

ORGANIZATION: SOUTHERN MECHANICAL SEALS, INCORPORATED
MIRAMAR, FLORIDA

REPORT NO.: 99901215/91-01	INSPECTION DATE: January 30-31, 1991	INSPECTION ON-SITE HOURS: 8
CORRESPONDENCE ADDRESS: Southern Mechanical Seals, Incorporated 2324 S.W. 60th Terrace P.O. Box 3778 Miramar, Florida 33023		
ORGANIZATIONAL CONTACT: Mr. Ed Werner TELEPHONE NUMBER: (305) 966-6616		
NUCLEAR INDUSTRY ACTIVITY: Distributor of commercial-grade valve packing, pump mechanical seals, gaskets, gasket material, high temperature cloth, and industrial compounds. Currently has no nuclear industry activity.		
ASSIGNED INSPECTOR:	<u>Richard P. McIntyre</u> R. P. McIntyre, Reactive Inspection Section No. 1 (RIS-1), Vendor Inspection Branch (VIB)	<u>3/13/91</u> Date
OTHER INSPECTOR:	S. L. Magruder, Special Projects Section, VIB	
APPROVED BY:	<u>Uldis Potapovs</u> Uldis Potapovs, Section Chief, RIS-1, VIB	<u>3-13-91</u> Date
INSPECTION SCOPE: Unannounced inspection to review records, procedures and determine scope of supply to nuclear facilities.		
PLANT SITE APPLICABILITY: Turkey Point 3 & 4, St. Lucie 1 & 2, Crystal River.		

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A. INSPECTION FINDINGS AND OTHER COMMENTS:

1. Background

Southern Mechanical Seals, Incorporated (SMSI) is a small, family owned and operated (3-5 people) distributor of valve packing, pump mechanical seals, gaskets, gasket material, high temperature cloth, and industrial compounds. They have been in business, selling mainly in the South Florida area, since 1971. The current owner, Mr. Ed Werner, has been with the company since 1971 and became president in 1983. SMSI sells mainly to local municipal water and sewage plants, sugar mills, and exporters. Until recently, they also sold to the local power company (Florida Power & Light), both to their fossil fuel and nuclear plants.

The primary focus of this inspection was to identify the extent to which SMSI supplies equipment and replacement parts to the nuclear industry.

2. Review of SMSI's Sales to Nuclear Licensees

During discussions with Mr. Werner, the inspectors were informed that, with the exception of one sale to Florida Power Corporation (FPC), the only utility that SMSI has ever sold to is Florida Power & Light (FP&L). SMSI did a significant amount of business with FP&L from 1971 until August 1990. At its peak, sales to FP&L constituted approximately 30 percent of SMSI's business. The majority of their sales were to FP&L's fossil plants, however, some sales were to nuclear plants. SMSI sold items from almost their entire product line to the nuclear plants including; gaskets and gasket material, valve packing, spiral wound gaskets, mechanical pump seals, industrial anti-seize compounds, small valves, and high temperature cloth. All of the materials were ordered as commercial-grade, however, FP&L specified that for the FEL-PRO anti-seize compound, and the SILTEMP high temperature cloth, additional certifications were required. FP&L classified these orders as nuclear commercial-grade. Mr. Werner stated that he was not familiar with any nuclear requirements or specifications and that none had ever been imposed on SMSI. SMSI does not have, and has never had, any form of a quality assurance program.

Mr. Werner stated that FP&L performed annual audits of SMSI and required them to maintain a rudimentary quality assurance manual containing an organization chart and a simple receipt inspection procedure. The inspectors were unable to review any of the documentation and records

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associated with the FP&L purchases due to the fact that Mr. Werner recently (January 1991) purged all records dealing with FP&L from his files including the quality assurance manual.

3. Review of the Sale of Substituted John Crane Valve Packing to FP&L

FP&L notified SMSI on August 29, 1990, that they would no longer be doing business with them. This decision was prompted by FP&L's discovery that SMSI had provided them with valve packing material other than what was specified on the purchase order. FP&L stated that they ordered John Crane (JC) valve packing, style numbers K1760, C1050, and 1340, from SMSI and received, as a substitute, packing that was not manufactured by JC but was packaged in a JC box. When asked about this, Mr. Werner admitted that he had, on several occasions, substituted different packing when he received an order from FP&L for JC packing. He stated that he only did this when he did not have enough JC packing in stock to fulfill purchase order requirements. He also stated that this happens all the time in this business and that the substitutions didn't really matter because he believed that all manufacturers of this type of packing produced products of similar quality. A review of SMSI invoices from other valve packing manufacturers revealed that SMSI also purchases packing from Garlock Corporation and Chemstar Corporation.

FP&L initially identified the problem at one of their fossil plants. When they reviewed their records to determine the extent of the substituted packing at their other facilities, suspect material was identified in the warehouse for the Turkey Point nuclear facility. No suspect material was found at the St. Lucie nuclear facility and FP&L determined that no suspect material had been installed in any nuclear unit. Samples of the suspect material found at Turkey Point were sent to JC for chemical and braiding analysis. The results of the analysis verified that the suspect packing was not made from the material used by JC and was braided differently. JC's review also determined that SMSI was using non-standard boxes, cardboard spools instead of metal spools, and was remarking JC boxes and labels.

After reviewing the few records available and after discussions with Mr. Werner, FP&L and FPC, the inspectors concluded that it was likely that SMSI has never sold any materials as safety-related to any nuclear utility and sold commercial-grade replacement materials to only FP&L and FPC among nuclear facilities.

B. PERSONS CONTACTED:

C. E. Werner, President, SMSI