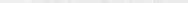


LICENSEE EVENT REPORT

CONTROL BLOCK: 

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	Y	J	A	F	1	2	0	0	-	0	0	0	0	-	0	0	0	3	4	1	1	1	1	1	4			5	
7	8	LICENSEE CODE						14	15	LICENSE NUMBER										25	LICENSE TYPE							30	57	CAT	58

CON'T

0 1 7 8

REPORT SOURCE L 6 0 5 0 0 0 3 3 3 7 0 8 2 9 7 9 8 0 9 1 9 7 9 9

60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0	2	Please See Attachment
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03 _____

04 _____

05 _____

0	6	
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07 _____

0	8	
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7 8 9

0 9

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)

9 10 11 12 13 14 15 16 17 18 19 20

(17) LER RO REPORT NUMBER 7 9 —

ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS				ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER					
X	18	Z	19	Z	20	Z	21	0	0	0	0	22	Y	23	N	24	Z	25	Z	9	9	9	4
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1	0	Please See Attachment
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1	1	
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1	2	
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1	3	
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1	4	
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8 9 FACILITY STATUS 1 5 G 28 10 11 12 % POWER 0 0 0 29 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 OTHER STATUS NA 30 31 32 METHOD OF DISCOVERY B 31 32 DISCOVERY DESCRIPTION Environmental Sample 32

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 6 Z (33) Z (34) NA NA

7 8 9 10 11 44 45 80

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37) 2 (38) MA	(39)			

PERSONNEL INJURIES										
NUMBER			DESCRIPTION							
1	8	0	0	0	40	NA				
7	8	9	11	12						80

LOSS OF OR DAMAGE TO FACILITY					
TYPE		DESCRIPTION			
1	9	Z	(47)	NA	993.25
7	8	9	10		80

PUBLICITY		ISSUED		DESCRIPTION		NA		7909240566		NRC USE ONLY	
2	0	N	44								
7	8	9	10								

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

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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

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

Possible explanation for the existence 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 $2.19 \pm E+10$ 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

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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.

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