

Metropolitan Edison Company
 Three Mile Island Nuclear Station Unit 1 (TMI-1)
 Docket No. 50-289
 Operating License No. DPR-50
 Nonroutine 30-Day Environmental Report 75-04

11-20-75

Report on an Anomalous Measured Level of Radioactivity

Description of Measured Level

A monthly composite of weekly grab samples of surface river water collected about 1.5 miles downstream from the TMI-1 river discharge had a total tritium activity of 1.20×10^{-6} $\mu\text{Ci/cc}$ as reported to Met-Ed on October 21, 1975. This value is greater than four times the control station value of 2.5×10^{-7} $\mu\text{Ci/cc}$, which was determined by Met-Ed's consultants during the station preoperation period.

Possible Cause

Discharges are made from the TMI-1 Liquid Waste Evaporator Condensate Tanks on an irregular schedule based on unit operating conditions. Weekly grab samples for the radiological environmental monitoring program are taken on a regular basis. It is believed that the grab samples which were composited to form this sample were taken during periods of evaporator condensate tank discharge and, accordingly, during periods of higher-than-normal river water tritium level.

Analysis of Measured Level

It is believed that neither the health nor safety of the public was threatened by the occurrence represented by this sample in that:

- The level of tritium activity was less than 1/1000th of the Maximum Permissible Concentration Level given in 10CFR20 for members of the public.
- The level of tritium activity at the nearest downstream source of continuous public use was a background level (4.11×10^{-7} $\mu\text{Ci/cc}$).
- No Technical Specification limits were exceeded.
- The event resulted from normal unit operations as described in the TMI-1 Final Safety Analysis Report.

Corrective Actions

The discharge of effluents from the Evaporator Condensate Tank is a normal process associated with unit operations and is described in the Final Safety Analysis Report. Sampling and analysis of Surface Water samples will continue in accordance with TMI-1 Environmental Technical Specifications, Table 3.