

FOREWORD

Prior to 1979, it was the responsibility of the Health Physics Department, under the direction of the Radiation Safety Officer, to ensure that an adequate radiation protection program was in place and that all recommended practices and procedures were adhered to. For reference purposes, a manual entitled "Nuclear Facility Health Physics Program", containing recommended practices related to radiation protection, was issued.

In 1979, the added responsibility of ensuring that adequate general industrial health and safety practices were being followed was also assigned to Health Physics. At the same time, the group's name was changed to Health & Safety Department. In November 1980, the name of the Nuclear Products Division was changed to Safety Light Corporation. An updated version of the above manual, entitled "Safety Light Corporation Health and Safety Program, Revision 2" was issued for use on 1 December, 1980. Revision 3 was issued on 1 July, 1983. On 4 April, 1986; a further updating was made, and issued as Revision 4. Revision 5, issued on 12 December, 1988; incorporated updated practices and procedures put into effect since Revision 4 was issued. Revision 6, 9 October, 1989; included additions to the employee training section and incorporated security procedures recently initiated.

Revision 7, dated 1 November, 1991; reflected changes to restricted area procedures, reaction to Processing Building alarm bell and available radiation and tritium monitoring equipment.

Revision 8, dated 1 January, 1994; incorporated the new revisions to 10 CFR Part 20, reflecting inclusion of Parts 20.1001 - 20.2401, with stress on the principle of operating to ALARA. As in previous program manuals, operating controls are designed to be equal to or more restrictive than regulations. This program shall be reviewed, at least annually, for content and implementation by the Radiation Safety Committee or their equivalent.

Revision 9, dated March 15, 1994; makes the corrections to the USNRC new telephone exchange number and reflects the correct reporting region (Region I) for any accountable occurrences.

Revision 10, dated April 15, 1998, updates telephone numbers, includes some minor corrections and reflects some changes in statements about current and past operations, revisions in stack exhaust monitoring, and receiving packages.

The present issue, Revision 11, dated September 29, 1998, addresses changes in function of the Radiation Safety Committee and stack exhaust monitoring, and updates some telephone numbers. Section 5.2 has been amended to reflect current wipe survey frequencies.

5.0.0 MONITORING PROGRAMS

5.1.0 AIRBORNE CONTAMINATION

5.1.1 Room Air Samples:

The air in each Processing Building room in which routine tritium gas production operations are conducted, will be monitored continuously for tritium, using an alarm-equipped monitor.

5.2.0 SURFACE CONTAMINATION

5.2.1 Smear Surveys:

- a. The Tritium Gas Processing room will be surveyed for removable tritium contamination by the Health & Safety Dept. each day production activity has taken place in that room. This survey shall be made by taking a number of smears at random locations in each room. The number of smears will be determined by the type of operation, the amount of radioactivity in process, and the past contamination history of the operation.
- b. Areas outside of the Tritium Gas Processing room will be at the discretion of the RSO or surveyor depending upon the activity and operations being performed.
- c. If emergencies or other high priority work do not allow for above smear surveys on the day that production activity has taken place in the Tritium Gas Processing room, the surveys shall be conducted by not later than the end of the following working day.

5.2.2 Additional Smear Surveys:

At the discretion of the RSO or surveyor other rooms in the processing building and other areas will be surveyed for removable tritium contamination. Frequency, location and areas surveyed will be dictated by operations taking place in these areas.

5.2.3 Quarterly Smear Surveys:

Each room occupied by Safety Light Corp. personnel outside of tritium restricted areas, will be smear-surveyed for tritium at least once each calendar quarter by the Health & Safety Dept.