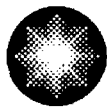


P.O. Box 63
Lycoming, New York 13093



Constellation Energy Group

Nine Mile Point
Nuclear Station

June 3, 2003

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

RE: Nine Mile Point Unit 1
 Docket No. 50-220
 DPR-63

Nine Mile Point Unit 2
Docket No. 50-410
NPF-69

Gentlemen:

Enclosed please find a copy of the following procedure revisions for Nine Mile Point Nuclear Station:

EPIP-EPP-07	Revision 06	Downwind Radiological Monitoring
EPIP-EPP-16	Revision 10	Environmental Monitoring
EPMP-EPP-08	Revision 10	Maintenance, Testing and Operation of the Oswego County Prompt Notification System

These procedure revisions are being submitted as required by Section V to Appendix E of 10 CFR Part 50. Should you have any questions, please feel free to contact Mr. James D. Jones, Director of Emergency Preparedness at (315) 349-4486.

Very truly yours,

Gary L. Detter
Manager Security & Emergency Preparedness

gd/cr

Enclosure

pc: Mr. H. J. Miller, Regional Administrator, Region I (1 copy)
 Mr. G. K. Hunegs, Senior Resident Inspector (1 copy)
 Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)

A045

NINE MILE POINT NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-07

REVISION 06

DOWNWIND RADIOLOGICAL MONITORING

TECHNICAL SPECIFICATION REQUIRED

Approved by:
G. L. Detter



Manager Security and Emergency Preparedness

8 MAY 03
Date

Effective Date: 05/15/2003

PERIODIC REVIEW DUE DATE MAY, 2004

LIST OF EFFECTIVE PAGES

<u>Page No.</u>	<u>Change No.</u>	<u>Page No.</u>	<u>Change No.</u>	<u>Page No.</u>	<u>Change No.</u>
Coversheet .					
i....					
ii....					
1....					
2....					
3....					
4....					
5....					
6....					
7....					
8....					
9....					
10....					
11....					
12....					
13....					
14....					

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 PURPOSE.....	1
2.0 PRIMARY RESPONSIBILITIES	1
3.0 PROCEDURE	1
3.1 Assembly and Dispatch of Downwind Survey Teams	1
3.2 Performance of Downwind Surveys	3
4.0 DEFINITIONS	5
5.0 REFERENCES AND COMMITMENTS	5
6.0 RECORD REVIEW AND DISPOSITION	6
ATTACHMENT 1: RADIOLOGICAL SURVEY DATA SHEET	7
ATTACHMENT 2: SURVEY TEAM BRIEFING FORM.....	8
ATTACHMENT 3: TABLE OF ON-SITE AND OFF-SITE SURVEY/SAMPLE LOCATIONS.....	9
ATTACHMENT 4: EMERGENCY TELEPHONE NUMBERS	11
ATTACHMENT 5: SURVEY TEAM WORKSHEET	12
ATTACHMENT 6: ESSTC DOWNWIND SURVEY TEAM GUIDANCE.....	13
ATTACHMENT 7: SURVEY TEAM KIT EQUIPMENT.....	14

1.0 PURPOSE

To define the responsibilities and actions of personnel directing and performing radiological surveys and sampling inside and outside the station Owner Controlled Area during an emergency.

2.0 PRIMARY RESPONSIBILITIES

2.1 The Environmental Sample/Survey Coordinator (ESSTC):

2.1.1 Assembles and provides technical and administrative direction from the EOF to Downwind Survey Teams.

2.1.2 Ensure continuous accountability for personnel actively assigned RP responsibilities.

2.2 The Radiation Protection Team Coordinator (RPTC):

2.2.1 Assembles and provides technical and administrative direction from the OSC to the Downwind Survey Teams prior to EOF activation.

2.2.2 Ensure continuous accountability for personnel actively assigned RP responsibilities.

2.3 Downwind Survey Teams perform sampling and radiological surveys inside and outside the station Owner Controlled Area during an emergency.

2.4 The Offsite Dose Assessment Manager (ODAM) provides overall coordination of the offsite dose assessment effort, including direction to the ESSTC.

3.0 PROCEDURE

3.1 Assembly and Dispatch of Downwind Survey Teams

3.1.1 RPTC Actions

a. Receive a briefing and instructions from the ESSTC or the RAM, depending on which facility becomes operational first.

b. Assemble teams that shall consist of a minimum of two downwind qualified individuals.

c. Assign teams and designate as follows:

1. Team A: Locate plume maximum does rates based on wind direction.

3.1.1.c (Cont)

2. Team B: Assess radiological conditions onsite and outside the protected area including for example:
 - Security Buildings
 - Warehouse
 - P Building
 - Engineering Support Building
 - Nuclear Learning Center
 - Energy Center
 - Parking Lots
3. Team C: Assess radiological conditions inside and outside the protected area.
- d. Provide a job brief to each team utilizing Attachment 2.
 1. Provide each team with a copy of the completed Attachment 2.
- e. Direct teams to gather supplies and equipment, using Attachment 7, Survey Team Kit Equipment, and report to RPTC on radio channel 3 (for Unit 1 incidents) or radio channel 4 (for Unit 2 incidents) when ready for dispatch.
- f. Fax completed Attachment 2s to the ESSTC at 593-5992.

3.1.2 Downwind Survey Team Actions

- a. Obtain briefing and completed Attachment 2 from the RPTC.
- b. Obtain the following equipment and supplies:
 1. Working copies of EPIP-EPP-07.
 2. Copies of required data sheets.
 3. The following documents:
 - Drivers license
 - Company ID or Oswego County Emergency Identification Card ("Green Card")
 4. Appropriate dosimetry, protective equipment and clothing, radiation monitoring and communications equipment from the Unit 1 Storeroom or the EOF. See Attachment 7, Survey Team Kit Equipment, for guidance.

3.1.2.b (Cont)

5. A company or private vehicle. Keys to company vehicles are contained in the OSC key box. Company vehicles best suited for downwind survey tasks (equipped with cell phone, radio and AC power inverter) are as follows:

Vehicle	Group	Designated parking location
5-483*	Security	At Unit 1 Security (inside fence)
5-484	Emergency Preparedness	Nuclear Learning Center
5-487*	Environmental Protection	At Unit 1 Security (inside fence)
5-576	Security	At Unit 1 Security (inside fence)
3-1113*	Environmental Protection	TBD
2-1459	Information Management	East side of P-Bldg.
2-1792	Unit 2 M & TE	North end of L-shape Bldg.
2-1802	BM & G	Nuclear Learning Center
2-1883*	Emergency Preparedness	TBD
2-1893	BM & G	TBD

* Equipped with AC Power Inverter.

- c. Verify the operability of all equipment.
- d. When ready for dispatch, contact the RPTC on radio channel 3 (for Unit 1 incidents) or radio channel 4 (for Unit 2 incidents).
1. Inform the RPTC that the team will be turning over to the EOF.
 2. Establish communication with the EOF using one of the following means:
 - Primary: Radio channel 13 (Downwind Teams)
 - Alternate: Radio channel 14 (NMP Admin)
 - Alternate: Telephone (ESSTC at 593-5988 or RPTC AT 349-1272)
 - If unable to contact the EOF, re-establish communications with the RPTC using Step 3.1.2.d.

3.2 Performance of Downwind Surveys

3.2.1 ESSTC actions

- a. Obtain completed Attachment 2s from the EOF Dose Assessment fax.
- b. When contacted by the teams, verify their readiness to perform surveys.
- c. Utilize Attachment 6 to provide specific team tasks.
- d. Review survey team assignments in Step 3.1.1.c.

3.2.1 (Cont)

- e. Review communications methods in Step 3.1.2.d.
- f. Instruct EOF Radio Operator to record data from teams using Attachment 1.
- g. Provide periodic updates to teams that include:
 - Status of radiological release.
 - Emergency classification and subsequent changes
 - Changes in meteorological conditions
 - Onsite and offsite protective actions
- h. Instruct teams to obtain air sample measurements of baseline activity and in areas of elevated activity.
- i. Complete Attachment 5 for significant field data.
- j. Provide results to the ODAM as appropriate.
- k. Periodically fax completed Attachment 1 and Attachment 5 to the County and State Emergency Operations Centers. These numbers may be obtained from the County and State representatives in the EOF.
- l. Instruct teams to return all data sheets to the EOF or OSC upon completion of mission.

3.2.2 Downwind Survey Team Actions

- a. Take the following measurements/samples:
 - Contact and 1 meter open and closed window readings (for general area radiation data).
 - Air samples when directed to do so by the ESSTC.
- b. Perform surveys and samples in accordance with S-RPIP-3.0, except where indicated below:
 1. Conduct continuous count rate or dose measurements while mobile.
 2. Obtain air sample measurements when directed to do so by the ESSTC.
 - a. Minimum air sample volume should be at least 45 cubic feet unless otherwise directed.

3.2.2.b.2 (Cont)

- b. Silver Zeolite (AgZ) cartridges shall be used for all samples unless otherwise directed.
 - c. AgZ cartridges that read >8500 cpm should be returned to the Environmental Lab at the EOF for gamma spectral analysis as this may indicate CDE_T doses >5 rem.
3. Obtain dose rate or count rate measurements at each survey location as follows:
- a. Obtain ground level contact readings by scanning along a line about 20 feet long at right angles to the wind direction. Report and record peak readings only.
 - b. Obtain one meter (waist level) readings along the same line that the contact reading were taken. Report and record peak readings only.
 - c. Record all data on Attachment 1.
 - d. Retain all data.
- c. Transmit survey data results to the EOF. At a minimum include all shaded areas of Attachment 1.
 - d. The ESSTC should ensure Survey Team Worksheets (Attachment 5), or equivalent form are completed and forward to the ODAM.

4.0 **DEFINITIONS**

None

5.0 **REFERENCES AND COMMITMENTS**

5.1 **Technical Specifications**

Unit 1 Tech Spec, Section 6.15

5.2 **Licensee Documentation**

5.2.1 Nine Mile Point Nuclear Station Site Emergency Plan

5.3 Standards, Regulations and Codes

- 5.3.1 NUREG-0654 FEMA-REP-1: Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness In Support of Nuclear Power Plants.

5.4 Policies, Programs and Procedures

- 5.4.1 EPMP-EPP-02, Emergency Equipment Inventories and Checklists
- 5.4.2 EPIP-EPP-15, Emergency Health Physics Procedure
- 5.4.3 S-RPIP-3.0, Radiological Surveys

5.5 Commitments

None

6.0 RECORD REVIEW AND DISPOSITION

The following records generated by this procedure as a result of an actual emergency declared at Nine Point Nuclear Station shall be maintained by Records Management for the Permanent Plant File in accordance with NIP-RMG-01:

- Attachment 1, Downwind/Re-entry Survey Data Sheet
- Attachment 2, Survey Team Briefing Forms
- Attachment 5, Survey Team Worksheet
- Logs
- Radiation Survey Log Sheets

The following records generated by this procedure during emergency drills or exercises are not required for retention in the Permanent Plant File:

- Attachment 1, Downwind/Re-entry Survey Data Sheet
- Attachment 2, Survey Team Briefing Forms
- Attachment 5, Survey Team Worksheet
- Logs
- Radiation Survey Log Sheets

ATTACHMENT 1: RADIOLOGICAL SURVEY DATA SHEET

[illegible][illegible]

ATTACHMENT 2: SURVEY TEAM BRIEFING FORM

Date _____

Time of Briefing _____

Briefing conducted by: (Print/initial) _____

Team Members	Team Members	Team Members
<input type="checkbox"/> Downwind <input type="checkbox"/> Inplant <input type="checkbox"/> Re-entry	<input type="checkbox"/> Downwind <input type="checkbox"/> Inplant <input type="checkbox"/> Re-entry	<input type="checkbox"/> Downwind <input type="checkbox"/> Inplant <input type="checkbox"/> Re-entry

Mission:

- ☐ Inplant: _____
- ☐ Downwind: ☐ Mobile Survey and _____
- ☐ Environmental: _____
- ☐ Re-entry: _____

Briefing Details (Check when complete)

- ☐ RWP _____
- ☐ Anticipated radiation/contamination levels _____
- ☐ Required dosimetry and protective clothing _____
- ☐ Dose guidance and limits
 - ☐ normal station (occupational) limits in effect
 - ☐ emergency dose limits in effect (as directed by TSC RAM)
- ☐ Pre-selected and alternate routes _____
- ☐ Where to report results _____
- ☐ Wind speed/direction (Downwind/Re-entry only) (from Control Room Chemistry Tech or EOF Met Advisor) _____
- ☐ Status of radiological releases (from RAM or ESSTC) _____
- ☐ Emergency classification _____
- ☐ Implemented protective actions (onsite and/or offsite) _____
- ☐ Communications methods (radio channel, phone numbers)
- ☐ Caution: If general area dose rates exceed 8000 mrad/hr. O.W., retreat to an area of lesser exposure and contact ESSTC (for downwind teams) or RPTC (for inplant teams)

NOTE: Consider background dose rates when evaluating sample contact dose rates.

- ☐ Caution: If unshielded, uncorrected contact dose rates on any sample or object exceed 2000 mrad/hr. O.W., do NOT handle sample directly.
- ☐ Contact the ESSTC (593-5988) when Downwind teams have been dispatched.
- ☐ Fax this briefing sheet to the ESSTC (593-5992) at the completion of the briefing.

ATTACHMENT 3: TABLE OF ON-SITE AND OFF-SITE SURVEY/SAMPLE LOCATIONS

Sheet 1 of 2

Sector	Sample ID#	Location-Description	Miles (from Site (1))	Azimuth	ERPA(s)
C	C-1 (Off-site)	1.3 Miles North on Ontario Point Road by Environmental Station R-5	16.2	40°	(2)(3)
D	D-1 (On-site)	30' South of NMP-II	0.4	72°	1
D	D-2 (On-site)	Dirt access road along the lake on JAFNPP Site by Environmental Station H	1.0	73°	1
D	D-3 (Off-site)	In hamlet of Selkirk on County Route 5	11.3	71°	14
D	D-4 (Off-site)	0.65 miles north of the entrance to Selkirk Shores State Park on NY Route 3	11.3	77°	14
D	D-5 (Off-site)	Corner Rainbow Shores Road and NY Route 3	13.5	65°	(3)
E	E-1 (On-site)	In front of NMP Unit 2 combined construction offices	0.3	89°	1
E	E-2 (On-site)	Along dirt access road by Environmental Station H on JAFNPP Site	0.9	93°	1
E	E-3 (Off-site)	Corner of Lake Road and Nine Mile Point Road	1.9	97°	1,2
E	E-4 (Off-site)	Shore Oaks-at the end of Shore Oaks Drive	2.7	94°	2,4
E	E-5 (Off-site)	Hickory Grove-at the end of Hickory Grove Drive	4.6	96°	4
E	E-6 (Off-site)	Intersection of NY Route 104B, County Route 1, and County Route 43	6.6	101°	7
E	E-7 (Off-site)	Texas-intersection of NY 104B and County Route 16	7.8	95°	15
E	E-8 (Off-site)	Corner of Hager Drive and NY Route 3	10.2	86°	14
F	F-1 (On-site)	Along Lake Road about 0.3 miles of JAFNPP access road	1.2	107°	1
F	F-2 (On-site)	Intersection of County Route 29 and Lake Road	1.1	105°	1
F	F-3 (Off-site)	Nine Mile Point Road halfway between Lake Road and Miner Road intersection	2.1	114°	2
F	F-4 (Off-site)	Intersection of Pleasant Point Drive (County Route 44) and County Route 1	3.9	110°	4
F	F-5 (Off-site)	Intersection of NY Route 104 and County Route 6	5.5	121°	4,7,8,9
F	F-6 (Off-site)	Intersection of NY Route 104 and County Route 43 at Toll Gate	7.4	116	7,8
F	F-7 (Off-site)	Intersection of County Route 64 and NY Route 104 in the Village of Mexico	9.3	117°	16
G	G-1 (On-site)	Nuclear Learning Center	0.2	129°	1
G	G-2 (On-site)	Along NMP Unit 2 material access road approximately 50' from Lake Road intersection	0.5	142°	1
G	G-3 (On-site)	250' south of JAFNPP Access Road on Lake Road in ball field	0.7	131°	1
G	G-4 (Off-site)	Intersection of Miner Road and County Route 29	1.9	142°	1,2
G	G-5 (Off-site)	Intersection of Nine Mile Point Road and County Route 1	2.8	134°	2,4,5
G	G-6 (Off-site)	Intersection of NY Route 104 and NY 104B	4.8	126°	4,9
G	G-7 (Off-site)	Intersection of Lilly Marsh Road and Darrow Road	6.1	135°	9
G	G-8 (Off-site)	Cummings Bridge, intersection of County Routes 6, 51 and 64	7.3	136°	8,9
G	G-9 (Off-site)	Hamlet of Vermillion on County Route 35	9.6	137°	8,18

(1) Center of the site is taken as the NMPNS Unit II Reactor Building.

(2) Environmental Station/Control Point, does NOT appear on "Off-Site Survey Location Map #4"

(3) Not in an ERPA, outside EPZ

ATTACHMENT 3 (Cont)

Sheet 2 of 2

Sector	Sample ID#	Location Description	Miles from Site ⁽³⁾	Azimuth	ERPA(s)
H	H-1 (On-site)	South side of Lake Road about 0.15 miles west of NMP Unit 2 materials access road	0.5	155°	1
H	H-2 (On-site)	Nine Mile pole #3, 1/2 way between the two transmission lines on Miner Road	1.6	157°	1,2,3
H	H-3 (Off-site)	North Scriba, intersection of County Routes 1 and 29	2.5	152°	2,5
H	H-4 (Off-site)	Hammonds Corners, intersection of NY Route 104 and County Route 29	3.5	159°	5,10
H	H-5 (Off-site)	South New Haven, intersection of County Routes 51, and 51A	5.2	149°	9
H	H-6 (Off-site)	0.1 mile east of O'Conner Road County Route 4 by Environmental Station E	7.1	159°	18
H	H-7 (Off-site)	Intersection of County Route 6 and McDougall Road	9.2	156°	18
J	J-1 (On-site)	Along the Private Road, south of NMP II Cooling Tower	0.4	174°	1
J	J-2 (On-site)	NMP Pole #1 intersection of Miner Road NMP Transmission Road	1.5	177°	1,3
J	J-3 (Off-site)	Intersection of North Road, and NMP transmission lines east of Lakeview Road	2.2	178°	3,5
J	J-4 (Off-site)	Intersection of NY Route 104 and County Route 51A	3.8	176°	5,10
J	J-5 (Off-site)	Intersection of O'Connor Road and Hay Fly Road	5.5	176°	10
J	J-6 (Off-site)	Intersection of Route 176 and Black Creek Road	7.9	177°	20
J	J-7 (Off-site)	Intersection of State Highway 176 and Howard Road	11.1	176°	⁽³⁾
K	K-1 (On-site)	Intersection of the Private Road and Energy Center Road	0.8	211°	1
K	K-2 (On-site)	Intersection of Miner Road and Lakeview Road	1.6	189°	1,3
K	K-3 (Off-site)	Intersection of County Route 1 (North Road) and Creamery Road	2.6	205°	3,5,6
K	K-4 (Off-site)	Scriba, intersection of NY Route 104, Creamery Road and Klocks Corners Road	3.9	194°	5,6,10,11
K	K-5 (Off-site)	Lansing, intersection of County Routes 4 and 53	5.7	201°	11,19
K	K-6 (Off-site)	At intersection of County Route 53 and Dutch Ridge Road	7.6	193	19
K	K-7 (Off-site)	Minetto, intersection of County Routes 48 & 25	9.0	201°	21
L	L-1 (On-site)	Energy Center access road, approx. 0.1 mile from the Private Road	0.5	224°	1
L	L-2 (On-site)	Intersection of Lakeview, Private Road & County Route 1A	1.4	219°	1,3
L	L-3 (Off-site)	Walker, intersection of County Routes 1 and 1A	3.1	221°	3,6
L	L-4 (Off-site)	100' N. of Seneca Street on St. Paul's Cemetery Road by Environmental Station G	5.2	226°	12
L	L-5 (Off-site)	Oswego, intersection of NY Route 104 and NY 481	6.6	229°	12
L	L-6 (Off-site)	SUNY Oswego, intersection of Route 104 and College Access Road	8.1	232°	22
L	L-7 (Off-site)	Oswego Center, intersection of County Routes 7 & 20	9.6	220°	22
M	M-1 (On-site)	Energy Center Access Road approx., 60' from building	0.5	246°	1
M	M-2 (On-site)	Meteorological Tower	0.8	250°	1
N	N-1 (On-site)	Energy Center	0.4	265°	1

⁽³⁾ Not in an ERPA, outside EPZ

ATTACHMENT 4: EMERGENCY TELEPHONE NUMBERS

TSC

Radiological Assessment Manager 349-1353
..... 343-6408

OSC

Radiological Protection Team Coordinator 349-1272

EOF

Environmental Survey/Sample Team Coordinator 593-5988
..... 593-5987
Fax 593-5992

EOF Radio Operator 593-5991

Emergency Vehicle Cell Phone Numbers

5-484 593-4646

5-487 593-4645

5-1113 593-4651

2-1883 593-9606

2-1459 592-1041

5-576 592-1008

2-1802 592-1107

5-483 592-1125

2-1792 592-1188

2-1893 592-1165

ATTACHMENT 5: SURVEY TEAM WORKSHEET

From: Survey Team ID _____ Reviewed by: _____

1. Survey Date/Time _____ / _____

2. Location # _____

3. General Area Radiation Data:

	<u>Contact</u>	<u>1m or G/A</u>	
a. Open Window	_____	_____	mrad/hr OW - cpm (circle one)
b. Closed Window	_____	_____	mrad/hr - cpm (circle one)
c. B Correction Factor	_____		

4. Air Sample Data:

a. Duration _____ (min)

b. Flow rate _____ (ft³/min)

c. Air sample volume (ft³) = Duration x Flow Rate

(Workspace) _____ x _____ = _____ ft³

d. Background at sample media counting location _____ cpm

e. Particulate prefilter reading _____ ☐ cpm ☐ mrad/hr OW

f. Silver Zeolite Cartridge reading _____ ☐ cpm ☐ mrad/hr OW

5. Calculations:

a. Particulate Activity ($\mu\text{Ci/cc}$) $\frac{(1.6 \text{ E } -10) \times \text{Particulate Prefilter Reading (cpm)}}{\text{air sample volume (ft}^3\text{)}}$

(Workspace) $\frac{(1.6 \text{ E } -10) \times (\text{_____ cpm})}{(\text{_____ ft}^3)} = \text{_____ } \mu\text{Ci/cc}$

b. Iodine Activity ($\mu\text{Ci/cc}$) $\frac{(3.4 \text{ E } -9) \times \text{Silver Zeolite Cartridge Reading (cpm)}}{\text{air sample volume (ft}^3\text{)}}$

(Workspace) $\frac{(3.4 \text{ E } -9) \times (\text{_____ cpm})}{(\text{_____ ft}^3)} = \text{_____ } \mu\text{Ci/cc}$

c. Noble Gas Activity ($\mu\text{Ci/cc}$) = 1 meter or G/A open window (mrad/hr OW) x (1.4 E -6)

(Workspace) _____ mrad/hr OW x (1.4 E -6) = _____ ($\mu\text{Ci/cc}$)

d. I/NG Ratio $\frac{\text{Iodine Activity}}{\text{Noble Gas Activity}}$

(Workspace) _____ = _____

ATTACHMENT 6: ESSTC DOWNWIND SURVEY TEAM GUIDANCE

Objectives	Actions	Observables
Locate Plume	<ul style="list-style-type: none"> Instruct team to traverse plume at right angles to the wind. This should be done 1-3 miles downwind to start. (Note: A team should traverse the plume \leq two or three times unless meteorological or source term conditions change). 	<ul style="list-style-type: none"> Note where 1m dose rates elevate above background OR elevated readings return to background. Peak 1m dose rate readings indicate maximum concentration or high ground deposition.
Characterize Plume	<ul style="list-style-type: none"> Instruct team to take 1m and contact GA dose rates. 	<ul style="list-style-type: none"> Contact readings greater than 1m readings indicate ground deposition (Note: in this case 1m reading may be biased by ground shine). Contact readings equal to 1m readings indicate no deposition. Ground deposition indicates iodines and/or particulates are present.
	<ul style="list-style-type: none"> If no ground deposition is present, take 1m OW dose rate reading to calculate release rate 	<ul style="list-style-type: none"> N/A
	<ul style="list-style-type: none"> Instruct teams to take air samples 	<ul style="list-style-type: none"> Elevated particulate prefilter readings indicate iodines or particulates are present. Elevated silver(zio)ite cartridge readings indicate iodines are present.
<ul style="list-style-type: none"> Verify appropriateness of protective actions (or lack of protective actions) 	<ul style="list-style-type: none"> Survey inhabited locations 	<ul style="list-style-type: none"> Verify absence of radiological hazard Verify radiological conditions are as expected

ATTACHMENT 7: SURVEY TEAM KIT EQUIPMENT

Page 1 of 1

The following items should be considered for inclusion in the equipment and supplies contained in the Survey Team "Kit":

EQUIPMENT

- ☐ Count Rate Meter
- ☐ Dose Rate Meter (0-5 R/hr)
- ☐ Dose Rate Meter (0-50 Rh/hr)
- ☐ High Range Dose Rate Meter (0-1000 R/hr)
- ☐ Silver Zeolite Air Sample Pack
- ☐ Charcoal Air Sample Pack
- ☐ Radeco AC Air Sampler
- ☐ O₂ Meter

DOSIMETRY

- ☐ TLDs
- ☐ Finger Rings
- ☐ Dosimeter (0-5 R)
- ☐ Dosimeter (0-50 R)
- ☐ Dosimeter (1-200 R)
- ☐ Dosimeter Charger
- ☐ Electronic Dosimeter

PROTECTIVE EQUIPMENT

- ☐ Protective Clothing (PCs)
- ☐ Full Face Respirator
- ☐ Spare canisters
- ☐ Flashlights
- ☐ KI Tablets

SUPPLIES

- ☐ Radeco DC Air Sampler
- ☐ Maps
- ☐ Tape
- ☐ Smears
- ☐ Plastic Bags
- ☐ Maslin Cloth
- ☐ Extension Cord
- ☐ Latex Gloves
- ☐ Rubber Boots
- ☐ Rain Suit
- ☐ Gym Bag
- ☐ Rad Rope
- ☐ Step Off Pads
- ☐ Rad Tags (as appropriate)
- ☐ Rad Signs (as appropriate)
- ☐ Plastic Booties

NINE MILE POINT NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-16

REVISION 10

ENVIRONMENTAL MONITORING

TECHNICAL SPECIFICATION REQUIRED

Approved by:
G. L. Detter


Manager, Security and Emergency Preparedness

MAY 03
Date

Effective Date: 05/15/2003

PERIODIC REVIEW DUE DATE MAY, 2004

LIST OF EFFECTIVE PAGES

Page No. Change No.

Page No. Change No.

Page No. Change No.

Coversheet .

23

i

24

ii

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

21

22

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 PURPOSE	1
2.0 RESPONSIBILITIES	1
3.0 PROCEDURE	2
3.1 The Environmental Survey/Sample Team Coordinator (ESSTC) actions:	2
3.2 Environmental Monitoring Teams actions:	2
3.3 The Offsite Dose Assessment Manager (ODAM) Actions:	2
3.4 The Emergency Director/Recovery Manager (ED/RM) actions:	2
4.0 DEFINITIONS	3
5.0 REFERENCES AND COMMITMENTS	3
6.0 RECORDS REVIEW AND DISPOSITION	4
ATTACHMENT 1: RADIOLOGICAL ENVIRONMENTAL SAMPLING PROGRAM TABLE	6
ATTACHMENT 2: EMERGENCY ENVIRONMENTAL SAMPLE DATA SHEET REFINED CONTAMINATION SURVEYS	8
ATTACHMENT 3: 10CFR140.84, RADIOLOGICAL CRITERIA FOR EXTRAORDINARY NUCLEAR OCCURRENCE	9
ATTACHMENT 4: PROTECTIVE ACTION GUIDELINES FOR INGESTION PATHWAY	12
ATTACHMENT 5: DIRECTION OF ENVIRONMENTAL SAMPLE COLLECTION	14
ATTACHMENT 6: COLLECTION OF ENVIRONMENTAL SAMPLES	15
ATTACHMENT 7: SNOW SAMPLING	16
ATTACHMENT 8: GROUND CONTAMINATION SAMPLING	17
ATTACHMENT 9: GROUND DEPOSITION SAMPLING	18
ATTACHMENT 10: VEGETATION SAMPLING	19
ATTACHMENT 11: SURFACE WATER SAMPLING	20
ATTACHMENT 12: ESTIMATION OF TOTAL POPULATION DOSE	21
ATTACHMENT 13: NEAR SITE ENVIRONMENTAL MONITOR LOCATIONS	23
ATTACHMENT 14: OFFSITE ENVIRONMENTAL MONITOR LOCATIONS	24

1.0 PURPOSE

- 1.1** To provide data used in the determination of radiological dose and contamination estimates from environmental samples.
- 1.2** To determine if an emergency situation should be classified as an Extraordinary Nuclear Occurrence in accordance with 10CFR140, Subpart E, Extraordinary Nuclear Occurrences.
- 1.3** To describe and provide for the initiation of an expanded Radiological Environmental Monitoring Program (REMP) to determine maximum exposed individual dose and population man-rem doses upon termination of the accident release.

2.0 RESPONSIBILITIES

2.1 Emergency Director/Recovery Manager (ED/RM)

- 2.1.1** Makes the decision to notify off-site emergency management agencies.
- 2.1.2** Makes Protective Action Recommendations (PARs), as necessary, to off-site emergency management agencies.

2.2 Offsite Dose Assessment Manager (ODAM)

Provides overall coordination of the offsite dose assessment effort, including direction to the ESSTC.

2.3 Environmental Sample/Survey Coordinator (ESSTC) OR Supervisor Environmental Protection:

- 2.3.1** Directs the activities of and provides technical and administrative direction from the EOF to Downwind Survey teams.
- 2.3.2** Ensures continuous accountability for personnel actively assigned out of plant surveys.
- 2.3.3** Directs the expanded environmental monitoring program.
- 2.3.4** Assesses the radiological impact of station operation on the general public and the environment.
- 2.3.5** Interprets analyses data from samples collected for the expanded environmental monitoring program.

2.4 Environmental Monitoring Teams

Perform sampling and radiological surveys outside the station during an emergency.

3.0 PROCEDURE

NOTE: It is not necessary to execute steps or actions in the order listed to successfully perform this procedure.

3.1 The Environmental Survey/Sample Team Coordinator (ESSTC) actions:

NOTE: Attachment 1, Radiological Environmental Sampling Program table provides guidance on determining what to sample and quantities.

- a. Implement emergency environmental sampling in accordance with:
 - Attachment 5, DIRECTION OF ENVIRONMENTAL SAMPLE COLLECTION.
- b. Determine if 10CFR140 criteria are met in accordance with Attachment 3, 10CFR140.84, RADIOLOGICAL CRITERIA FOR EXTRAORDINARY NUCLEAR OCCURRENCE
- c. Assist the ODAM in determining total population, assuming persons within the ERPA are exposed to the maximum radiation levels.
- d. Determine adequacy of State Ingestion Pathway Protective Action in accordance with Attachment 4, Protective Action Guidelines for Ingestion Pathway.

3.2 Environmental Monitoring Teams actions:

- a. Collect samples in accordance with:
 - Attachment 6, COLLECTION OF ENVIRONMENTAL SAMPLES
 - Attachment 7, SNOW SAMPLING
 - Attachment 8, GROUND CONTAMINATION SAMPLING
 - Attachment 9, GROUND DEPOSITION SAMPLING
 - Attachment 10, VEGETATION SAMPLING
 - Attachment 11, SURFACE WATER SAMPLING
- b. Perform other actions as directed by the Environmental Survey Sample Team Coordinator or the Supervisor Environmental Protection.

3.3 The Offsite Dose Assessment Manager (ODAM) Actions: Determine Total Population Dose in accordance with Attachment 12, ESTIMATION OF TOTAL POPULATION DOSE.

3.4 The Emergency Director/Recovery Manager (ED/RM) actions:

Inform State officials of the need for preventative or emergency actions in accordance with recommendations from the ESSTC or Supervisor Environmental Protection.

4.0 DEFINITIONS

4.1 Derived Intervention Level

Corresponds to the concentration in food present throughout the relevant period of time that, in the absence of intervention, could lead to an individual receiving a radiation dose equal to the Protection Action Guideline.

4.2 Environmental Monitoring Teams

Personnel from the station staff (Radiation Protection or Environmental Departments) or contractor staff that collect environmental samples or obtain environmental measurements as part of the Expanded Radiological Environmental Monitoring Program.

4.3 Expanded Radiological Environmental Monitoring Program

Characterized by an increase in the number and frequency of samples collected as part of the normal monitoring program, plus other additional sampling of critical pathways (such as snow, ground deposition, surface water, etc.)

4.4 Ingestion Exposure Pathway

The pathway by which an exposure is received is due to the ingestion of contaminated water or foods.

4.5 Radiological Environmental Monitoring Program

Program involving the collection of radiological samples required by Technical Specifications and additional optional samples not covered in technical specifications (such as soil, meat, poultry, etc.)

5.0 REFERENCES AND COMMITMENTS

5.1 Technical Specifications

None

5.2 Licensee Documentation

5.2.1 Site Emergency Plan

5.3 Standards, Regulations, and Codes

5.3.1 10CFR140, Subpart E, Extraordinary Nuclear Occurrences

5.3.2 EPA 400-R-92-001, EPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992

- 5.3.3 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
- 5.3.4 Accidental Radioactive Contamination of Human Foods and Animal Feeds: Recommendations for State and Local Agencies, U.S. Department of Health and Human Services, Aug 1998.

5.4 Policies, Programs, and Procedures

- 5.4.1 S-ENVSP-4.1, TLD Preparation and Collection
- 5.4.2 S-ENVSP-4.2, Environmental Air Monitoring Sample Collection
- 5.4.3 S-ENVSP-4.4, Environmental Surface Water Sample Collection and Compositing
- 5.4.4 S-ENVSP-4.5, Emergency Preparedness TLD Placement/Collection
- 5.4.5 EPIP-EPP-07, Downwind Radiological Monitoring
- 5.4.6 EPIP-EPP-08, Off-Site Dose Assessment and Protective Action Recommendation
- 5.4.7 (Finley, R.D., H.B. Warren, and R.E. Hargrove, "Storage Stability of Commercial Milk," Journal of Milk and Food Technology. 31(12):382-387, December 1968).

5.5 Commitments

None

6.0 RECORDS REVIEW AND DISPOSITION

- 6.1 The following records generated by this procedure shall be maintained by Records Management for the Permanent Plant File in accordance with NIP-RMG-01, Records Management:

NOTE: This section only applies to records resulting from an actual emergency declared at Nine Mile Point.

Attachment 2: Emergency Environmental Sample Data Sheet Refined Contamination Surveys

Attachment 4: Protective Action Guidelines for Ingestion Pathway

6.2 The following records generated by this procedure are not required for retention in the Permanent Plant File:

NOTE: This section only applies to records not generated as the result of an actual emergency declared at Nine Mile Point.

Attachment 2: Emergency Environmental Sample Data Sheet Refined Contamination Surveys

Attachment 4: Protective Action Guidelines for Ingestion Pathway

LAST PAGE

ATTACHMENT 1: RADIOLOGICAL ENVIRONMENTAL SAMPLING PROGRAM TABLE

Page 1 of 2

The following table should be used as guidance in determining environmental samples and quantity to be sampled:

Medium Sampled	Approximate Quantity/Volume of Each Sample	Analysis	Preferred Sample location
Air-particulate	20,000 ft ^{3**} 45 ft ^{3*}	Beta**, gamma**	Downwind from site Upwind
Air-Iodine	20,000 ft ^{3**} 45 ft ^{3*}	Beta, gamma**	Downwind from site Upwind
Water-Lake (Note 1)	8 liters (2 gal)	Gamma	Downstream Upstream
Water-Tap (Note 2)	8 liters (2 gal)	Gamma	Downstream Upstream
Soil (Note 3)	2 Kg. (wet)	Gamma Isotopic	Downwind Upwind
Vegetation (Note 3)	2 Kg. (wet)	Gamma Isotopic	Downwind Upwind
Milk (Note 4)	3 gallons	I ¹³¹ Gamma Isotopic Sr ⁹⁰	Downwind*** Upwind***
Snow	1 yard ² (to a depth of 1 inch)	Gamma Isotopic	As directed by Environmental Protection
Other	****	****	****

- * Downwind Survey Team Air Sample
- ** Normal Radiological Environmental Monitoring Program Air Sample
- *** If Owner Cooperation Available
- **** Other sample media type as directed by Environmental Protection (shoreline sediment, fish, algae, meat, etc.)

ATTACHMENT 1: RADIOLOGICAL ENVIRONMENTAL SAMPLING PROGRAM TABLE

Page 2 of 2

- NOTES:**
1. Upstream samples should be a minimum of five miles upstream of station outfalls.
 2. Control samples should come from a least prevalent flow direction and from a township (municipal) water supply.
 3. Control samples should come from a least prevalent wind direction at TLD sites for sample accountability. Downwind samples should be taken at or near TLD locations for sample accountability.
 4. Control milk samples should be raw, untreated milk from farms in a least prevalent wind direction.

NOT ALL SAMPLES ON THIS TABLE NEED TO BE COLLECTED DURING EMERGENCY CONDITIONS; HOWEVER, A REPRESENTATIVE SAMPLE SHOULD BE TAKEN IN THE REMAINING AREAS AS TIME PERMITS.

This procedure may continue for a relatively long period of time after the emergency has been terminated. However, this procedure should continue in effect under the direction of the Supervisor Environmental Protection until all required samples have been collected, prepared, analyzed and evaluated, as appropriate.

ATTACHMENT 2

EMERGENCY ENVIRONMENTAL SAMPLE DATA SHEET REFINED CONTAMINATION SURVEYS

Type of Sample	Sample Number (as applicable)	Date	Time
Technician(s)	Location		

Map

	Reference Object
	Direction
	Distance
	ft

Refined Contamination Surveys

	Radiation Levels				Comments
	Circle: μ R/hr or mR/hr or CPM				
	Before		After		
	1cm	1m	1cm	1m	
Snow					
Ground Deposition: Grass Soil Leaves					
Vegetation Sampling: (Leaves and/or Debris)					Depth of Sample
Other Environmental Media Samples:					Type:

Refined Ground Contamination Survey (as applicable)

		Radiation Levels		
		Circle: μ R/hr or mR/hr or CPM		
Square Size	Result	Minimum	Maximum	Approximate Average
(Circle: 80,40, 20 ft.)	1 cm			
	1 meter			

Weather Conditions

--

Other Comments

--

NOTE: For environmental samples, ensure the containers (bags, bottles, etc.) are adequately sealed and labeled.

ATTACHMENT 3: 10CFR140.84. RADIOLOGICAL CRITERIA FOR
EXTRAORDINARY NUCLEAR OCCURRENCE

Page 1 of 3

1. Ensure samples are taken in accordance with Attachment 5, "Direction of Environmental Sample Collection".
2. Calculate doses in accordance with Attachment 12, "Estimation of Total Population Dose" and evaluate survey results from activities performed in accordance with Attachment 6, "Collection of Environmental Samples".
3. Compare the survey and sample results from step 2 above to the 10CFR140.84 criteria listed under "TOTAL PROJECTED RADIATION DOSES", or "TOTAL SURFACE CONTAMINATION LEVELS" this attachment.
4. If the 10CFR140.84 criteria listed in this attachment are met or exceeded in accordance with step 3 above, notify the ED/RM that we have met the NRC criteria for liability under 10CFR140.84, Extraordinary Nuclear Occurrence.
5. Maintain awareness of the requirements of this attachment, and ensure someone is addressing this evaluation on an ongoing basis as appropriate.

ATTACHMENT 3 (Cont)

Page 2 of 3

(Criterion 1-Substantial Discharge of
Radioactive Material or Substantial
Radiation Levels Off-Site)

The Commission will determine that there has been a substantial discharge or dispersal of radioactive material off-site, or that there have been substantial levels of radiation off-site, when, as a result of an event comprised of one or more related happenings, radioactive material is released from its intended place of confinement or radiation levels occur off-site and either of the following findings is also made:

- a. The Commissioner finds that one or more persons off-site were, could have been, or might be exposed to radiation or to radioactive material, resulting in a dose or in a projected dose in excess of one of the levels in the following table:

TOTAL PROJECTED RADIATION DOSES

CRITICAL ORGAN	DOSE (rems)
Thyroid	30
Whole Body	20
Bone Marrow	20
Skin	60
Other organs or tissues	30

Exposure from the following types of sources of radiation shall be included:

1. Radiation from sources external to the body;
2. Radioactive material that may be taken into the body from its occurrence in air or water; and
3. Radioactive material that may be taken into the body from its occurrence in food or on terrestrial surfaces.

(Criterion 1-Substantial Discharge of Radioactive Material
or Substantial radiation Levels Off-Site)

b. The Commission finds that:

1. Surface contamination of at least a total of any 100 square meters of off-site property has occurred as the result of a release of radioactive material from a production or utilization facility and such contamination is characterized by levels of radiation in excess of one of the values listed in Column 1 or Column 2 of the following table, or
2. Surface contamination of any off-site property has occurred as the result of a release of radioactive material in the course of transportation and such contamination is characterized by levels of radiation in excess of one of the values listed in Column 2 of the following table:

TOTAL SURFACE CONTAMINATION LEVELS^(A)

Type of Emitter	Column 1 Off-Site Property, Contiguous to Site, Owned or Leased by Person with Whom An Indemnity Agreement is Executed.	Column 2 Other Off-Site Property
Alpha emission from transuranic isotopes	3.5 microcuries per square meter	0.35 microcuries per square meter
Alpha emission from isotopes other than trans- uranic isotopes	35 microcuries per square meter	3.5 microcuries per square meter
Beta or gamma emission	40 millirads/hour @ 1 cm ^(B)	4 millirads/hour @ 1 cm ^(B)

^(A) The maximum levels (above background), observed or projected, 8 or more hours after initial deposition.

^(B) Measured through not more than 7 milligrams per square centimeter of total absorber.

1. The purpose of this Attachment is to outline the expected actions to be taken by State and Federal officials in response to radioactive contamination of foodstuffs as a result of an accidental release of radioactive materials from the Nine Mile Point Nuclear Station.
2. The Protection Action Guidelines are as follows:
 - 0.5 rem for committed effective dose equivalent.
 - 5 rem committed dose equivalent to an individual tissue or organ.
3. The following table provides Derived Intervention Levels (DIL) for the major radionuclides at concern. A DIL corresponds to the concentration in food present throughout the relevant periods at that time that, in the absence of any intervention, could lead to an individual receiving a radiation dose equal to the PAG.

Recommended Derived Intervention Level (DIL)
or Criterion for Each Radionuclide Group ^(a), ^(b)

All components of the Diet

Radionuclide Group	Bq/kg	(pCi/kg)
Sr-90	160	4300
I-131	170	4600
Cs-134 + Cs-137	1200	32,000
Pu-238 + Pu-239 + Am-241	2	54
Ru-103 + Ru-106 ^(c)	$\frac{C_3}{6800} + \frac{C_6}{450} < 1$	$\frac{C_3}{180,000} + \frac{C_6}{12,000} < 1$

- NOTES:**
- a. The DIL for each radionuclide group (except for Ru-103+Ru-106) is applied independently. Each DIL applies to the sum of the concentrations of the radionuclides in the group at the time of measurement.
 - b. Applicable to foods as prepared for consumption. For dried or concentrated products such as powdered milk or concentrated juices, adjust by a factor appropriate to reconstitution, and assume the reconstitution water is not contaminated. For spices, which are consumed in very small quantities, use a dilution factor of 10.
 - c. Due to the large difference in DILs for Ru-103 and Ru-106, the individual concentrations of Ru-103 and Ru-106 are divided by their respective DILs and then summed. The sum must be less than one. C_3 and C_6 are the concentrations, at the time of measurement, for Ru-103 and Ru-106, respectively.

4. If a DIL is met for a particular food stuff, the State or lead Federal Agency may implement any of the following protective actions:
 - a. Protective action prior to confirmation of contamination:
 1. Simple precautionary actions to avoid or reduce the potential for contamination of food and animal feeds. This may include:
 - covering exposed food products
 - moving animals to shelter
 - corralling livestock and providing protected feed and water
 2. Temporary embargo to prevent the introduction into commerce of food which is likely to be contaminated.
 - b. Protective actions for foods confirmed to be contaminated.
 1. Temporary embargo to prevent the contaminated food from being introduced into commerce.
 2. Normal food production and processing actions that reduce the amount of contamination in or on food below the DIL. These actions may include:
 - holding to allow for radioactive decay
 - brushing, washing or peeling
 - c. Protective actions for animal feeds confirmed as contaminated:
 - replace contaminated water with uncontaminated water
 - removal of lactating dairy animals from contaminated feeds and pasture.
5. The ODAM or ESSTC may compare the activity of contaminated foodstuffs to the DIL.
 - a. Activity of contaminated foodstuffs may be determined from samples taken in response to this procedure.
 - b. Protective actions recommended by the State or lead Federal Agency may be compared to information available to EOF dose assessment staff. Discrepancies should be resolved by interaction with the NRC staff in the EOF.

ATTACHMENT 5: DIRECTION OF ENVIRONMENTAL SAMPLE COLLECTION

NOTE: Whenever possible a 9 Mile Point Radiation Protection Technician or individual with equivalent knowledge and expertise should accompany any sampling teams.

1. Initiate the collection of emergency environmental samples and surveys in accordance with Attachment 1, RADIOLOGICAL ENVIRONMENTAL SAMPLING PROGRAM TABLE after any significant radiological release.
2. Depending upon the extent of the emergency and the duration of the emergency organization, advise the Radiological Assessment Manager (RAM) and Emergency Director/Recovery Manager (ED/RM) in the EOF of the implementation and progress of the refined surveys and the expanded environmental monitoring program, as applicable.

NOTE: Whenever possible the sample teams should be instructed to start sampling in areas of least contamination first and work toward areas of higher contamination. This lessens the potential of cross contamination of samples.

3. Select appropriate collection locations, based on the following order of priority:
 - a. Upwind off-site, as applicable
 - b. Upwind on-site
 - c. Downwind off-site
 - d. Downwind on-site (site boundary area)
4. Select other collection locations as soon as practicable without interfering with other emergency operations.
5. Environmental samples should be collected in accordance with S-ENVSP-4.1, S-ENVSP-4.2, S-ENVSP-4.4 and S-ENVSP-4.5 as appropriate.
6. If the emergency situation requires an increased number and frequency of sample locations, initiate the expanded Radiological Environmental Monitoring Program (REMP).
7. Direct Environmental Monitoring Teams to collect environmental samples (such as water, soil, foliage) using:

NOTE: One set of supplies is kept at the EOF. The other ingestion pathway sampling kit is kept at the office of the environmental sample collection contractor.

- a. Post-accident radiological environmental sampling equipment (NMPNS Staff)
 - b. The post-accident ingestion pathway sampling kit (contractor)
8. Direct teams to the appropriate facility for sample analysis.
9. During or after the emergency situation at the site is terminated, the Environmental Survey/Sample Team Coordinator, the Supervisor Environmental Protection or designee, should evaluate processing Emergency TLDs in accordance with S-ENVSP-4.5, Emergency Preparedness to TLD Placement/Collection.

ATTACHMENT 6: COLLECTION OF ENVIRONMENTAL SAMPLES

NOTES:

1. Radiation level measurements should be obtained using a dose rate instrument (micro R/hr. or micro Rem/hr.) or a count rate instrument (counts per minute).
2. Environmental samples should be collected and handled in a manner to minimize the spread of contamination and the cross contamination of samples.
1. Use the supplies and equipment contained in:
 - a. The EOF post accident radiological environmental sampling equipment (9 Mile Point teams)
 - b. The post-accident ingestion pathway sampling kit (contractor teams)
2. Use additional supplies and equipment as advised by the Supervisor Environmental Protection.
3. Using the attachments in this procedure for guidance as necessary, collect samples as directed by the Environmental Survey Sample Team Coordinator or the Supervisor Environmental Protection.
4. Upon arriving at an environmental air monitoring station, unlock and open the door using the P-5 key, which is available with the Rad Protection supplies and equipment found at the EOF.
5. Collect air samples in accordance with S-ENVSP-4.2, Environmental Air Monitoring Sample Collection. Refer to Attachment 13 and 14 for location.
6. Deliver the particulate and charcoal cartridge samples to the Nine Mile Point Nuclear Station (NMPNS) or James A. Fitzpatrick (JAF) lab, as directed by the Supervisor Environmental Protection or ESSTC.
7. When collecting environmental radiation monitor data, Environmental Monitoring Teams should:
 - a. Observe the dose rate indication on the survey meter.
 - b. Report and record the dose rate in micro R/hr via the radio (Rad. Team channel) or cellular phone to the Emergency Operations Facility (EOF), if requested.
 - c. Use a portable dose rate survey meter to compare dose rates as follows:
 1. Place the detector close to the monitoring station.
 2. Observe the meter readings.
 3. Report the results to the EOF.

ATTACHMENT 7: SNOW SAMPLING

1. Before sample collection, consult with the Supervisor Environmental Protection for any additional direction.
2. Select a sampling area free of natural or man-made disturbances (plowing, snowmobiles, pedestrians, etc.).

NOTE: Snow that is falling or on the ground at the time of interest may have drifted. Melting, freezing, or falling rain may fix the snow deposition in an ice layer not affected by winds. Use snow deposition and existing weather conditions to determine the sampling area.

3. Obtain radiation level measurements with a portable survey meter one centimeter and one meter above the surface of the snow and record on the Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2).
4. Measure the selected sampling area in units of square feet.
5. Sample frozen snow to a depth of 1 inch where possible sufficient to yield 3 liters of melted snow, allowing for:
 - a. A crusty layer may have formed on an earlier snowfall or the snow of interest may be below a crusty layer formed later. Therefore, the crusty layer may have to be removed before sampling snow.
 - b. Loose snow volume is four times a liquid volume. Sample 12 liters of loose frozen snow.
 - c. Icy snow volume is approximate two times a liquid volume. Sample 6 liters of icy snow.
 - d. 1 cubic foot of snow approximates 0.5 liters of liquid when melted.
6. Pack the snow in a plastic collection bag.
7. Remove the snow to a depth sufficient to collect the snow of interest.
8. Estimate the depth of snow collected.
9. Double bag snow samples to prevent leakage.
10. Identify the sample bag with sample type, location, date, and time.
11. Remeasure radiation levels at one centimeter and one meter from the newly exposed surface.
12. Record the data on the Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2):

ATTACHMENT 8: GROUND CONTAMINATION SAMPLING

1. Select an area where natural or man-made disturbances are limited.
2. As directed by the Supervisor Environmental Protection, measure or estimate one of the following:
 - a. An approximate 80 foot square for low contamination
 - b. A 40 foot square for moderate contamination
 - c. A 20 foot square for heavy contamination
3. Sketch a map of the squared area noting fixed reference points on Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2).
4. Perform a general area survey using a portable meter at waist level (one meter).
5. Indicate the general area (average) dose rate and any isolated results greater than 10 times the general area readings on the map.
6. Measure radiation levels at one meter and one centimeter at intersection points. Indicate results on map.
7. Indicate location, date, time, and reference to north direction on map.
8. If directed, obtain soil sample(s) in accordance with Attachment 9 of this procedure.

ATTACHMENT 9: GROUND DEPOSITION SAMPLING

1. When sampling AREAS WITH GRASS:

- a. Obtain radiation readings at one centimeter and one meter above the surface of the sampling area.
- b. Measure the selected sampling area in units of square feet.
- c. Clip the grass in the sample area close to the roots. Do NOT include clumps of grass and dirt in the sample. Collect a sample volume of approximately one gallon (compressed).
- d. Collect separately the top $\frac{1}{2}$ inch of soil from the area in which the grass was clipped. Obtain enough soil for an approximate mass of 2 Kg (4.4 lbs.).
- e. Remeasure radiation levels at one centimeter and one meter above the surface, where samples were taken.
- f. Record data on Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2):
- g. Identify the sample collection bag with date, time, location, and sample type.

2. When sampling areas with NO GRASS:

- a. Measure selected sampling area in units of square feet.
- b. Measure radiation levels at one centimeter and one meter above the surface of the sampling area.
- c. If leaves or debris other than sticks are in the selected areas, collect as a separate sample.
- d. Collect the top $\frac{1}{2}$ inch of soil for an approximate mass of 2 Kg (4.4 lbs.).
- e. Remeasure radiation levels at one centimeter and one meter from the surface.
- f. Record data on Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2):
- g. Identify the sample collection bag with date, time, location, and sample type.

ATTACHMENT 10: VEGETATION SAMPLING

1. Obtain radiation levels at one centimeter and one meter from the surface.

2. When obtaining samples, consider the following.

a. Sample tree leaves from the outer-most part of small trees.

NOTE: Deposition is NOT representative on leafy areas under taller trees or bushes.

b. Select broadleaf vegetation from open areas.

c. Use large leafy vegetation which are considered edible, if possible. However, other types of leafy vegetation are acceptable.

NOTE: When collecting samples, consider cutting and collecting only the edible portion of the vegetation.

d. Ground deposition sampling may be necessary in conjunction with vegetation sampling.

3. Obtain a 2 Kg sample (4.4 lbs.).

4. Record data on Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2):

ATTACHMENT 11: SURFACE WATER SAMPLING

1. Receive direction from the ESSTC.
2. Measure the radiation levels at one centimeter and one meter above the surface of the water. These measurements are only required once before sampling.
3. Obtain approximately two gallons of water from the surface.
4. Record the radiation levels and sample volume on the Emergency Environmental Sample Data Sheet Refined Contamination Surveys (Attachment 2). Indicate the sample type in the "Comment" Section and whether the sample is still water (for example, a pond) or running water (for example, a stream).

ATTACHMENT 12: ESTIMATION OF TOTAL POPULATION DOSE

- NOTES:**
1. This procedure results in an estimation of total population dose to the public. As additional data becomes available (such as Aerial Measurement System, State or Federal survey team results) this estimation may be refined.
 2. This procedure should only be implemented once any abnormal radiological releases have stopped.
 3. Estimation of Total Population Dose may be accomplished by using EDAMS or TLDs. It is NOT necessary to execute both 1.0 and 2.0.

1.0 Estimation of Total Population Dose (TPD) using EDAMS

1.1 The ODAM should:

- a. Verify that the Chronological Release Rate Log is completed in accordance with EPIP-EPP-08.
- b. Initiate the EDAMS program in accordance with EPIP-EPP-08.
- c. Utilizing the instructions for EDAMS use in EPIP-EPP-08, enter the following:
 - affected unit
 - accident scenario definition as requested by EDAMS
 - for each 15 minute step, beginning at the time release above technical specifications began, until cessation of such releases:
 - source term for all pathways
 - meteorological data
- d. When all data has been entered, go to "Report Options Menu" and request "Print Complete Dose/Dose Rate Report".
- e. Utilizing the above report, go to "Survey Points: Dose Rates and Accumulated Doses." The "TEDE" column provides dose to the population of each ERPA.
- f. Provide this information to the ED/RM

ATTACHMENT 12 (Cont)

2.0 Estimation of Total Population Dose using Environmental TLDs

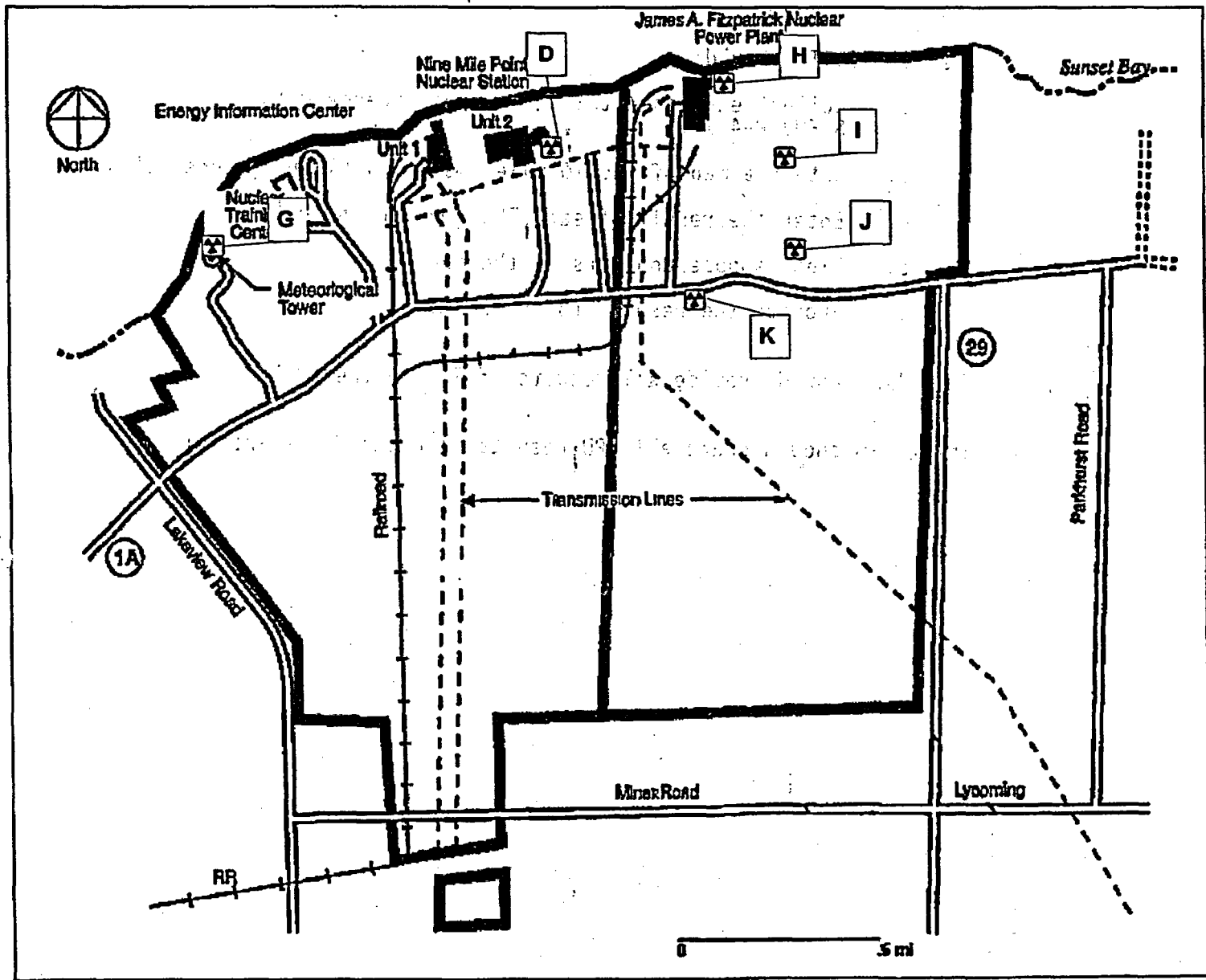
NOTE: This method provides doses that are exclusive of internal dose.

2.1 The ESSTC should:

- a. Collect environmental TLDs in accordance with S-ENVSP-4.1.
- b. Obtain a map of the 10 mile Emergency Planning Zone (EPZ).
- c. Enter the result of each TLD (mR) on the map.
- d. Plot isodose contours on the map.
- e. Provide the results to the ODAM.

3.0 The ODAM should provide all results of TPD to the ED/RM.

4.0 The ED/RM should share all TPD results with the State and County.



ATTACHMENT 14: OFFSITE ENVIRONMENTAL MONITOR LOCATIONS

This map displays the distribution of 100 offsite environmental monitoring stations in the New Haven, Connecticut region. The stations are identified by alphanumeric codes (e.g., A-1, B-2, C-3, etc.). The map covers a large area, including the city of New Haven, the town of Scrība, and the village of Volney. Major roads and highways are shown, along with various geographical features like lakes and rivers. The map also includes a scale bar and a north arrow for orientation.

NINE MILE POINT NUCLEAR STATION
EMERGENCY PLAN MAINTENANCE PROCEDURE

EPMP-EPP-08

REVISION 10

MAINTENANCE, TESTING AND OPERATION OF THE
OSWEGO COUNTY PROMPT NOTIFICATION SYSTEM

TECHNICAL SPECIFICATION REQUIRED

Approved by:
G. L. Detter


Manager, Security and Emergency Preparedness

5/23/03
Date

Effective Date: 5/27/2003

PERIODIC REVIEW DUE DATE: MAY, 2004

LIST OF EFFECTIVE PAGES

<u>Page No.</u>	<u>Change No.</u>	<u>Page No.</u>	<u>Change No.</u>	<u>Page No.</u>	<u>Change No.</u>
Coversheet .		22			
i		23			
ii		24			
iii		25			
1		26			
2		27			
3		28			
4		29			
5		30			
6		31			
7		32			
8		33			
9		34			
10		35			
11		36			
12		37			
13		38			
14		39			
15		40			
16		41			
17		42			
18					
19					
20					
21					

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 PURPOSE	1
2.0 PRIMARY RESPONSIBILITY	1
3.0 PROCEDURE	2
3.1 Director - Emergency Preparedness	2
3.2 M&T Communications Group (NGRID)	2
3.3 Central Region Station Maintenance Group (NGRID)	3
3.4 Central Regional Operators (NGRID)	3
3.5 Oswego County Emergency Management Office (OCOMO)	3
3.6 National Weather Service (NWS)	4
3.7 Nine Mile Point Computer Group	4
3.8 Oswego Line/Fulton Line (NGRID)	4
4.0 DEFINITIONS	5
5.0 REFERENCES AND COMMITMENTS	6
6.0 RECORD REVIEW AND RETENTION	7
ATTACHMENT 1: SYSTEM DESCRIPTION	8
ATTACHMENT 1.1: SIREN LOCATIONS	10
ATTACHMENT 1.2: CIRCUIT IDENTIFICATION FOR SIREN SITES	12
ATTACHMENT 2: BI-WEEKLY TEST	13
ATTACHMENT 2.1: BI-WEEKLY SILENT TEST CHECKLIST	14
ATTACHMENT 2.2: BI-WEEKLY TEST LOG	16
ATTACHMENT 2.3: SIREN ADDRESS CODES (INTRAC)	18
ATTACHMENT 3: QUARTERLY TESTING	19
ATTACHMENT 3.1: QUARTERLY TEST ACTIONS	20
ATTACHMENT 3.2: QUARTERLY SIREN TESTING LOG	22
ATTACHMENT 4: ANNUAL FULL SYSTEM TEST	24
ATTACHMENT 4.1: ANNUAL TEST ACTIONS	25
ATTACHMENT 4.2: ANNUAL PNS TEST RESULTS LOG	27
ATTACHMENT 4.3: SIREN ACTIVATION REPORT	29
ATTACHMENT 5: ANNUAL PROMPT NOTIFICATION SYSTEM SIREN PREVENTATIVE MAINTENANCE-MECHANICAL/ELECTRICAL	30

TABLE OF CONTENTS (Cont)

<u>SECTION</u>	<u>PAGE</u>
ATTACHMENT 5.1: ANNUAL PROMPT NOTIFICATION SYSTEM PREVENTATIVE MAINTENANCE-COMMUNICATIONS	33
ATTACHMENT 5.2: PNS PROGRAM OVERSIGHT FOR TESTING AND MAINTENANCE . . .	34
ATTACHMENT 5.3: PNS PROGRAM OVERSIGHT FOR TESTING AND MAINTENANCE OBSERVATION FORM	35
ATTACHMENT 5.4: PRE AND POST MAINTENANCE TESTING	36
ATTACHMENT 5.5: PRE AND POST MAINTENANCE TEST PLAN	37
ATTACHMENT 6: RECORD KEEPING	38
ATTACHMENT 6.1: SIREN OUT-OF-SERVICE REPORT	39
ATTACHMENT 6.2: SIREN SITE MAINTENANCE LOG	40
ATTACHMENT 6.3: MONTHLY PNS SUMMARY FORM	41
ATTACHMENT 7: WYLE REPORT REQUIREMENTS	42

1.0 PURPOSE

To describe the operation, testing and maintenance of the Oswego County Prompt Notification System (PNS).

2.0 PRIMARY RESPONSIBILITY

2.1 Director - Emergency Preparedness

Has overall responsibility for the operation, testing and reporting of the PNS and its activities.

2.2 M&T Communication Group (NGRID)

Coordinates and participates in testing and repair of the PNS sirens.

2.3 Central Region Station Maintenance Group (NGRID)

Assists in testing, repair and maintenance of the PNS sirens.

2.4 Central Regional Operators (NGRID)

Assists in monitoring and problem notification of the PNS.

2.5 Oswego County Emergency Management Office (OCEMO)

Conducts tests and assists in resolution of problems and activation of the PNS.

2.6 National Weather Service (NWS)

Conducts tests and activation of the PNS Tone Alert System.

2.7 Nine Mile Point Computer Group

Provides maintenance for the SAMS computers as needed.

2.8 NMPC Oswego/Volney Line (NGRID)

Provides siren circuit identifications as needed.

3.0 PROCEDURE

NOTE: Changes to PNS testing or configuration shall conform to the requirements of Wyle Research Report WR 84-22 "Evaluation of the Oswego County Prompt Notification System". (See Attachment 7)

3.1 Director - Emergency Preparedness

- a. Coordinate scheduling of PNS activities in accordance with EPMP-EPP-01.
- b. Complete monthly PNS Summary Form using Attachment 6.3 or equivalent, and send to New York State.
- c. Verify all required notifications to the public have been made for all tests requiring siren activations for testing.
- d. Verify bi-weekly tests are conducted in accordance with Attachment 2.
- e. Verify quarterly tests are conducted in accordance with Attachment 3.
- f. Verify annual test is conducted in accordance with Attachment 4.
- g. Verify appropriate oversight of siren activities, including observation of testing and maintenance activities. Attachment 5.2 and 5.3 should be used as guidance.
- h. Maintain siren out of service reports (Attachment 6.1).
- i. Verify completion of annual maintenance. Attachment 5 may be used to document this activity.
- j. Verify conduct of pre and post maintenance siren testing. (Attachments 5.4 and 5.5.)
- k. Verify appropriate review and documentation of Operating Experience (OE) activities as they pertain to the PNS.

3.2 M&T Communications Group (NGRID)

- a. Coordinate quarterly and annual testing of outdoor warning sirens.
- b. Ensure personnel are available to support tests.
- c. Maintain manuals and technical literature as appropriate.
- d. Provide maintenance crews to respond to siren problems as needed.
- e. Conduct pre and post maintenance siren testing as necessary utilizing Attachments 5.4 and 5.5

3.2 (Cont)

- f. Assist in performing quarterly tests in accordance with Attachment 3.
- g. Assist in performing annual tests in accordance with Attachment 4.
- h. Perform annual preventive maintenance on PNS siren system communications equipment. Attachment 5.1 may be used for preventive maintenance.

3.3 Central Region Station Maintenance Group (NGRID)

- a. Perform corrective and annual preventative maintenance on the Outdoor Warning Siren System. Attachment 5 may be used for preventative maintenance.
- b. Conduct pre and post maintenance testing as necessary utilizing Attachments 5.4 and 5.5.
- c. Forward inspection and maintenance data to Director Emergency Preparedness.
- d. Maintain manuals and technical literature as appropriate.
- e. Maintain Siren Site Maintenance Log.
- f. Provide maintenance crews to respond to siren problems as needed.
- g. Complete an Out-of-Service Report on becoming aware of sirens requiring repair and forwards to Emergency Preparedness.
- h. Forward inspection and maintenance data to Emergency Preparedness.
- i. Provide Station Maintenance Field Teams to participate in quarterly and annual siren tests.

3.4 Central Regional Operators (NGRID)

- a. Monitor circuits providing electrical power to sirens.
- b. Make appropriate notifications when sirens may not be operational.

3.5 Oswego County Emergency Management Office (OCEMO)

- a. Coordinate Oswego County efforts regarding the PNS.
- b. Provide PNS materials to the general public in Oswego County.
- c. Maintain knowledge of sirens out of service.
- d. Conduct biweekly silent tests of sirens. May use Attachment 2.

3.5 (Cont)

- e. Distribute tone alert radios to appropriate persons within the 10 Mile Emergency Planning Zone.
- f. Distribute batteries annually to people issued tone alert radios.
- g. Provide special notification to appropriate persons regarding PNS testing.
- h. Conduct annual testing of the Oswego County Emergency Alert System radio stations.
- i. Forward monthly, a list of tone alert radio activations to the Director Emergency Preparedness.
- j. Activate sirens, as needed.
- k. Ensure notification of siren testing is made via news media and advertisements.
- l. Provide Oswego County PNS mailings and brochures to the general public.
- m. Conduct quarterly siren tests. May use Attachment 3.
- n. Conduct annual siren tests. May use Attachment 4.

3.6 National Weather Service (NWS)

- a. Activate the tone alert radios on a weekly basis for testing purposes and for drills and actual incidents.
- b. Forward monthly a list of Tone Alert Radio Activations to OCEMO.

3.7 Nine Mile Point Computer Group

Perform maintenance on SAMS computers, as needed.

3.8 Oswego Line/Fulton Line (NGRID)

- a. Confirm circuit identification when requested and/or if they become aware of a change to siren circuit identifications.
- b. Notify the Director - Emergency Preparedness when there is a planned line outage that would affect one or more of the sirens.

4.0 DEFINITIONS

4.1 Emergency Alert System (EAS)

A system of radio stations organized to permit designated government officials to issue expedient emergency information and instructions in threatened or actual emergencies.

4.2 Growl Test

A test in which the siren is activated via Intrac in the Alert Mode, then immediately canceled. In effect, the siren sounds for a portion of one-cycle.

4.3 Motorola System (Intrac)

The Motorola Intrac 2000 Radio Alarm and Control System. This is a "send only" system.

4.4 Oswego County Prompt Notification System (PNS)

The system used for alerting and warning the population of Oswego County through use of sirens and tone alert radios. The alerted population may turn to designated radio stations of the EAS for emergency information and instruction.

4.5 Outdoor Warning Sirens

Outdoor warning sirens located in heavily populated areas within the 10 Mile Emergency Planning Zone (EPZ) designed to alert the general population.

4.6 Siren Activation and Monitoring System (SAMS)

This system monitors system status and activation, and activates sirens.

4.7 Tone-Alert Radio System

A radio receiver system used to alert low density population areas (residential and commercial buildings) in an emergency situation.

5.0 REFERENCES AND COMMITMENTS

5.1 Technical Specifications

None

5.2 Licensee Documentation

5.2.1 Nine Mile Point Site Emergency Plan

5.2.2 Wyle Research Report WR 84-2 "Evaluation of the Oswego County Prompt Notification System"

5.3 Standards, Regulation, and Codes

5.3.1 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors

5.3.2 NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

5.3.3 NUREG 1022, Supplement 1, Licensee Event Report System, Description of System and Guidelines for Reporting Events

5.3.4 FEMA REP-10, Standard Guide for the Evaluation of Alert Notification Systems for Nuclear Power Plants

5.4 Policies, Programs, and Procedures

5.4.1 Oswego County Emergency Alert System Procedures

5.4.2 EPMP-EPP-01, Maintenance of Emergency Preparedness

5.4.3 EPIP-EPP-30, Prompt Notification System Problem Response

5.5 Commitments

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
----------------------------	------------------------------	--------------------

None

6.0 RECORD REVIEW AND RETENTION

6.1 The following records generated by this procedure shall be maintained by Records Management for the Permanent Plant File in accordance with NIP-RMG-01, Records Management:

Attachment 2.2
Attachment 3.2
Attachment 4.2
Attachment 5
Attachment 5.1
Attachment 5.3
Attachment 5.5
Attachment 6.1
Attachment 6.3

6.2 The following records generated by this procedure are not required for retention in the Permanent Plant File:

Attachment 4.3
Attachment 5.2
Attachment 5.4
Attachment 6.2

LAST PAGE

ATTACHMENT 1: SYSTEM DESCRIPTION

1.0 SYSTEM COMPONENTS

- Sirens
- Tone Alert Radios
- Emergency Alert System

2.0 SYSTEM COMPONENT DESCRIPTION

2.1 Sirens

- a. There are 37 sirens within the 10 mile EPZ. Their purpose is to notify the public of an incident at NMPNS or JAFNPP within 15 minutes.
- b. They are primarily located within a 5 mile radius of the site, along the lakeshore, and in heavily populated areas.
- c. Siren locations are contained in Attachment 1.1. Circuit identification for sirens is contained in Attachment 1.2.
- d. Sirens are tested as follows:
 - Bi-weekly siren test (Attachment 2)
 - Quarterly full-cycle test (Attachment 3)
 - Annual full-cycle test (Attachment 4)
- e. Sirens are serviced annually in accordance with Attachment 5, and as-needed to maintain operability.
- f. Activation of the sirens is via either of the following:
 1. Motorola Intrac System. This consists of a receiver at each siren, and a control/sending unit at the County EOC. The control/sending unit utilizes a VHF transmitter. Additionally, a receiver at the County EOC indicates the successful transmission of a siren "all-call". The capability exists to activate sirens individually, or all at once.

OR

ATTACHMENT 1 (Cont)

2.1.f (Cont)

2. Siren Activation and Monitoring System (SAMS) gives near real-time status of each siren, and provides for the verification of actual siren activation for incidents and testing as well as activation capability. The system consists of a receiver/transmitter at each siren and at the County EOC and County Warning Point (911 Center), and a computer/visual display at the County EOC and Warning Point. The system monitors electrical power, system tampering, siren audio output and (where applicable) rotation.

- g. The siren system meets the design criteria required in FEMA-REP-10.

2.2 Tone Alert Radios

- a. Tone alert radios are distributed to people in the 10 mile EPZ who are outside the acoustical range of sirens, and to schools and industrial facilities as needed.
- b. The tone alerts receive transmission from the National Weather Service (NWS) on 162.55 MHz. They remain muted until the receipt of a tone transmitted by the NWS, for either testing or alert. The radios have a battery back-up.
- c. The transmitter is located on Onondaga Hill, near Syracuse. The site is equipped with emergency power. A dedicated telephone link connects the transmitter to the broadcast console in the NWS office, in Binghamton, NY.
- d. The system purpose is identical to that of the sirens.
- e. Oswego County monitors new eligible residents. New tone alerts are distributed as needed.

2.3 Emergency Alert System

- a. This system is comprised of EAS stations and encoders/decoders.
- b. EAS is notified by Oswego County, and provided with a message for dissemination to the public. The EAS stations then transmit an alert signal (encodes), and then re-broadcast the message.
- c. Detailed EAS testing and operations procedures are maintained by Oswego County and New York State.

1. Approximately 0.9 miles west of Energy Center driveway
2. End of Lake Road East - junction of Nine Mile Point Road
3. Pleasant Pt. Road (Co. Rt. 44) off North Road (Co. Rt. 1) toward lake, access by wooden gate
4. Co. Rt. 1 east of Co. Rt. 6 near Dempster Beach
5. Butterfly Road - off North Road (Co. Rt. 1) where North Road and 104B meet
6. Mexico Point Road west of 104B (past the marina on right)
7. Ramona Beach Rd. off Route 3, south of golf course
8. Co. Rt. 51A east of Co. Rt. 29 by radio towers
9. Corner of 104 West and Fred Haynes Boulevard
10. Utica Street and Third Avenue - Oswego Gas Dist. Yard
11. E. Schuyler St. & E. Ninth St., behind ice rink
12. Burt Street off W. Third St. past Paloma Sub
13. Gardenier Road - off Co. Rt. 7
14. Co. Rt. 20 off West Fifth St. Rd (Co. Rt. 25)
15. Alcan west entrance, off Co. Rt. 1, .5 mile down dirt road
16. Co. Rt. 1A, 3 miles west of NMP site
17. Co. Rt. 1, between Lakeview Rd and Co. Rt. 29
18. Co. Rt. 29 - Lycoming Fire Barn
19. Middle Road, .5 mile east of Co. Rt. 63
20. Route 104 East and Creamery Road

21. Duke Road, between 104 and Co. Rt. 51A
22. City Line Road - Oswego - South of Speedway by Wine Creek Inn
23. Dutch Ridge Road, off Co. Rt. 4
24. Old Rt. 57 across from Riverside Cemetery
25. Benson Avenue (Co. Rt. 25 by Minetto Fire Barn)
26. Old Rt. 57 between March Rd. and Co. Rt. 45
27. March Road between Kingdom Road and 481
28. Middle Rd., east of Co. Rt. 29
29. Co. Rt. 1 (North Road) - east of Shore Oaks Drive
30. Intersection of 104 and 104B (New Haven)
31. Vermillion, Sundown Rd, off Co. Rt. 35
32. Co. Rt. 16 - Flat Rock Camp Site - south of 104B and Texas
33. 104 and Lincoln Avenue, Mexico (Mexico Sub)
34. 104 East - by Leatherstocking Gun Club approximately, 1.2 mi. east of 104B
35. O'Connor Road east of Co. Rt. 29 just west of power lines
36. Corner of West Utica and 6th Street, Oswego
37. Corner of Co. Rt. 8 and Doolittle Road

ATTACHMENT 1.2: CIRCUIT IDENTIFICATION FOR SIREN SITES

SIREN #	LINE ID #	SUBSTATION/ CIRCUIT NAME	FEEDER #	BREAKER #
1	3	Lake Road	29951	R510
2	3	New Haven	25653	R530
3	5	New Haven	25653	R530
4	41	New Haven	25653	R530
5	5	New Haven	25653	R530
6	22	New Haven	25653	R530
7	33	Pulaski	6868	R680
8	11	New Haven	25653	R530
9	6	West Oswego	20909	R690
10	49	West Oswego	20907	R670
11	139	Wine Creek	28352	R520
12	69	Paloma	25458*	R580
13	37	West Oswego	20909	R690
14	2	Paloma	25456*	R560
15	40	Wine Creek	28354	R540
16	3	Wine Creek	28354	R540
17	1	Wine Creek	28354	R540
18	4	Wine Creek	28354	R540
19	5	Wine Creek	28354	R540
20	7	Wine Creek	28354	R540
21	11	New Haven	25653	R530
22	61	Wine Creek	28353	R530
23	12	Wine Creek	28354	R540
24	17	Seneca Hill	20668	R680
25	4	Seneca Hill	20668	R680
26	1	Seneca Hill	20668	R680
27	11	Seneca Hill	20668	R680
28	5	New Haven	25653	R530
29	5	New Haven	25653	R530
30	3	New Haven	25653	R530
31	10	New Haven	25652	R520
32	18	New Haven	25653	R530
33	1	Mexico	4362	R620
34	3	New Haven	25653	R530
35	23	Wine Creek	28354	R540
36	13	Varick	20703*	R25
37	5	Granby Center	29351	R510

*Supervisory Control by Central Regional Control

ATTACHMENT 2: BI-WEEKLY TEST

1.0 PURPOSE

To verify proper operation of siren control circuitry, Intrac and SAMS receivers and transmitters.

2.0 PROCEDURE

2.1 Oswego County performs the Bi-weekly test in accordance with Attachment 2.1.

2.2 All results are sent to the Nine Mile Point Director of Emergency Preparedness at the end of the month.

0001	0001	West Creek	01	01
0002	0002	West Creek	01	01
0003	0003	West Creek	01	01
0004	0004	West Creek	01	01
0005	0005	West Creek	01	01
0006	0006	West Creek	01	01
0007	0007	West Creek	01	01
0008	0008	West Creek	01	01
0009	0009	West Creek	01	01
0010	0010	West Creek	01	01
0011	0011	West Creek	01	01
0012	0012	West Creek	01	01
0013	0013	West Creek	01	01
0014	0014	West Creek	01	01
0015	0015	West Creek	01	01
0016	0016	West Creek	01	01
0017	0017	West Creek	01	01
0018	0018	West Creek	01	01
0019	0019	West Creek	01	01
0020	0020	West Creek	01	01
0021	0021	West Creek	01	01
0022	0022	West Creek	01	01
0023	0023	West Creek	01	01
0024	0024	West Creek	01	01
0025	0025	West Creek	01	01
0026	0026	West Creek	01	01
0027	0027	West Creek	01	01
0028	0028	West Creek	01	01
0029	0029	West Creek	01	01
0030	0030	West Creek	01	01
0031	0031	West Creek	01	01
0032	0032	West Creek	01	01
0033	0033	West Creek	01	01
0034	0034	West Creek	01	01
0035	0035	West Creek	01	01
0036	0036	West Creek	01	01
0037	0037	West Creek	01	01
0038	0038	West Creek	01	01
0039	0039	West Creek	01	01
0040	0040	West Creek	01	01
0041	0041	West Creek	01	01
0042	0042	West Creek	01	01
0043	0043	West Creek	01	01
0044	0044	West Creek	01	01
0045	0045	West Creek	01	01
0046	0046	West Creek	01	01
0047	0047	West Creek	01	01
0048	0048	West Creek	01	01
0049	0049	West Creek	01	01
0050	0050	West Creek	01	01
0051	0051	West Creek	01	01
0052	0052	West Creek	01	01
0053	0053	West Creek	01	01
0054	0054	West Creek	01	01
0055	0055	West Creek	01	01
0056	0056	West Creek	01	01
0057	0057	West Creek	01	01
0058	0058	West Creek	01	01
0059	0059	West Creek	01	01
0060	0060	West Creek	01	01
0061	0061	West Creek	01	01
0062	0062	West Creek	01	01
0063	0063	West Creek	01	01
0064	0064	West Creek	01	01
0065	0065	West Creek	01	01
0066	0066	West Creek	01	01
0067	0067	West Creek	01	01
0068	0068	West Creek	01	01
0069	0069	West Creek	01	01
0070	0070	West Creek	01	01
0071	0071	West Creek	01	01
0072	0072	West Creek	01	01
0073	0073	West Creek	01	01
0074	0074	West Creek	01	01
0075	0075	West Creek	01	01
0076	0076	West Creek	01	01
0077	0077	West Creek	01	01
0078	0078	West Creek	01	01
0079	0079	West Creek	01	01
0080	0080	West Creek	01	01
0081	0081	West Creek	01	01
0082	0082	West Creek	01	01
0083	0083	West Creek	01	01
0084	0084	West Creek	01	01
0085	0085	West Creek	01	01
0086	0086	West Creek	01	01
0087	0087	West Creek	01	01
0088	0088	West Creek	01	01
0089	0089	West Creek	01	01
0090	0090	West Creek	01	01
0091	0091	West Creek	01	01
0092	0092	West Creek	01	01
0093	0093	West Creek	01	01
0094	0094	West Creek	01	01
0095	0095	West Creek	01	01
0096	0096	West Creek	01	01
0097	0097	West Creek	01	01
0098	0098	West Creek	01	01
0099	0099	West Creek	01	01
0100	0100	West Creek	01	01

ATTACHMENT 2.1: BI-WEEKLY SILENT TEST CHECKLIST

1. OCEMO Actions

- a. Notify County Warning Point (CWP) that bi-weekly test is to be performed.
- b. Verify that printer is on and has sufficient paper.

NOTE: Up to 3 polls are permitted for satisfactory results. If >3 polls are required, then Acceptance Criteria Met = N.

c. Perform SAMS test as follows:

1. Send an "ARM" signal via SAMS for each siren individually or activate a group of sirens.
2. Query each siren via SAMS to verify receipt of "ARM" signal by each siren.
3. Record results on Attachment 2.2.
4. Acceptance criteria for the test is each siren indicating "Siren:Arm" on the SAMS monitor.

d. Perform Intrac test as follows:

1. Send a Test/Enable signal to all sirens using Intrac. Attachment 2.3 contains required codes.
2. Initiate an "All Poll" on SAMS.
3. Record results on Attachment 2.2.
4. Acceptance criteria for the test is each siren indicating, "Intrac:Enabled" on the SAMS monitor.

e. Notify the CWP to conduct the bi-weekly test from their location.

2. CWP (911 Center) Actions

NOTE: The purpose of this test is to verify operability of the SAMS equipment at the 911 Center.

- a. Send an "ARM" signal to any siren via SAMS.
- b. Query the siren via SAMS to verify receipt of "ARM" signal.
- c. Inform OCEMO of the test results.

ATTACHMENT 2.1 (Cont)

3. OCEMO follow up actions

a. If the above test results indicate the need for repair or investigation, then

1. Contact Central Regional Control Center (460-2421) or NGRID M&T Communications (460-2379) for repair, AND

2. Inform Nine Mile Point Emergency Preparedness (EP) of the problem.

b. Fax the completed Attachment 2.2 to Nine Mile Point EP at 349-4874.

ATTACHMENT 2.2: BI-WEEKLY TEST LOG

Completed by: _____ Location: ☐ EOC ☐ 911 Center Date Conducted: _____

SIREN #	INTRAC ACCEPTANCE CRITERIA MET? (Step 1.d.4)		SAMS ACCEPTANCE CRITERIA MET? (Step 1.e.4)		ANS Acceptance Criteria Met? (EPMP-EPP-05, Att. 3, Table 3.1)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	Y	N	Y	N	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (each column)							

ATTACHMENT 2.2 (Cont)

SIREN #	INTRAC ACCEPTANCE CRITERIA MET? (Step 1.3.4)		SAMS ACCEPTANCE CRITERIA MET? (Step 1.4.4)		SAMS Acceptance Criteria Met? (EPMP-EPP-05, Att. 3, Table 3.1)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	Y	N	Y	N	
26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
32	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
37	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (each column)							

***NOTE:** For Intrac Only: Up to 3 polls are permitted for satisfactory results. If >3 polls are required, then Acceptance Criteria Met = N.

CWP Acceptance Criteria met? ☐ Yes ☐ No

☐ No need for repair or investigation

☐ Repair or investigation needed. Action taken:

EP USE ONLY

Total number of sirens tested

Total number of sirens successfully passing the bi-weekly tests

in accordance with EPMP-EPP-05, Attachment 3, Table 3.1

ATTACHMENT 2.3: SIREN ADDRESS CODES (INTRAC)

SIREN SITE NO.	STATION CALL (Activates Individual Siren)
1	41A
2	42A
3	20A
4	21A
5	22A
6	1A
7	2A
8	23A
9	60A
10	61A
11	62A
12	63A
13	64A
14	65A
15	43A
16	44A
17	45A
18	46A
19	47A
20	51A
21	52A
22	66A
23	53A
24	67A
25	71A
26	10A
27	11A
28	54A
29	24A
30	25A
31	12A
32	3A
33	5A
34	26A
35	55A
36	72A
37	73A
All Sirens	40A

ATTACHMENT 2: QUARTERLY TESTING

1.0 PURPOSE

- 1.1 To verify proper operation of siren control circuitry, mechanicals, sensors and Intrac and SAMS receivers and transmitters.

2.0 PROCEDURE

- 2.1 Oswego County performs the quarterly test in accordance with Attachment 3.1.
- 2.2 NMPNS coordinates the performance of surveillance and repair functions as needed.
- 2.3 All results are sent to the Nine Mile Point Director of Emergency Preparedness.

ATTACHMENT 3.1: QUARTERLY TEST ACTIONS

NOTES: 1. Portions of the quarterly tests may be conducted from CWP.

2. Performance of the feedback functions of SAMS are NOT applicable to this test. That is, failures of audible, rotation, AC power or other SAMS sensors shall NOT affect whether the test met acceptance criteria.

1. OCEMO notifies CWP that test is to be performed.
2. Verify readiness of NGRID siren repair (Station Maintenance or Communications Group).
3. When requested by NGRID siren repair, activate the siren via SAMS as follows:
 - a. Activate the siren in the "Alert" mode.
 - b. Observe results on SAMS monitor.
 - c. Record results on Attachment 3.2.
 - d. If siren does not report back with "Siren Run OK" then activate affected siren(s) via Intrac in accordance with Step 4.
 - e. Acceptance criteria for the test is each siren sounding for 3 minutes, rotating (where applicable) and shutdown at the end of the 3 minute cycle, OR SAMS reports "Siren Run Ok".
4. When requested by NGRID siren repair, growl test the siren via Intrac (from OCEMO only) as follows:
 - a. Send a "Test/Enable" via Intrac.
 - b. Send an "Alert".
 - c. Immediately follow with a "Cancel".
 - d. Record results on Attachment 3.2.
 - e. Acceptance criteria for the test is each siren briefly sounding, as indicated by the NGRID siren repair.

ATTACHMENT 3.1 (Cont)

5. If the above test results indicate the need for repair or investigation, then:
 - a. Contact Central Regional Control Center (460-2421) or NGRID Radio (460-2379) for repair, AND
 - b. Inform Nine Mile Point EP of the problem.
6. Attach computer printout associated with the test to Attachment 3.2.
7. Fax the completed Attachment 3.2 and associated computer printout to Nine Mile Point EP at 349-4874.

ATTACHMENT 3.2: QUARTERLY SIREN TESTING LOG

Completed by: _____

Date Conducted: _____

SIREN #	SAMS ACTIVATION ACCEPTANCE CRITERIA MET? (Step 3.e)		INTRAC GROWL ACCEPTANCE CRITERIA MET? (Step 4.e)		ANS Acceptance Criteria Met? (EPMP-EPP-05, Att. 3, Table 3.1)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	Y	N	Y	N	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (each column)							

ATTACHMENT 3.2 (Cont)

Completed by: _____

Date Conducted: _____

SIREN #	SAMS ACTIVATION ACCEPTANCE CRITERIA MET? (Step 3.e)		INTRAC GROWL ACCEPTANCE CRITERIA MET? (Step 4.e)		ANS Acceptance Criteria Met? (EPMP-EPP-05, Att. 3, Table 3.1)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	Y	N	Y	N	
26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
32	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
37	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (each column)							

NOTE: Intrac Growl Only: Up to 3 attempts are permitted for satisfactory results. If >3 attempts are required, then Acceptance Criteria Met = N.

An asterisk* next to the siren number indicates that the test originated from the 911 Center

- ☐ No need for repair or investigation
- ☐ Repair or investigation needed. Action taken: _____

EP USE ONLY

Total number of sirens tested _____

Total number of sirens successfully passing the quarterly tests in accordance with EPMP-EPP-05, Attachment 3, Table 3.1 _____

ATTACHMENT 4: ANNUAL FULL SYSTEM TEST

1.0 PURPOSE

- 1.1 To verify proper operation of siren control circuitry, mechanicals, sensors and Intrac and SAMS receivers and transmitters.
- 1.2 To verify coordination between all components of the PNS (i.e. - sirens, Tone Alert and EAS).

2.0 PROCEDURE

- 2.1 Oswego County Emergency Management Office performs the annual test in accordance with Attachment 4.1
- 2.2 NMPNS Emergency Preparedness provides overall test coordination in accordance with this procedure.
- 2.3 NGRID Station Maintenance or Communications Group performs surveillance and repair functions as needed.
- 2.4 All results are sent to the Nine Mile Point Director of Emergency Preparedness.

ATTACHMENT 4.1: ANNUAL TEST ACTIONS

Sheet 1 of 2

Description of Actions

One week prior to test:

1. **Verify with OCEMO director that all public notifications have been performed.**

Prior to test:

NOTE: If any sirens are known to have inoperative SAMS before the test, an observer shall be placed at that siren, and the test results recorded on Attachment 4.3, Siren Activation Report.

1. **Verify proper operation of SAMS terminal and printer. Ensure proper printer paper supply.**
2. **Place EAS station on standby.**
3. **Place National Weather Service (NWS) on standby.**
4. **Notify County Fire Control and Sheriff of impending activation.**
5. **Establish open phone lines with EAS Station and NWS.**

At activation time, the following actions are to occur:

1. **SAMS operator to send an "Alert" signal to all sirens using OCEMO procedure.**
2. **EAS Station activates the EAS system.**
3. **NWS activates the Tone Alert system.**

After all sirens have reported back in:

1. **If any area does not report back "Siren Run OK" than send an alert to the siren via Intrac.**
2. **Record results onto Attachment 4.2, "Annual PNS Test Results Log" using printout from SAMS printer.**

ATTACHMENT 4.1: ANNUAL TEST ACTIONS

Sheet 2 of 2

3. Send an individual "Cancel" signal to any sirens suspected of not having silenced.
4. Note the EAS and Tone Alert test results on Attachment 4.2.
5. Acceptance Criteria
 - a. Siren Functions Properly - Yes = A 3 minute (\pm 30 sec) activation with rotation (if applicable) with siren shutdown at the end of the 3 minute cycle. This may be verified by:
 1. Actual observation (document with Attachment 4.3)
 2. Use of SAMS indication: "Siren Run OK"; or "Intrac Run OK" (document with SAMS printout)
 - b. Siren Functions Properly - No = Any deviation from the above.
 - c. EAS Test Successful:

Yes = Timely activation of EAS stations and transmission of the correct message.
 - d. Tone Alert Test Successful:

Yes = Timely activation of tone alert (or substitute) with transmission of the correct message.
6. If the above test results indicate the need for repair or investigation, then:
 - a. Contact Central Regional Control Center (460-2421) or NGRID M&T Communications for repair, to siren system.
 - b. Inform Nine Mile Point EP of the problem.
7. Fax the completed Attachment 4.2 and any associated paperwork (such as computer printouts or Attachment 4.3) to Nine Mile Point EP at 349-4874.

ATTACHMENT 4.2: ANNUAL PNS TEST RESULTS LOG

Completed by: _____

Activation Date/Time _____

SIREN #	ACTIVATION ACCEPTANCE CRITERIA MET? (Step 5 a)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	
1	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	
10	<input type="checkbox"/>	<input type="checkbox"/>	
11	<input type="checkbox"/>	<input type="checkbox"/>	
12	<input type="checkbox"/>	<input type="checkbox"/>	
13	<input type="checkbox"/>	<input type="checkbox"/>	
14	<input type="checkbox"/>	<input type="checkbox"/>	
15	<input type="checkbox"/>	<input type="checkbox"/>	
16	<input type="checkbox"/>	<input type="checkbox"/>	
17	<input type="checkbox"/>	<input type="checkbox"/>	
18	<input type="checkbox"/>	<input type="checkbox"/>	
19	<input type="checkbox"/>	<input type="checkbox"/>	
20	<input type="checkbox"/>	<input type="checkbox"/>	
21	<input type="checkbox"/>	<input type="checkbox"/>	
22	<input type="checkbox"/>	<input type="checkbox"/>	
23	<input type="checkbox"/>	<input type="checkbox"/>	
24	<input type="checkbox"/>	<input type="checkbox"/>	
25	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (each column)			

ATTACHMENT 4.2 (Cont)

Completed by: _____

Date Conducted: _____

SIREN #	ACCEPTANCE CRITERIA MET? (Step 5.a)		COMMENTS (include sensor failures, multiple tries, communication failures, etc)
	Y	N	
26	<input type="checkbox"/>	<input type="checkbox"/>	
27	<input type="checkbox"/>	<input type="checkbox"/>	
28	<input type="checkbox"/>	<input type="checkbox"/>	
29	<input type="checkbox"/>	<input type="checkbox"/>	
30	<input type="checkbox"/>	<input type="checkbox"/>	
31	<input type="checkbox"/>	<input type="checkbox"/>	
32	<input type="checkbox"/>	<input type="checkbox"/>	
33	<input type="checkbox"/>	<input type="checkbox"/>	
34	<input type="checkbox"/>	<input type="checkbox"/>	
35	<input type="checkbox"/>	<input type="checkbox"/>	
36	<input type="checkbox"/>	<input type="checkbox"/>	
37	<input type="checkbox"/>	<input type="checkbox"/>	
Total Number (Each column. Include previous page)			

EAS Activate Properly? ☐ Yes ☐ No

Tone Alert Activate Properly? ☐ Yes ☐ No

☐ No need for repair or investigation

☐ Repair or investigation needed. Action taken:

 _____ EP USE ONLY

Total number of sirens tested _____

Total number of sirens successfully passing the annual tests in
 accordance with EPMP-EPP-05, Attachment 3, Table 3.1 _____

ATTACHMENT 4.3: SIREN ACTIVATION REPORT

NOTE: This form only to be used during Annual PNS Test for sirens whose SAMS is not communicating properly.

Observers Name: _____ Siren # _____

Activation Time: _____ Activation Date: _____

Activation Duration: _____

Horn Rotation: ☐ YES ☐ NO ☐ N/A

Comments: _____

Signature: _____

ATTACHMENT 5: ANNUAL PROMPT NOTIFICATION SYSTEM SIREN
PREVENTATIVE MAINTENANCE-MECHANICAL/ELECTRICAL

Sheet 1 of 3

SITE # _____ INSPECTION BY: _____ DATE INSPECTED _____

"CONTROL BOX AND SAMS BOX"

Initials/Date

Check all circuit breakers _____ / _____

Check incoming AC voltage _____ / _____

Check amps on blower _____ / _____

Check amps on rotator _____ / _____

Check all electrical connections _____ / _____

Check all mechanical connections _____ / _____

After leads have been lifted (Intrac only):

Check alert mode _____ / _____

Check cancel mode _____ / _____

Clean interior of both control box and SAMS box _____ / _____

Check tamper switches _____ / _____

Check counter operation _____ / _____

Check heaters and thermostats _____ / _____

Check for moisture and bugs (clean if needed) _____ / _____

Check receptacle _____ / _____

"BLOWER PLATFORM (where applicable)"

Check for nests _____ / _____

Check belt condition and alignment _____ / _____

**ATTACHMENT 5: ANNUAL PROMPT NOTIFICATION SYSTEM SIREN
PREVENTATIVE MAINTENANCE-MECHANICAL/ELECTRICAL**

Sheet 2 of 3

SITE # _____ INSPECTION BY: _____ DATE-INSPECTED _____

"BLOWER PLATFORM (where applicable)"

Initials/Date

Check and oil blower relief valve

Grease blower (3 phase motors where applicable)

Check oil level in blowers and change if needed

Check capacitors in single phase motors

Check air intake screens on blower

Check hoses on blower

Check electrical connectors

Check mechanical connections

"TOP OF POLE"

Check screens

Check and adjust if necessary: foot pounds on horn rotation

Check belts on rotator

Check oil level in gear reducer

Check capacitor on rotator motor

Check rotation sensor and magnets

Check antenna and spray connection

Check solenoid slide valves on fire sirens

Check and lubricate gears if needed

Check brushes on STH10 and 3T 22B models

Check and fill grease cups

ATTACHMENT 5: ANNUAL PROMPT NOTIFICATION SYSTEM SIREN
PREVENTATIVE MAINTENANCE-MECHANICAL/ELECTRICAL

Sheet 3 of 3

SITE # _____ INSPECTION BY: _____ DATE INSPECTED _____

"TOP OF POLE"

Initials/Date

Bounce chopper and check bearings

____/____

Check all electrical connections

____/____

Check all mechanical connections

____/____

"CONTROL BOX"

Check timer settings

____/____

Check automatic switch settings

____/____

Check blower/chopper lead replacement

____/____

Counter readings when left T/E _____ alert _____ attack _____ motor _____

COMMENTS:

ATTACHMENT 5.1: ANNUAL PROMPT NOTIFICATION SYSTEM
PREVENTATIVE MAINTENANCE-COMMUNICATIONS

SITE # _____ DATE _____ TECHNICIAN(S) _____

ANNUAL CHECK ☐ OTHER MAINTENANCE ☐

Fill in all that apply:

1) SAMS EQUIPMENT

a) Compulert III

Check: 1. Processor Clock _____ 2. Connections _____

3. Battery _____
(Replace 5yrs max.)

4. Zerust _____ Battery Replacement
Date: _____

b) 900 mhz Darcom Radio

Check: TX 1. Power Out _____ 2. Reflected _____

3. Freq. Error _____ 4. Modulation _____

5. TX Level _____

RX 1. 12 dB Sinad _____ 2. RSSI _____

3. RX Level _____

2) INTRAC EQUIPMENT

Check: RX 1. 10dBQ _____ 2. 12 dB SINAD _____

3. Decoder _____ 4. Control Box _____

5. Antenna _____

EOC Encoder:

1. Battery _____ (Test under load/Replace 5yrs max)
Battery Replacement
Date: _____

2. Power Supply _____ (Battery float voltage)

COMMENTS/OBSERVATIONS:

ATTACHMENT 5.2: PNS PROGRAM OVERSIGHT FOR TESTING AND MAINTENANCE

1.0 Purpose

- 1.1 To provide appropriate oversight of the Prompt Notification System testing and maintenance programs.

2.0 Procedure

- 2.1 Nine Mile Point Emergency Preparedness (NMP EP) staff will observe the conduct of bi-weekly siren testing from Oswego County Emergency Management Office (OCEMO) a random basis. Document observations on Attachment 5.3.
- 2.2 NMP EP staff will observe the conduct of quarterly siren testing from both OCEMO and the Oswego County 911 Center. Document observations on Attachment 5.3.
- 2.3 NMP EP staff will observe the conduct of siren testing at randomly selected siren locations during the course of quarterly siren testing. Document observations on Attachment 5.3.
- 2.4 NMP EP staff will observe the conduct of annual siren testing from OCEMO. Document observations on Attachment 5.3.
- 2.5 NMP EP staff will observe annual maintenance activities at randomly selected siren locations as conducted by NGRID Station Maintenance and NGRID Communications Group. Document observations on Attachment 5.3.

ATTACHMENT 5.3: PNS PROGRAM OVERSIGHT FOR TESTING AND MAINTENANCE
OBSERVATION FORM

Name: _____

Date: _____

Observation: ☐ Bi-weekly test ☐ Quarterly test ☐ Annual test

☐ Annual maintenance ☐ Special test ☐ Other

Location: 1000 10th St NW, Washington, D.C. (approx. 1000 10th St NW, Washington, D.C.)

Observation details:	Sat	Unsat	N/A
Yield (%)			
Purity (%)			
mp (°C)			
¹ H NMR (CDCl ₃) δ			
¹³ C NMR (CDCl ₃) δ			
IR (neat) ν			
HRMS (ESI-TOF) m/z			
ANAL. Calcd for C ₁₀ H ₈ O ₂			
Found			

- **Appropriate procedure(s) used** ☐ ☐ ☐
- **Post-Maintenance test developed/used** ☐ ☐ ☐
- **Material condition of computers, printers, keyboard** ☐ ☐ ☐
- **Material condition of sirens - exterior:** ☐ ☐ ☐
 - **Paint, platform, screens, nests** ☐ ☐ ☐
- **Material condition of sirens - interior:** ☐ ☐ ☐
 - **Belts, electrical connections, mechanical connections, no jumpers installed, nests, cleanliness** ☐ ☐ ☐

Comments:

ATTACHMENT 5.4: PRE AND POST MAINTENANCE TESTING

1.0 Purpose

- 1.1 To provide for the conduct and documentation of pre and post-maintenance testing of the siren system.
- 1.2 Pre and post-maintenance test plan should be developed and used following notification of a siren system problem and prior to any work being performed.

2.0 Procedure

- 2.1 Nine Mile Point Emergency Preparedness (NMP EP) staff will ensure development of a pre or post-maintenance testing (PMT) plan, using Attachment 5.5.
- 2.2 EP staff should coordinate the development of the test with NMP Central Maintenance and NGRID Communications Group as appropriate.
- 2.3 Where possible, EP staff should observe the conduct of the PMT.
- 2.4 Pre or post maintenance tests shall be forwarded to Nine Mile Point Emergency Preparedness for inclusion in EP PPF.

ATTACHMENT 5.5: PRE AND POST MAINTENANCE TEST PLAN

Name: _____ Date: _____

Test Type: ☐ Pre-maintenance test ☐ Post-maintenance test ☐ Other

Reason for test: _____

Test Plan:

Acceptance Criteria:

Test Results: ☐ Sat ☐ Unsat

Comments:

ATTACHMENT 6: RECORD KEEPING

1.0 PURPOSE

- 1.1 To provide the required tracking and reporting of PNS activities.

2.0 PROCEDURE

- 2.1 A siren out of service report (Attachment 6.1) should be completed any time a siren is incapable of being activated.
- 2.2 A Siren Site Maintenance Log Sheet (Attachment 6.2) may be completed for all major siren maintenance or repair activities. This should be limited to those incidents that remove a siren from service or have the potential to do so.
- 2.3 Nine Mile Point Director of Emergency Preparedness shall direct completion of Monthly PNS Summary Form (Attachment 6.3), and verify its transmission to New York State Emergency Management Office.

The report shall contain the monthly and yearly availability, calculated as follows:

$$\text{Monthly availability (\%)} = \frac{[(37 \text{ sirens} \times 24 \text{ hrs} \times \# \text{ days in month}) - (\# \text{ hrs out of service for all sirens})]}{(37 \text{ sirens} \times 24 \text{ hrs} \times \# \text{ days in month})} \times 100$$

$$\text{Yearly availability (\%)} = \frac{\text{sum of 12 monthly availabilities}}{12}$$

NOTE: The design criteria is that yearly availability must remain >90%.

ATTACHMENT 6.1: SIREN OUT-OF-SERVICE REPORT

Siren Site No. _____ Date of Report ____/____/____

Date and Time Siren Out _____

Date and Time Siren In _____

Description of Failure:

Corrective Actions Taken:

Form completed by _____

Signature _____

cc: Oswego County Emergency Management Office
Supervisor, Central Regions Communications Group NGRID
Supervisor, Station Maintenance NGRID
Director - Emergency Preparedness, Nine Mile Point Nuclear Station

ATTACHMENT 6.2: SIREN SITE MAINTENANCE LOG

Site # _____

Date

Remarks

ATTACHMENT 6.3: MONTHLY PNS SUMMARY FORM

MONTHLY SUMMARY OF TESTING AND MAINTENANCE OF THE OSWEGO COUNTY PROMPT NOTIFICATION SYSTEM

Month/Year
/

Outdoor Siren System

Location Initiated

Date(s) Occurred

Expected

Polling	<input type="checkbox"/> Emergency Management Office <input type="checkbox"/> Other: _____		Daily
Silent Test	<input type="checkbox"/> Fire Control <input type="checkbox"/> Emergency Management Office <input type="checkbox"/> Other: _____		Biweekly
Quarterly Test	<input type="checkbox"/> Fire Control <input type="checkbox"/> Emergency Management Office <input type="checkbox"/> Other: _____		Quarterly
Full System Test	<input type="checkbox"/> Fire Control <input type="checkbox"/> Emergency Management Office		Annually

Tone Alert Radios

Tone Activation	<input type="checkbox"/> National Weather Service <input type="checkbox"/> Other _____		Weekly
-----------------	---	--	--------

EAS

Tone Activation	<input type="checkbox"/> Emergency Management Office <input type="checkbox"/> Other _____		Annually
-----------------	--	--	----------

Brief description of any problems found and resolution of such problems:

Monthly Siren Availability (%):	Year-to-Date Siren Availability (%):

ATTACHMENT 7: WYLE REPORT REQUIREMENTS

Any changes to this procedure or the Prompt Notification System conform to the following:

Requirements	Source Location	How met
During an emergency situation at NMP or JAF nuclear facilities, tone alert receivers in residential and commercial buildings are activated in conjunction with the siren system (tone alert activation is implemented through the National Weather Service).	Pg. 2-1, Section 2.2	System as built
The system may be activated through the Oswego County Emergency Operation Center or the Sheriff's office.	Pg. 3-1, Section 3.0	System as built
After a 30-second delay, the EAS network broadcast the appropriate announcements to the public.	Pg. 3-1, Section 3.0	System as built
The system provides alerting throughout the 0-5 mile radius around the plants as well as for populated areas between 5 and 10 miles	Pg. 4-1, Section 4.2	System as built
70dB required by sirens for alerting areas with greater than a 2000 persons per square mile and 60dB for populated areas with less than 2000 persons per square mile OR the sound level exceeds the average daytime ambient sound level by 10dB.	Pg. 4-1, Section 4.2 (also NUREG 0654 Appendix 3)	System as built
In low density populated areas within the EPZ, tone alert radios may be used for alerting purposes.	Pg. 4-1, Section 4.1	System as built
All major institutional and industrial facilities are provided with commercial grade tone alert receivers.	Pg. 4-2, Section 4.3	System as built
Silent siren tests are to be performed on a bi-weekly basis.	Pg. 4-3, Section 4.5	IAW EPMP-EPP-08, Attachment 2
Quarterly siren tests will consist of a 3-minute operation or as a minimum a growl test of each siren.	Pg. 4-3, Section 4.5	IAW EPMP-EPP-08, Attachment 3
Annual full system test performed during which the entire system shall be simultaneously activated.	Pg. 4-3, Section 4.5	IAW EPMP-EPP-08, Attachment 4
A weekly test of the tone alert radios shall be performed.	Pg. 4-3, Section 4.5	Per EPMP-EPP-08, Section 3.6
The tone alert system shall be activated as part of the annual full system test.	Pg. 4-3, Section 4.5	IAW EPMP-EPP-08, Attachment 4
Preventive Maintenance shall be performed annually on all siren systems.	Pg. 4-3, Section 4.5	Per EPMP-EPP-08, Attachments 5 & 5.1
Corrective maintenance will be performed on an as-needed basis.	Pg. 4-4, Section 4.5	Per EPMP-EPP-08, Attachments 5.4 & 5.5
Maintenance records are to be maintained and out-of-service as well as return-to-service notifications be made.	Pg. 4-4, Section 4.5	Per EPMP-EPP-08, Attachments 6 & 6.1