

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-271/88-09

Docket No. 50-271

License No. NPF-28

Priority --

Category C

Licensee:

Facility Name: Vermont Yankee Nuclear Power Station
Ferry Road
Brattleboro, Vermont 05301

Inspection At: Vernon, Vermont

Office Inspection Conducted: June 20-24, 1988

Inspector: for J. J. Kottan

Walter J. Paschak, Chief, Effluents
Radiation Protection Section, DRSS

7-13-88

Date

Approved by: for M. S. Hambury

Ronald R. Bellamy, Chief, Facilities
Radiation Safety and Safeguards Branch, DRSS

7/13/88

Date

Inspection Summary: Office Inspection on June 20-24, 1988 of Measurements made by a Representative of the State of Vermont

Areas Inspected: Vermont Yankee Nuclear Power Corporation offsite disposal of sewage waste containing licensed material during the period of January 1986 through May 1988.

Results: One unresolved item was identified (potential improper disposal of licensed material.)

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PDR ADOCK 05000271
Q PNU

DETAILS

During the period of January, 1986 through May, 1988, Vermont Yankee Nuclear Power Corporation disposed of sewage waste containing licensed material in the Town of Brattleboro's sewage waste treatment facility. Sewage from two onsite sewage holding tanks were routinely transported by truck to the treatment facility and disposed of there. The COB holding tank was emptied approximately twice per week during periods of heavy contractor activity. The main septic tank was emptied twice per year. During the period of June 8-10, 1988, a representative of the State of Vermont, Department of Health, made radioanalytical measurements of sludge sampled at the Brattleboro sewage waste treatment facility. Some of the radioactivity measured originated at the Vermont Yankee Nuclear Power Station. The radionuclides Cs-137, Cs-134, Co-60, Mn-54, and Zn-65 were found in the sludge samples. Several of these radionuclides are byproducts of the operation of the Vermont Yankee Nuclear Power Station.

A copy of the report prepared by the State of Vermont representative is enclosed. The report indicates the presence of licensed material in the Brattleboro sewage treatment facility sludge samples and provides specific concentrations of Co-60 that were detected. This situation is considered unresolved pending receipt of the licensee's complete evaluation of this problem. (88-09-01)

The Vermont Yankee Nuclear Power Station management was informed in a telephone conversation with Dr. Walter J. Pasciak of the Region I office on July 5, 1988.

June 14, 1988

CONTAMINATED SEWAGE SLUDGE SAMPLING
SAMPLING RESULTS SUMMARY AS OF 6/14/88

Cobalt 60

Brattleboro Sewage Treatment Plant

Composite sludge from storage pile

157 picoCuries/
Kilogram

Vermont Yankee site

Main septic tank (bottom)

1500 picoCuries/
Kilogram

Construction Office Bldg. holding tank (liquid)

Negative

Construction Office Bldg. holding tank (bottom)

125 picoCuries/
Kilogram

Stuart Thurber (Lilac Ridge) Farm, W. Brattleboro

Sludge storage pile (from Brattleboro sewage treatment plant)

115 picoCuries/
Kilogram

Vegetation next to sludge storage pile

Negative

Water - brook (300 feet from pit site)

Negative

Water - brook (1/4 mile from pit site)

Negative

Milk

Negative

Skibniowsky Goat Farm, Vernon

Water - pond

Negative

Whitaker Farm, Vernon

Soil, behind barn

Negative

Vegetation, behind barn

Negative

Water, brook

Negative

Water, brook

Negative

Enclosure 2

Whitaker Pit, Vernon

Soil, pit center	264 picoCuries/ Kilogram
Soil, west edge of pit	Negative
Soil, northwest edge of pit	Negative
Soil, southeast edge of pit	Negative
Soil, south edge of pit	Negative
Soil, northeast edge of pit	Negative
Vegetation, west edge of pit	Negative
Vegetation, inside pit	Negative

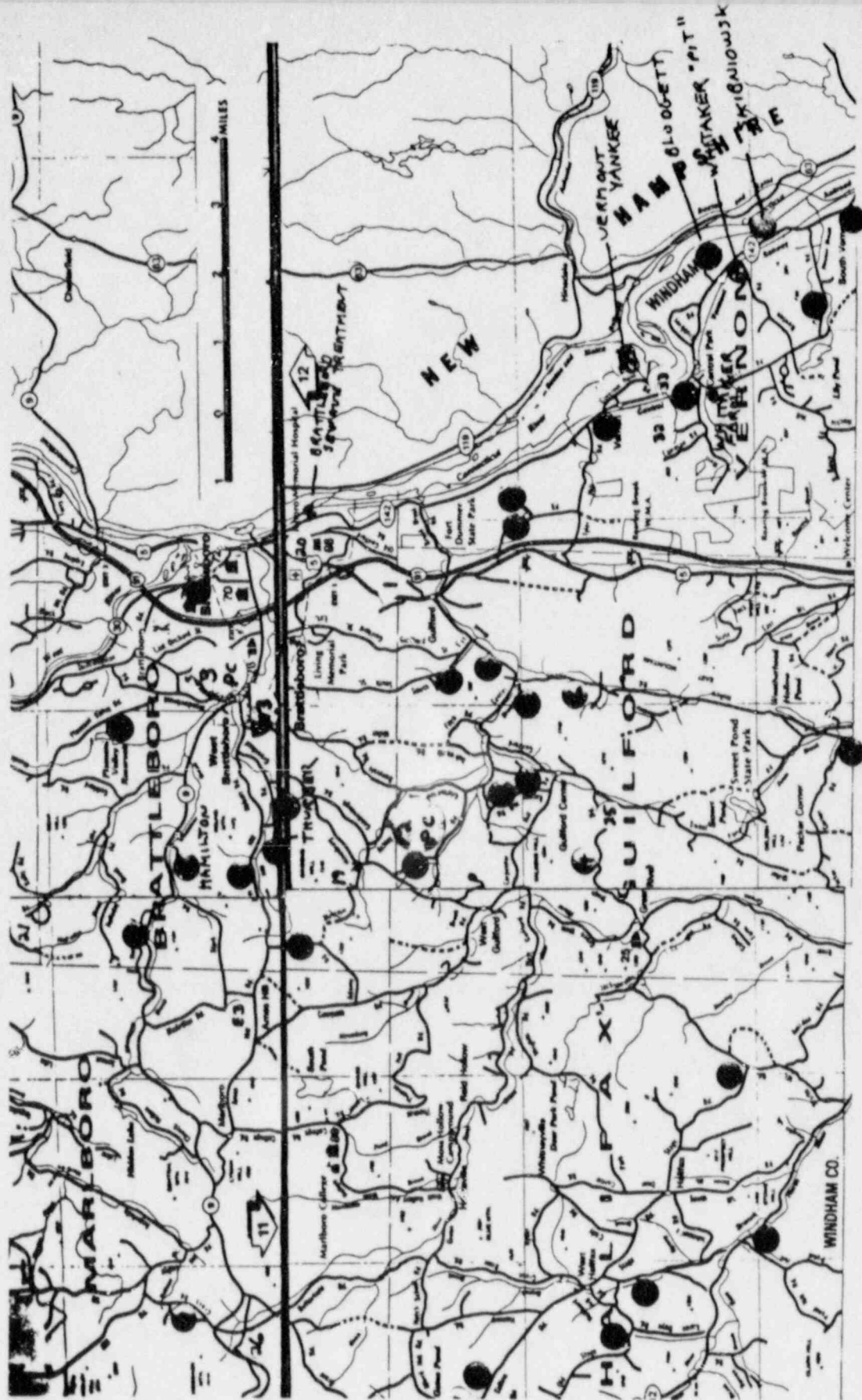
Edward R. Hamilton Farm

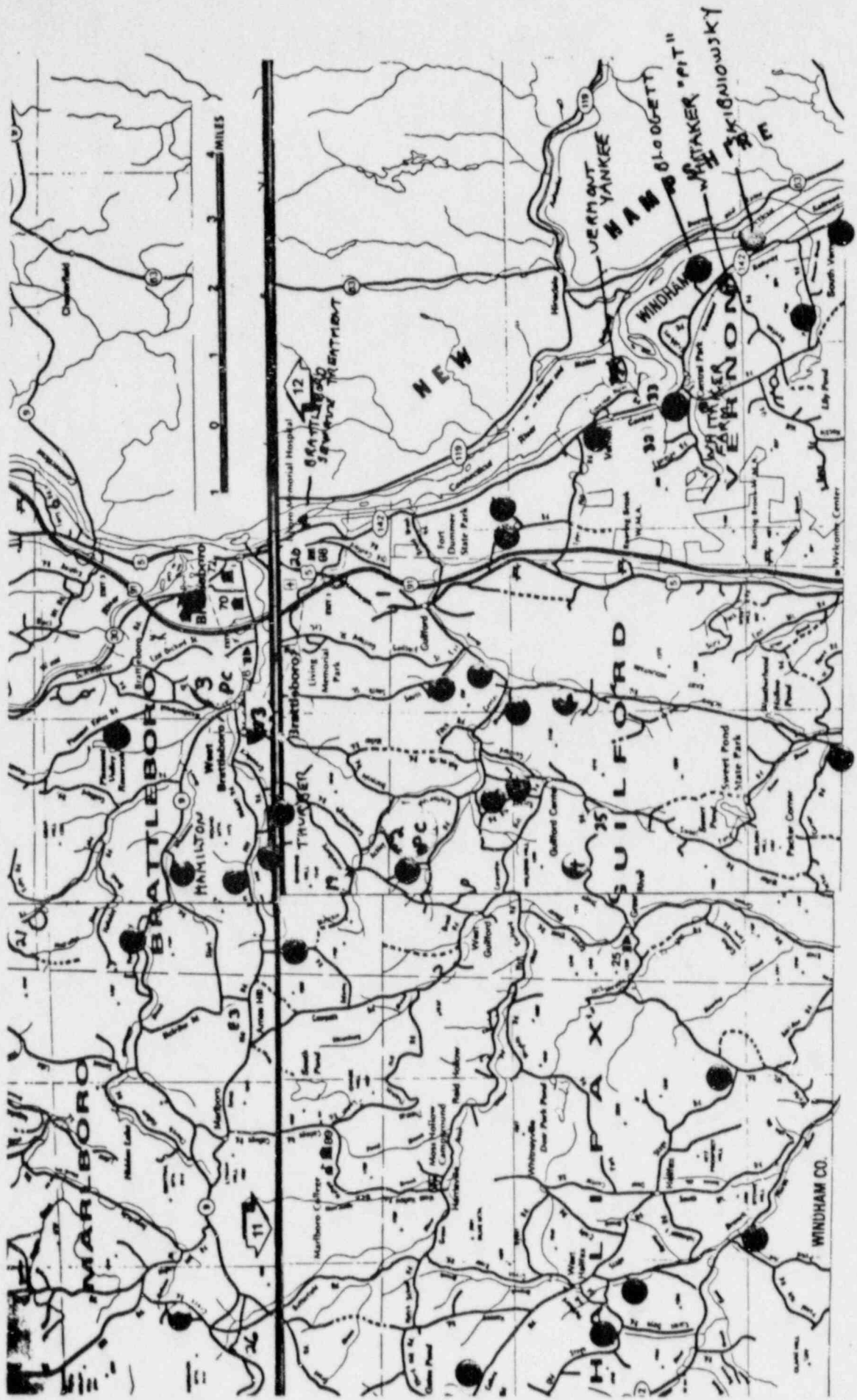
Milk	Negative
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Montpelier Sewage Treatment Plant

Control	Negative
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Submitted By: Raymond N. McCandless, Director





VERMONT
YANKEE
HAM BLOUETT
WATKINS "PIT"
WATKINS
WATKINS

WINDHAM CO.