610) 337-5240.

Sincerely,

Original signed by John D. Kinneman

John D. Kinneman, Chief
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

Enclosures:

10 CFR 19
10 CFR 20
10 CFR 30
NUREG-1556, Vol. 12

cc:

William E. Lynch, Vice-President
Norman G. Fritz, Radiation Safety Officer

L. Harmon
Safety Light Corporation

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