Memo

March 2009

To: Owners/users of Seaman Nuclear Corporation Moisture-Density Gauges

From: Seaman Nuclear Corporation

Re: Non-applicability of personal monitoring dosimeters

Keep this document on file to meet U.S. Nuclear Regulatory Commission (NRC) requirement.

Personnel monitoring is addressed in the "NRC's Regulatory Guide NUREG-1556, Vol. 1, Rev. 1, pages 8-14 and Appendix I. Regulations: 10 CFR 20.1502, 10 CFR 20.1201, 10 CFR 20.1207, 10 CFR 20.1208.

> "Maintain, for inspection by NRC, documentation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10 percent of the allowable limits . . ."

Individuals are not likely to exceed 10% of occupational dose limits of 5 rems per year due to Seaman Nuclear Moisture Density Gauges. Therefore, personal monitoring and related recordkeeping are not required for Seaman Gauges.

The determination that individuals are not likely to receive more than 10% of occupational dose limits due to Seaman Nuclear moisture density gauges is based on:

1. A finding by the United States Nuclear Regulatory Commission.

2. Exposure history of Seaman Customers.

Occupational dose limits are much lower, ½ rem, for minors and pregnant women. Monitoring may be required for these individuals if they were regular gauge operators. Contact Seaman Nuclear or your State in this circumstance.

Safety and Labor Savings Note: According to the NRC, NUREG-1556 Appendix I "The most common way that individuals might exceed 10 percent of the applicable limits is by performing frequent routine cleaning and lubrication (source shield mechanism ) of gauges." With compressed air and the proper tools this procedure can be completed in ten minutes by an experienced individual and is expected to be repeated 125 times per year.

Note that that source shield mechanism in Seaman gauges is sealed and does not need to be serviced by the operator. That eliminates the largest cause of radiation exposure to the operator and saves over 20 hours of labor each year.