

~~Essential~~  
~~Low~~

January 24, 1984

VASSALLO  
CIRC  
to Tech.  
Dir.

Dr. Thomas E. Murley  
Regional Administrator  
United States Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Re: Docket No. 50-220

Dear Dr. Murley:

In accordance with Nine Mile Point Nuclear Station Unit 1 Technical Specifications, we hereby submit the following 30-day Nonroutine Environmental Operating Report. This report is submitted in accordance with the required content of section 4.6.2 of the Appendix B Technical Specifications.

Very truly yours,

*C. V. Mangan*

C. V. Mangan  
Vice President

Nuclear Engineering & Licensing

CVM/HJF:jkr

Enclosure

cc: Director, Office of NRR (1 copy) ✓

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# NONROUTINE ENVIRONMENTAL OPERATING REPORT

Nine Mile Point Nuclear Station Unit 1

Docket No. 50-220 . -

January 24 , 1984

## Introduction

This Nonroutine Environmental Operating Report is submitted in accordance with Section 4.6.2.a of the Nine Mile Point Nuclear Station Unit 1 Technical Specifications, Appendix B (Environmental Technical Specifications). Section 4.6.2.a indicates that a report shall be submitted in the event that Section 2, "Limiting Conditions for Operation" or a report level or specification is reached (as specified in Section 3, "Environmental Surveillance").

## Description

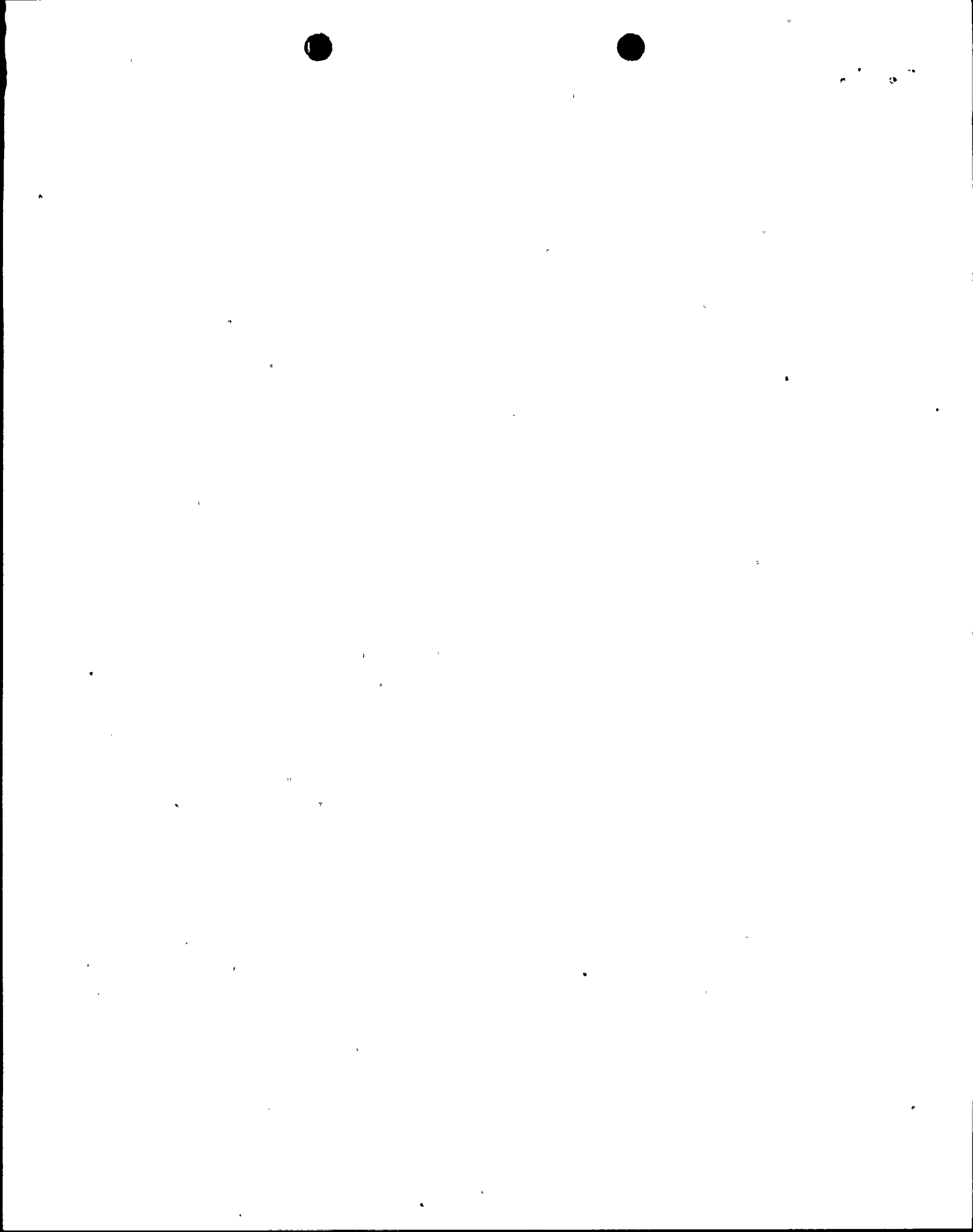
Appendix B, Table 3.2-1, requires that a sensitivity of 80 pCi/Kg - dry or less be attained for the radiological analysis of environmental fish samples. This sensitivity specification applies to gamma spectral analysis, Sr-89 analysis and Sr-90 analysis.

Fish samples collected during May 1983 showed eight of the nine sample results for Sr-89 to have sensitivities of greater than 80 pCi/Kg-dry. In addition, fish samples collected in October 1983 showed several radionuclides with a sensitivity of greater than 80 pCi/Kg - dry when analyzed by gamma spectral analysis. Sensitivities for Sr-89 and Sr-90 analyses were less than the required sensitivity for the October 1983 samples.

These inconsistencies were noted as a result of receipt and review of fish sample data on January 9, 1984 and December 27, 1983.

## Cause

The required sensitivity was not able to be met for several of the radionuclides for the gamma spectral analyses and the Sr-89 analyses because of the relatively short half-lives of the radionuclides in question. In addition, the required sensitivity is very low and is well below sensitivities required by Regulatory Guide 4.8 (Environmental Technical Specifications for Nuclear Power Plants) or NUREG-0473 (Standard Radiological Effluent Technical Specifications for Boiling Water Reactors).



### Corrective Actions

Several corrective actions were taken by the licensee and an additional action is presently being pursued. These actions include:

- (1) The required fish samples are analyzed using a large sample quantity and are counted for long periods of time in an attempt to achieve low sensitivities.
- (2) The licensee is presently working with the Commission to finalize the Radiological Effluent Technical Specifications (RETS) based on NUREG-0473. These specifications would effectively replace the present Environmental Technical Specifications (ETS). Implementation of the RETS will provide an attainable fish analysis sensitivity based on the more recent Branch Technical Position to Regulatory Guide 4.8 (1979) and NUREG-0473.



W. J. B.