



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

December 19, 2001

Docket Nos. 03005980  
03005982  
Control Nos. 128861  
128944

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

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

**SUBJECT: SAFETY LIGHT CORPORATION, REQUEST FOR ADDITIONAL  
INFORMATION CONCERNING REVIEW OF DECOMMISSIONING COST  
ESTIMATE AND DECOMMISSIONING PLAN  
CONTROL NOS. 128861 AND 128944**

Dear Mr. Harmon:

This is in reference to your letters, dated October 26, 2000 and December 6, 2000, which transmitted Decommissioning Cost Estimates (DCEs) and a Decommissioning Plan for Safety Light Corporation, Bloomsburg, Pennsylvania with a schedule for continuation of site remediation activities for inactive portions of the Bloomsburg site. This information was submitted to satisfy Conditions 13 and 20.B of your Nuclear Regulatory Commission License Nos. 37-00030-02, and 37-00030-08, respectively. As discussed below, we are unable to approve your DCEs.

We reviewed these documents to determine whether Safety Light Corporation (SLC) had submitted reasonable DCEs based on the requirements of 10 CFR Part 20, Subpart E. To determine the adequacy of your DCEs, we evaluated the reasonableness of your assumptions based on existing site characterization data, waste disposal costs, and specified remediation tasks. We also reviewed your Derived Concentration Guideline Levels (DCGLs) for surface and below surface radiological contamination. The NRC staff analysis involved: (1) independently calculating DCGLs for building surfaces, surface soil, and subsurface soil equivalent to 25 mrem per year (mrem/yr), and Groundwater Concentration Limits (GCLs) equivalent to 25 mrem/yr and 4 mrem/yr for comparison to maximum contaminant levels for radioactivity in community water systems ; (2) requesting contractor assistance to review SLC DCEs and available characterization data; and, (3) soliciting comments from the Commonwealth of Pennsylvania and the U.S. Environmental Protection Agency Region 3. The NRC also requested a contractor develop independent cost estimates for all areas within the SLC site for both unrestricted and restricted release scenarios.

With respect to SLC's derived DCGLs and GCLs, we concluded that SLC had adequately addressed the major isotopes of interest. SLC's DCGLs and GCLs were generally similar or more restrictive than those derived by the staff, except for a few cases. However, these differences would not have a significant impact on the cost estimates, and therefore, your site

specific DCGLs were used to develop DCEs for unrestricted and restricted release conditions. Our dose modeling approach and DCGL results are described in the NRC report entitled, "Evaluation of the DCGLs Proposed for Safety Light Corporation Site," dated October 1, 2001 (Enclosure 1). Please refer to Table 5 for a summary comparison of the NRC and SLC derived DCGLs and GCLs.

Based on our analysis of your DCEs, we concluded: that several assumptions in your DCEs are not reasonable; that significant remediation tasks were not addressed; and that additional characterization (approximately \$500,000) would be necessary to narrow the band of uncertainty with respect to a site DCE. However, because funding is limited, we do not recommend, and are not authorizing this expenditure.

NRC developed five scenarios which resulted in a range of DCEs. Using realistic waste disposal costs and reasonable assumptions for depth of soil contamination, we calculated DCEs being a factor of three to four higher than your cost estimates for unrestricted release of the site. These independent cost estimates are described in the Decommissioning Cost Estimate for Safety Light Corporation, Bloomsburg, PA, dated October 29, 2001 (Enclosure 2). Exhibit 1 shows the unrestricted release scenarios cost estimates range from \$94 million to \$120 million. We also included for your review, two working documents that provided the basis for these independent cost estimates. These contractor reports are: "Review of Safety Light Corporation Decommissioning Cost Estimate, Bloomsburg, PA," dated August 17, 2001 (Enclosure 3); and, "Review and Evaluation of Characterization Data Provided for Safety Light Corporation, Bloomsburg, PA," dated October 30, 2001 (Enclosure 4).

Your Decommissioning Plan provided a schedule for remediation activities, if funding were available. We recognize that you are unable to assign dates to the remediation tasks in your schedule until you are to begin remediation. Nonetheless, we conclude that the ranking of tasks included in your schedule is acceptable. It is our understanding that specific project decommissioning plans would be submitted for NRC approval, if a remediation task could be funded.

Based on the above information that was developed by NRC and its contractor, we do not approve your DCEs for both licenses. Please respond within 30 days from the date of this letter and provide your modified site DCE and identify your DCGLs that you would use to demonstrate compliance with 10 CFR Part 20, Subpart E. We suggest you consider the information developed to calculate an NRC site DCE for unrestricted release, and those NRC calculated DGCLs that are more conservative than your calculated DCGLs for future decommissioning planning. Should you choose to assume different parameters, e.g., depth of soil contamination, please provide a clear justification and explanation for the different values chosen.

Please reply to my attention and refer to Mail Control Nos. 128861 and 128944. If you have any technical questions regarding this deficiency letter, please call Marie Miller at (610) 337-5205.

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

L. Harmon  
Safety Light Corporation

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Sincerely,

***Original signed by Francis M. Costello***

Ronald R. Bellamy, Chief  
Decommissioning and Laboratory Branch  
Division of Nuclear Materials Safety

Enclosures:

1. Evaluation of the DCGLs Proposed for SLC (10/1/01)
2. DCE for SLC (10/29/01)
3. Review of SLC DCE (08/17/01)
4. Review & Evaluation of Characterization Data (10/30/01)

cc w/encl:

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

cc: (by separate letter):

D. Allard, PADEP  
J. Kopenhaver, PADEP  
W. Belanger, EPA Region 3  
E. Zanowiak, EPA Region 3

L. Harmon  
Safety Light Corporation

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