LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 LICENSEE CODE: N Y J A F 1 (2) LICENSE NUMBER: 0 0 - 0 0 0 0 - 0 0 0 (3) LICENSE TYPE: 4 1 1 1 1 (4) CAT (5)

CON'T 01 REPORT SOURCE: L (6) DOCKET NUMBER: 0 5 0 0 0 3 3 3 (7) EVENT DATE: 0 8 2 9 7 9 (8) REPORT DATE: 0 9 1 9 7 9 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 Please See Attachment

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
Z Z (11)	X (12)	X (13)	Z Z Z Z Z Z (14)	Z (15)	X (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
7 9	—	0 5 1	/	0 4	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	Z (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Please See Attachment

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
G (28)	0 0 0 (29)	NA	B (31)	Environmental Sample

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	NA

993 2F

PUBLICITY

ISSUED	DESCRIPTION (45)
N (44)	NA

7909240566

NRC USE ONLY

NAME OF PREPARER: W. Verne Childs PHONE: 315-342-3840

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

ATTACHMENT TO LER 79-051/04T-0 Page 1 of 2

The following Environmental Radiological Monitoring sample is an anomalous measurement based on the criteria outlined in Section 5.6.2.B of the James A. FitzPatrick Environmental Technical Specifications (ETS).

MOLLUSK SAMPLES

	Sample Location*	Date	Mn-54 PCi/g (wet)
1.	Off-Site	5/30/79	< 0.034
2.	NMPW On-Site	5/30/79	0.077 ± 0.026
3.	FitzPatrick On-Site	6/11/79	0.53 ± 0.059
4.	FitzPatrick (Recount) On-Site	6/11/79	0.46 ± 0.055

* See Technical Specification, Appendix B for location details.

The activity level of Mn-54 in the FitzPatrick (on-site) is greater than ten times the control location (off-site) for the same sample period.

The control station ten times value is based on ten times an LLD value (4.66 sigma). Using an LLD value to evaluate anomalous measurements lends the comparison to be biased by the control station sample size and count time. As sample size and count time increase, the achievable LLD becomes proportionally lower. In this instance, the LLD for Mn-54 is low, resulting in an artifical anomalous measurement.

Possible explanation for the existance of such a disproportionate concentration of Mn-54 could be the very high bioaccumulation factor of manganese in fresh water mollusks, which are indigenous to the off-shore area of the site. The total release of Mn-54 via liquid effluent from the site (Nine Mile Point Unit No. 1 Nuclear Station and the James A. FitzPatrick Nuclear Power Plant) for the period of July 1, 1978 to July 1, 1979 was 0.574 Ci. Discharge dilution flow for this same period of time was equal to 2.19 ± E+10 liters (dilution during discharge).

The fresh water mollusks found in the vicinity of Nine Mile Point are not consumed by humans and are considered to be in the aquatic food chain to only a limited degree. Because fresh water mollusks are not considered edible, no accurate estimate of the possible dose contribution to man from their use as a food can be made. A dose estimate can be made using inflated parameters for the purpose of evaluation of possible dose contribution from the use of fresh water mollusks. Using the average individual consumption of seafood of 1.0 kg/yr for an adult, the dose to ingestion would be 0.0005 mrem/yr whole body and 0.0074 mrem/yr to the gastrointestinal tract from Mn-54 concentrations. As illustrated above the resulting dose is very low and in reality would probably be 0.0 mrem because the species is inedible. A review of Mn-54 data from 1974 through 1978 shows that a definite

trend exists for the reduction of Mn-54 concentrations in mollusk samples. The reportable concentration of 0.55 pCi/g (wet) shows a continued reduction of Mn-54 concentrations in sampled mollusk.

It should be noted that recent NRC reporting requirements, which were included in draft Technical Specifications, list the reporting level for Mn-54 as 30 pCi/g (wet). This new reporting level (which is not in effect yet for James A. Fitz-Patrick Nuclear Power Plant is nearly two orders of magnitude higher than the level being reported here.

NOTE: LER 78-068, 78-072, 78-077, 78-087 and 78-099 are similar events. In addition, this report is being submitted late due to Administrative error. The error occurred as a result of a similar event relating to the concentration of certain isotopes contained in other aquatic media samples. Based on telephone discussions with NRC Region I personnel, it was determined the event associated with the other samples did not require a report. The individuals responsible for preparing this report erroneously assumed that none of the aquatic samples, including the mollusk sample event, required a report.