UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 25, 2003

Mr. Rocky Green, President
Unertl Optical Company, Inc.
2900 S. Highland Dr.
Building 18C
Las Vegas, NV 89109

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON SELF-LUMINOUS GUN SIGHTS

Dear Mr. Green:

This letter is in response to your application dated June 20, 2003, for registration of self-luminous gun sights. In reviewing your application, we find that it is lacking information. In the Enclosure of this letter, we have summarized the issues not addressed in your application. The questions are related to the registration certificate of the gun sights. You will receive another letter regarding the exempt product distribution license.

Please submit the requested information within thirty days of the date of this letter. If we have not received complete information within thirty days of the date of this letter, we will consider your application as having been abandoned by you. This is without prejudice to the submission of a complete application.

If you have any questions, please contact me at (301) 415-7138 or Dr. John P. Jankovich at 301-415-7904.

Sincerely,

Tomas Herrera, Nuclear Safety Intern
Materials Safety and Inspection Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

Unertl Optical Company, Inc. SSD Case 03-45

Enclosure

Additional Information for
Registration of Gun Sights

Unertl Optical Company, Inc. application dated June 20, 2003, contained insufficient information on the issues below. Guidance on addressing the issues may be found in "Consolidated Guidance About Materials Licenses: Application for Sealed Source and Device Evaluation and Registration," NUREG-1556, Vol. 3. The document is available at the NRC web-site: www.nrc.gov.

1. Prototype Testing:

   1.1 Provide a statement that shows that the same units were used for each test.

   1.2 Please state your rationale for selecting the series and models used in prototype testing. Demonstrate how the prototype test results apply to all other series of devices and models.

2. Calculations:

   2.1 In Attachment 5A "Extreme Recoil Energy Data", please provide the calculations to demonstrate how you reached the recoil values that are shown. Our calculations resulted in different values.

   2.2 In Attachment 5A the test data shows that the sights were tested with 5000 rounds fired for a model Colt 1911 firearm. Please provide your rationale for testing two other models less than the 5000 rounds specified in NUREG-1556, Volume 8, Appendix O.

3. Design:

   3.1 Provide detailed information of how the different types of gun sights will be attached to the firearms. The application states on page 5, that the sights will be mounted to the gun by dove-tail, post, or screw. Please provide detailed drawings of the different methods of attachment that will be used.

   3.2 Provide detailed drawings and dimensions of the installation of the "bar" sources into the gun sights. Similar to those you have provided for the "dot" sights.

   3.3 We intend to use Fig-5 in the Sealed Source and Device registration certificate as an illustration. However Fig-5 shows the bar sources touching the outer surfaces of the side bodies. Please provide a drawing to replace Fig-5 which is proportional to the actual hardware.

   3.4 Elaborate on page 7, what is meant by a "defective sight" (e.g., change in color, loss of luminescence).

4. Labeling:

Provide the location, materials, dimensions, colors, method of labeling (e.g., painted, etched, molded, etc.), as well as drawings or illustration of the markings for labeling the sights.

5. Operations, Safety Instructions:

5.1 Provide a final copy of the user manual and the radiological safety instructions for the sights the consumer will receive with the product.

5.2 On page 7, paragraph 2 the proposal states that Unertl Optical Company, Inc. will request the users to return the units to the manufacturer "for proper disposal" please note that the user manual may not require, but can only propose such an action because exempt products are distributed without such conditions. Please include a clarification statement in your application.

6. Construction :

Please delineate the exact name for each model that are shown on Figures 5 and 6 as well as the front sight shown in Figures 1 and 3.

7. Quality Assurance:

7.1 Please confirm that the instruments used in the Quality Assurance Control Procedures/Equipment were calibrated in accordance with the applicable standards and that the calibration is traceable to the National Institute of Standards and Technology (NIST).

8. Typographical Errors:

Please confirm our understanding.

8.1 On page 14, in section 3.2.2. We assume the low temperature value -46 is meant to be -46°C.

8.2 In Attachment 5, Fig-6 we assumed that the value of 0.30 mCi is meant to be 30 mCi.

8.3 In the application the adhesive company name appears as Locktite we assume that this name is supposed to read Loctite.