NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-01

REVISION 09

CLASSIFICATION OF EMERGENCY CONDITIONS AT UNIT 1

TECHNICAL SPECIFICATION REQUIRED

Approved by:
L. A. Hopkins

Plant Manager - Unit 1

11/23/99
Date

THIS IS A FULL REVISION

Effective Date: 12/30/1999

PERIODIC REVIEW DUE DATE DECEMBER 2000

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1.0 PURPOSE

Provide the Control Room staff and Site Emergency Director with the criteria and method for classifying abnormal conditions into one of the four emergency classifications.

2.0 PRIMARY RESPONSIBILITIES

2.1 Station Shift Supervisor (SSS/SED)

- Maintains awareness of any abnormal plant conditions or occurrences and evaluates the need to classify the condition in accordance with this procedure.
- Upon initial declaration of an emergency, assumes the role of Site Emergency Director (SED) and functions as the SED until relieved of those duties by the on-call SED, other SRO, or the emergency is terminated.
- Declares any subsequent emergency classifications based on available information until relieved of SED, or other active SRO duties, or the emergency is terminated.
- For conditions classified as an Unusual Event, terminating the emergency in accordance with EPIP-EPP-25 "Reclassification and Recovery".

2.2 Site Emergency Director (TSC/SED)

- Upon activation of the TSC, relieves the SSS of the SED duties in accordance with EPIP-EPP-18 "Activation and Direction of the Emergency Plans".
- Maintains awareness of any abnormal plant conditions or occurrences and evaluates the need to re-classify the condition in accordance with this procedure and in concurrence with the Corporate Emergency Director.
- For conditions classified as an Alert or higher, terminating the emergency in accordance with EPIP-EPP-25 "Reclassification and Recovery".

2.3 Corporate Emergency Director (CED)

For conditions classified as an Alert or higher, concur with the emergency classification or reclassification as determined by the SED.

3.0 PROCEDURE

NOTES: 1. Entry into an emergency classification is not expected for planned outages of systems or equipment in which compensatory measures have been taken.

2. The SSS/SED should not delay actions that would mitigate or prevent an emergency or off-normal conditions, to classify an event. However, all events should be classified in accordance with this procedure no later than 15 minutes after indications are available in the Control Room that an EAL has been exceeded.

3.1 Station Shift Supervisor/Site Emergency Director (SSS/SED) Actions For Site Events

NOTES: 1. If there is any question as to who should initiate the emergency plan, the Unit 1 SSS shall assume the duties of the SED.

2. In all cases, the decision as to which Unit SSS will be the SED and subsequent emergency classification and declaration shall not exceed 15 minutes from the time that indications are available in the Control Room that an EAL has been exceeded.

3.1.1 **IF**: The emergency declaration is due to an initiating condition affecting both Unit 1 and Unit 2,

THEN: Confer with the Unit 2 SSS and determine,
- Which plant has the highest level of emergency classification required and
- Who first was notified of/identified the event.

3.1.2 **IF**: Emergency classification levels are different,

THEN: The SSS at the Unit having the highest emergency classification level shall assume the role of SSS/SED.

3.1.3 **IF**: Emergency classification levels are the same,

THEN: The SSS at the Unit which first was notified of/identified the event shall assume the role of the SSS/SED.

3.1.4 While performing the following steps:

a. **IF**: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.1.5 of this procedure.

3.1.4 (Cont)

b. **IF**: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. **IF**: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.1.4.c.2 and 3.1.4.c.3.

3.1.5 **IF**: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure.

3.1.6 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.1.7 **IF**: The Unit 2 SSS has assumed the duties of the SED,

THEN:
1. Update the SED as plant conditions or emergency actions levels change.
2. Verify that communications/notifications performed in accordance with EPIP-EPP-20, include information about both Unit 1 and Unit 2 as appropriate for site events.

3.1.8 **IF**: You have assumed the duties of the SED,

THEN:
1. Confer with the Unit 2 SSS and obtain updates of plant conditions and emergency action level status.
2. Ensure that communications/notifications performed in accordance with EPIP-EPP-20, include information about both Unit 1 and Unit 2 as appropriate for site events.

3.1.9 **WHEN**: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

3.2 SSS/SED Actions For Unit Specific Events

3.2.1 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.2.2 While performing the following steps:

a. **IF**: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.2.3 of this procedure.

b. **IF**: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. **IF**: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.2.2.c.2 and 3.2.2.c.3.

3.2.3 **IF**: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. Declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure.

3.2.4 **WHEN**: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

3.3 TSC/SED Actions for Emergency Events

3.3.1 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.3.2 While performing the following steps:

a. **IF**: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.3.3 of this procedure.

b. **IF**: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. **IF**: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.3.2.c.2 and 3.3.2.c.3.

3.3.3 **IF**: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. Declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure.

3.3.4 **WHEN**: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

4.0 DEFINITIONS

4.1 Unusual Event - Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected.

4.2 Alert - Events are in progress or have occurred which degrade plant safety systems to the extent that increased monitoring of plant safety functions is warranted. Any releases from these events are expected to be limited to small fractions of the EPA Protective Action Guideline plume exposure levels outside the site boundary.

4.3 Site Area Emergency - Events are in progress or have occurred which involve actual or likely major failures of plant functions intended for protection of the public. Releases are not expected to exceed EPA Protection Action Guideline plume exposure levels outside the site boundary.

4.4 General Emergency - Events are in progress or have occurred which involve actual or imminent substantial core degradation with potential for loss of containment integrity. Any releases from these events can be reasonably expected to exceed EPA Protective Action Guideline plume exposure levels outside the site boundary.

4.5 Site Events - Events are in progress or have occurred that have or could have affected the entire protected area. Examples of these events include but are not limited to; Bomb threats, earthquakes, hurricanes, tornadoes etc.

4.6 Transitory Event - An event in which an emergency action level has been exceeded but the condition no longer warrants classification at that level prior to making the emergency declaration.

4.7 Classification - Categorization of plant conditions or events into the appropriate emergency classification level.

4.8 Declaration - Announcement in the Control Room or TSC that an EAL has been met and an emergency classification level has been entered.

5.0 REFERENCES AND COMMITMENTS

5.1 Licensee Documentation

Unit 1 UFSAR, Chapter XIII

5.2 Standards, Regulations, Codes

- NUMARC NESP-007, Methodology for the Development of Emergency Action Levels

5.3 Policies, Programs and Procedures

- EPMP-EPP-0101, Unit 1 Emergency Classification Technical Bases
- EPIP-EPP-18, Activation of the Emergency Plan
- EPIP-EPP-25, Emergency Reclassification and Recovery
- NRC Emergency Preparedness Position (EPPOS) #2, "Timeliness of Classification of Emergency Conditions"

5.4 Commitments

None

6.0 RECORD REVIEW AND DISPOSITION

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

Not Applicable

The following records generated by this procedure as a result of EP Drills/Exercises are not required for retention in the Permanent Plant File.

Not Applicable

This page represents the

Emergency Action Level Matrix/Unit 1

which is too large to fit in this document.

Revision 08 of the EAL Matrix

remains applicable and in effect.

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-02

REVISION 09

CLASSIFICATION OF EMERGENCY CONDITIONS AT UNIT 2

TECHNICAL SPECIFICATION REQUIRED

Approved by:
M. F. Peckham

Plant Manager - Unit 2

11/28/99
Date

THIS IS A FULL REVISION

Effective Date: 12/30/1999

PERIODIC REVIEW DUE DATE NOVEMBER 2000

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1.0 PURPOSE

Provide the Control Room staff and Site Emergency Director with the criteria and method for classifying abnormal conditions into one of the four emergency classifications.

2.0 PRIMARY RESPONSIBILITIES

2.1 Station Shift Supervisor (SSS/SED)

- Maintains awareness of any abnormal plant conditions or occurrences and evaluates the need to classify the condition in accordance with this procedure.
- Upon initial declaration of an emergency, assumes the role of Site Emergency Director (SED) and functions as the SED until relieved of those duties by the on-call SED, other SRO, or the emergency is terminated.
- Declares any subsequent emergency classifications based on available information until relieved of SED, or other active SRO duties, or the emergency is terminated.
- For conditions classified as an Unusual Event, terminating the emergency in accordance with EPIP-EPP-25 "Reclassification and Recovery".

2.2 Site Emergency Director (TSC/SED)

- Upon activation of the TSC, relieves the SSS of the SED duties in accordance with EPIP-EPP-18 "Activation and Direction of the Emergency Plans".
- Maintains awareness of any abnormal plant conditions or occurrences and evaluates the need to re-classify the condition in accordance with this procedure and in concurrence with the Corporate Emergency Director.
- For conditions classified as an Alert or higher, terminating the emergency in accordance with EPIP-EPP-25 "Reclassification and Recovery".

2.3 Corporate Emergency Director (CED)

For conditions classified as an Alert or higher, concur with the emergency classification or reclassification as determined by the SED.

3.0 PROCEDURE

NOTES: 1. Entry into an emergency classification is not expected for planned outages of systems or equipment in which compensatory measures have been taken.

2. The SSS/SED should not delay actions that would mitigate or prevent an emergency or off-normal conditions, to classify an event. However, all events should be classified in accordance with this procedure no later than 15 minutes after indications are available in the Control Room that an EAL has been exceeded.

3.1 Station Shift Supervisor/Site Emergency Director (SSS/SED) Actions For Site Events

NOTE: 1. If there is any question as to who should initiate the emergency plan, the Unit 1 SSS shall assume the duties of the SED.
2. In all cases, the decision as to which Unit SSS will be the SED and subsequent emergency classification and declaration shall not exceed 15 minutes from the time that indications are available in the Control Room that an EAL has been exceeded.

3.1.1 **IF**: The emergency declaration is due to an initiating condition affecting both Unit 1 and Unit 2,

THEN: Confer with the Unit 1 SSS and determine,
- Which plant has the highest level of emergency classification required and
- Who first was notified of/identified the event.

3.1.2 **IF**: Emergency classification levels are different,

THEN: The SSS at the Unit having the highest emergency classification level shall assume the role of SSS/SED.

3.1.3 **IF**: Emergency classification levels are the same,

THEN: The SSS at the Unit which first was notified of/identified the event shall assume the role of the SSS/SED.

3.1.4 While performing the following steps:

a. **IF**: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.1.5 of this procedure.

3.1.4 (Cont)

b. **IF**: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. **IF**: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.1.4.c.2 and 3.1.4.c.3.

3.1.5 **IF**: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. Declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure.

3.1.6 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.1.7 **IF**: The Unit 1 SSS has assumed the duties of the SED,

THEN:
1. Update the SED as plant conditions or emergency actions levels change.
2. Verify that communications/notifications performed in accordance with EPIP-EPP-20, include information about both Unit 1 and Unit 2 as appropriate for site events.

3.1.8 **IF**: You have assumed the duties of the SED,

THEN:
1. Confer with the Unit 1 SSS and obtain updates of plant conditions and emergency action level status.
2. Ensure that communications/notifications performed in accordance with EPIP-EPP-20, include information about both Unit 1 and Unit 2 as appropriate for site events.

3.1.9 **WHEN**: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

3.2 SSS/SED Actions For Unit Specific Events

3.2.1 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.2.2 While performing the following steps:

a. **IF**: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.2.3 of this procedure.

b. **IF**: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. **IF**: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.2.2.c.2 and 3.2.2.c.3.

3.2.3 IF: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. Declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure

3.2.4 WHEN: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

3.3 TSC/SED Actions for Emergency Events

3.3.1 Continually monitor and evaluate plant conditions to determine if one or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded.

3.3.2 While performing the following steps:

a. IF: An abnormal condition exists which meets or exceeds an emergency action level for a classification higher than is currently declared,

THEN: Go to Step 3.3.3 of this procedure.

b. IF: It is determined that the emergency has been over classified OR that the emergency classification is no longer warranted,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

c. IF: An EAL has been met or exceeded, but the EAL threshold or emergency condition no longer exists prior to making the emergency declaration (transitory event),

THEN:
1. Classify current conditions and declare the emergency, if necessary.
2. Make notifications required for the declared emergency in accordance with EPIP-EPP-20.
3. Notify State, County and NRC of transitory event (even if no emergency is declared).

NOTE: The same Part 1 Notification Fact Sheet and NRC Notification Worksheet can be used to execute Steps 3.3.2.c.2 and 3.3.2.c.3.

3.3.3 **IF**: One or more emergency action level thresholds in the Emergency Action Level Matrix (Attachment 1), have been met or exceeded,

THEN:
1. Declare the highest level emergency classification for which an EAL is currently being met or exceeded.
2. Enter EPIP-EPP-18 "Activation and Direction of the Emergency Plans" and execute it concurrently with this procedure

3.3.4 **WHEN**: It has been determined that an emergency condition no longer exists,

THEN: Enter EPIP-EPP-25 "Emergency Reclassification and Recovery".

4.0 DEFINITIONS

4.1 Unusual Event - Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant. No releases of radioactive material requiring offsite response or monitoring are expected.

4.2 Alert - Events are in progress or have occurred which degrade plant safety systems to the extent that increased monitoring of plant safety functions is warranted. Any releases from these events are expected to be limited to small fractions of the EPA Protective Action Guideline plume exposure levels outside the site boundary.

4.3 Site Area Emergency - Events are in progress or have occurred which involve actual or likely major failures of plant functions intended for protection of the public. Releases are not expected to exceed EPA Protection Action Guideline plume exposure levels outside the site boundary.

4.4 General Emergency - Events are in progress or have occurred which involve actual or imminent substantial core degradation with potential for loss of containment integrity. Any releases from these events can be reasonably expected to exceed EPA Protective Action Guideline plume exposure levels outside the site boundary.

4.5 Site Events - Events are in progress or have occurred that have or could have affected the entire protected area. Examples of these events include but are not limited to; Bomb threats, earthquakes, hurricanes, tornadoes etc.

4.6 Transitory Event - An event in which an emergency action level has been exceeded but the condition no longer warrants classification at that level prior to making the emergency declaration.

4.7 Classification - Categorization of plant conditions or events into the appropriate emergency classification level.

4.8 Declaration - Announcement in the Control Room or TSC that an EAL has been met and an emergency classification level has been entered.

5.0 REFERENCES AND COMMITMENTS

5.1 Licensee Documentation

Unit 2 USAR, Chapter 13 .

5.2 Standards, Regulations, Codes

- NUMARC NESP-007, Methodology for the Development of Emergency Action Levels

5.3 Policies, Programs and Procedures

- EPMP-EPP-0102, Unit 2 Emergency Classification Technical Bases
- EPIP-EPP-18, Activation of the Emergency Plan
- EPIP-EPP-25, Emergency Reclassification and Recovery
- NRC Emergency Preparedness Position (EPPOS) #2, "Timeliness of Classification of Emergency Conditions"

5.4 Commitments

None

6.0 RECORD REVIEW AND DISPOSITION

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

Not Applicable

The following records generated by this procedure as a result of EP Drills/Exercises are not required for retention in the Permanent Plant File.

Not Applicable

This page represents the

Emergency Action Level Matrix/Unit 2

which is too large to fit in this document.

Revision 08 of the EAL Matrix

remains applicable and in effect.

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-11

REVISION 04

HAZARDOUS MATERIAL INCIDENT RESPONSE

TECHNICAL SPECIFICATION REQUIRED

Approved by: L. A. Hopkins	Plant Manager - Unit 1	11/22/99 Date
Approved by: M. F. Peckham	Plant Manager - Unit 2	11/22/99 Date

THIS IS A FULL REVISION

Effective Date: 12/13/1999

PERIODIC REVIEW DUE DATE NOVEMBER 2001

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1.0 PURPOSE

To provide direction for the notification and coordination of personnel to respond to a hazardous material (HAZMAT) incident (suspected or confirmed) at the Nine Mile Point Nuclear Site, that may pose a threat to:

- Personnel OR
- Safe plant operation OR
- The environment

2.0 RESPONSIBILITIES

2.1 **Fire Brigade Leader** at the affected unit is responsible for:

2.1.1 Initial response

2.1.2 Performing initial incident assessment

2.1.3 Mitigating the consequences of the HAZMAT release/emergency

2.1.4 Setting up the incident command post

2.1.5 Notifying the SSS that the emergency is terminated

2.2 **Environmental Protection Personnel** are responsible for:

2.2.1 Assessing the situation for reportability

2.2.2 Making notifications to offsite regulatory agencies in accordance with S-ENVSP-9, "Spill Contingency Plan and Procedure" for a HAZMAT EMERGENCY.

2.2.3 Providing single point of contact for the determination of necessary/required cleanup activities, for a HAZMAT EMERGENCY.

2.2.4 If necessary, coordinating sampling of the spill area to assure cleanup is successful, following a HAZMAT EMERGENCY.

2.3 **Station Shift Supervisor** is responsible for:

2.3.1 Providing overall direction and control of any HAZMAT release/emergency as it relates to the safe operation of the affected unit.

2.3.2 Determining if the Emergency Plan should be entered based on Emergency Action Levels listed in EPIP-EPP-01/02 (Classification of Emergency Conditions Unit 1/Unit 2)

2.3.3 Ensuring appropriate notifications are completed as required.

2.3.4 Directing appropriate personnel to perform cleanup of a HAZMAT release, that is below the HAZMAT EMERGENCY level.

2.4 **Chief Shift Operator**

2.4.1 Notifying the Fire Brigade Leader of a release of any potentially hazardous materials.

2.4.2 Making announcements to onsite personnel in accordance with Attachment 1 of this procedure.

2.5 **Station Personnel** are responsible for notifying the control room of suspected or actual HAZMAT releases.

2.6 **Radiation Protection** personnel are responsible for ensuring that for HAZMAT releases within the protected area:

2.6.1 Appropriate radiological surveys are conducted

2.6.2 Personnel responding to the emergency comply with appropriate radiological work practices and procedures

3.0 PROCEDURE

NOTE: Entry into this procedure is expected for any hazmat incidents that may pose a threat to:

- Personnel OR
- Safe plant operation OR
- The environment.

3.1 Station Personnel

Notify the control room as soon as possible following the discovery of an actual or suspected release of hazardous materials . Include in the notification (if known):

- Type of material released and from what source.
- Hazards from the materials released.
- Amount/quantity of released materials.
- Building/area and exact location of the release materials (example, turbine building el 261 northwest side by the ...).
- If outside, general wind direction (example, wind is coming from the...)
- If the material has or will enter a storm drain or the lake.

3.2 Chief Shift Operator

3.2.1 Upon notification of a release of any potentially hazardous materials, the CSO shall:

a. Notify the Fire Brigade Leader using normal notification methods (phone, radio, or page) of the release of any potentially hazardous materials and include:

- Type of material released and from what source.
- Hazards from the materials released.
- Amount/quantity of released materials.
- Building/area and exact location of the release materials.
- If outside, general wind direction (example, wind is coming from the...)
- If the material has or will enter a storm drain or the lake.

b. **IF**, the notification indicates a release of any potentially hazardous materials which:

1. Presents an unknown hazard, **OR**
2. Requires full fire brigade involvement (as determined by the Fire Brigade Leader), **OR**
3. Has entered a storm drain or the Lake, **OR**
4. Is outside and in excess of quantities/amounts indicated in the table below,

MATERIALS BEING RELEASED	
Substance Involved	**Amount/Quantity**
Gasoline	Forms a puddle or free-flowing
Diesel Fuel	Forms a puddle or free-flowing
Hydraulic Fluid	Forms a puddle or free-flowing
Antifreeze	1 Quart
Car Brake Fluid	Forms a puddle or free-flowing
Transmission Fluid	Forms a puddle or free-flowing

THEN, Complete Attachment 1, CSO HAZMAT EMERGENCY CHECKLIST

3.2.2 **IF**: The release of any potentially hazardous materials does not meet any of the criteria in step 3.2.1b above,

THEN: 1. Inform the SSS of the specifics of the release as reported by the Fire Brigade Leader.

2. Take other actions as directed by the SSS or as requested (if appropriate) by the Fire Brigade Leader.

3.3 Station Shift Supervisor

Upon notification of a release of any potentially hazardous materials the SSS shall complete the SSS checklist "HAZMAT CHECKLIST" (Attachment 2).

3.4 Fire Brigade Leader

Upon notification of a release of any potentially hazardous materials the **Fire Brigade Leader** shall implement actions in accordance with the "Fire Brigade Leader HAZMAT Checklist" (Attachment 3).

3.5 Environmental Protection Personnel

3.5.1 Upon notification of a HAZMAT incident or emergency shall implement appropriate notification actions in accordance with S-ENVSP-9, "Spill Contingency Plan and Procedures".

NOTE: Personnel assigned cleanup responsibilities may be required to have specific qualifications in accordance with 29CFR1910, "Hazardous Waste Operations and Emergency Response".

3.5.2 Obtain information on specific details of the HAZMAT EMERGENCY from any of the following as applicable:

- Safety and Health (Materials Safety Data Sheet (MSDS) information)
- S-ENVSP-9
- Sampling analysis, waste materials packaging
- Outside (vendor) assistance

3.5.3 Determine necessary cleanup activities required for the HAZMAT EMERGENCY based upon:

- Materials spilled
- Size of the spill
- Special handling/training required for cleanup.

3.5.4 Advise the SSS on specific cleanup activities required for the HAZMAT EMERGENCY. Examples of cleanup methods to be used may include:

- Buildings and Grounds personnel perform the cleanup and disposal using normal cleanup methods (speedy dry, wipe down, etc..)
- Use of contracted personnel qualified to perform HAZMAT cleanup and disposal, perform the cleanup.

3.5.5 **IF**: Contracted personnel are to be used,
THEN: Write a purchase requisition detailing the needs and required training/expertise.

3.5.6 Ensure cleanup activities as recommended have been accomplished following the HAZMAT EMERGENCY.

3.5.7 As necessary, direct sampling of area following cleanup to verify cleanup is adequate.

3.5.8 If appropriate, write a DER per NIP-ECA-01, detailing:

- The specifics of the incident,
- Immediate corrective actions taken,
- Long term preventive measures taken to prevent re-occurrence.

3.6 Security

3.6.1 Provide security as needed to keep unauthorized personnel away from the HAZMAT scene.

3.6.2 If directed by the SSS, notify the following of the Hazmat Incident:

- Environmental Protection (use on-call list and/or pagers)
- Radiation Protection (in-plant accidents only)
- Safety (use on call list and/or pagers)
- Affected Plant Manager

3.7 Radiation Protection

3.7.1 Upon hearing the announcement for a HAZMAT EMERGENCY within the Protected Area, the Radiation Protection Technician shall:

a. Report to the incident command post.

3.7.1 (Cont)

b. Take direction from the Fire Brigade Leader.

c. Perform the necessary radiological surveys.

d. Ensure compliance with the appropriate Radiation Protection Procedures by all members of response team.

3.8 Safety Department Personnel upon notification provide support as necessary to ensure personnel are made aware of health hazards associated with the hazardous materials involved.

4.0 DEFINITIONS

4.1 Hazardous Materials (HAZMAT)

Any element, compound or combination thereof, which is detonable, flammable, corrosive, toxic, an oxidizer, an etiologic agent, or highly reactive and which because of handling, storage processing, or packaging may have detrimental effects upon plant personnel, the public, equipment, and/or the environment.

4.2 Hazardous Materials Incident

The release of any amount of hazardous materials that may be considered a threat to:

- Personnel OR
- Safe plant operation OR
- The environment

4.3 HAZMAT EMERGENCY

A release of any potentially hazardous materials which:

1. Presents an unknown hazard, **OR**
2. Requires full fire brigade involvement (as determined by the Fire Brigade Leader), **OR**
3. Has entered a storm drain or the Lake, **OR**

4.3 (Cont)

4. Is outside and in excess of quantities/amounts indicated in the table below,

MATERIALS BEING RELEASED	
Substance Involved	**Amount/Quantity**
Gasoline	Forms a puddle or free-flowing
Diesel Fuel	Forms a puddle or free-flowing
Hydraulic Fluid	Forms a puddle or free-flowing
Antifreeze	1 Quart
Car Brake Fluid	Forms a puddle or free-flowing
Transmission Fluid	Forms a puddle or free-flowing

5.0 REFERENCES AND COMMITMENTS

5.1 Technical Specifications

None

5.2 Licensee Documentation

Nine Mile Point Site Emergency Plan

5.3 Standards, Regulations, Codes

5.3.1 6NYCRR 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities

5.3.2 6NYCRR 595 Release of Hazardous Substances

5.3.3 U.S. EPA Regulations: 40 CFR302 - Designation, Reportable Quantities, and Notification

5.3.4 US EPA REG 40 CFR355 Emergency Planning and Notification

5.3.5 29CFR1910-120 Hazardous Waste Operations and Emergency Response

5.3.6 10CFR50.72 Immediate notification requirements for operating nuclear power reactors.

5.4 Policies, Programs and Procedures

5.4.1 S-ENVSP-9, Spill Contingency Plan and Procedure

5.4.2 EPIP-EPP-01, Classification of Emergency Conditions at Unit 1

5.4.3 EPIP-EPP-02, Classification of Emergency Conditions at Unit 2

5.4.4 EPIP-EPP-18, Activation and Direction of the Emergency Plans

5.4.5 NIP-ENV-02, Control of Hazardous, Industrial and Mixed Wastes

5.5 **Commitments**

Sequence Number	Commitment Number	Description

None

6.0 RECORD 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 only applies if records are generated as the result of an actual declared emergency at the Nine Mile Point Nuclear Station.

- Attachment 1, CSO Checklist Hazardous Material Emergency
- Attachment 2, SSS HAZMAT Checklist
- Attachment 3, Fire Brigade Leader HAZMAT Checklist

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

NOTE: This only applies when records are not the result of an actual declared emergency.

- Attachment 1, CSO Checklist Hazardous Material Emergency
- Attachment 2, SSS HAZMAT Checklist
- Attachment 3, Fire Brigade Leader HAZMAT Checklist

LAST PAGE

ATTACHMENT 1: CSO CHECKLIST HAZARDOUS MATERIAL EMERGENCY

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

		Completed	N/a
1.	Notified of potential HAZMAT incident: (NAME) _____	☐	☐
	Hazards from the materials released: _____	☐	☐
	Amount/quantity of released materials: _____	☐	☐
	Building/area, exact location of the release materials: _____	☐	☐
	If outside, general wind direction (example, wind is coming from the...) _____	☐	☐
	If the material has or will enter a storm drain or the lake. _____	☐	☐
2.	Notify the SSS include information from step 1	☐	☐
3.	Make announcement as follows:		
	a. Place the GAItronics in the merge mode	☐	☐
	b. Sound the Station Alarm for 10 seconds	☐	☐
	c. Make the following announcement:	☐	☐

"ATTENTION, ATTENTION, THIS (IS/IS NOT) a DRILL. a HAZARDOUS MATERIAL EMERGENCY HAS BEEN REPORTED AT UNIT (1 or 2). THE FIRE BRIGADE SHALL RESPOND TO:

_____

(AREA OF INCIDENT). ALL OTHER PERSONNEL SHOULD REMAIN CLEAR OF THE AREA."

	d. Repeat the alarm and the announcement	☐	☐
	e. Remove GAItronics from merge mode.	☐	☐

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

		Completed	N/a
4.	Check plant parameters, initiate any required Special Operating Procedure(s) or Emergency Operating Procedure(s)	☐	☐
5.	Obtain the location of the incident command post from the Fire Brigade Leader and make an announcement as follows:		
	a. Place GAItronics in merge mode	☐	☐
	b. Sound the Station Alarm for 10 seconds	☐	☐
	c. Make the following announcement	☐	☐
	"ATTENTION, ATTENTION, THIS (IS/IS NOT) a DRILL. a HAZARDOUS MATERIAL EMERGENCY HAS BEEN REPORTED AT UNIT (1 or 2). THE INCIDENT COMMAND POST IS LOCATED AT: _____ *PERSONNEL RESPONDING TO THE EMERGENCY SHALL REPORT TO THIS LOCATION"*		
	d. Repeat alarm and announcement	☐	☐
6.	If requested by the Fire Brigade Leader,		
	a. Contact Oswego County 911 Center, and ask for assistance for a hazardous materials emergency	☐	☐
	b. Request Oswego County 911 Center notify the Oswego County Emergency Management Office (OCEMO)	☐	☐

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

	Completed	N/a
7. At the direction of the SSS that the emergency is terminated, make the following announcement:		
a. Place the GAItronics in merge mode	☐	☐
b. Sound the Station Alarm for 10 seconds	☐	☐
c. Make the following announcement:	☐	☐

"ATTENTION, ATTENTION, THIS (IS/IS NOT) a DRILL. THE HAZARDOUS MATERIAL EMERGENCY AT UNIT (1 or 2) LOCATED AT _____ *HAS BEEN* TERMINATED."

d. Repeat alarm and announcement	☐	☐
e. Remove GAItronics from merge mode.	☐	☐

ATTACHMENT 2: SSS HAZMAT CHECKLIST

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

		Completed	N/a
1.	Obtain relevant information concerning the Hazardous Material Release/emergency from the CSO	☐	☐
2.	Initiate any required Special Operating Procedure(s) or Emergency Operating Procedure(s)	☐	☐
3.	Determine if an emergency action level (EAL) has been reached/exceeded using EPIP-EPP-01/02.	☐	☐
4.	**IF**: The Emergency Plan has not been activated **AND**: An EAL has been reached/exceeded, **THEN**: Activate the Emergency Plan in accordance with EPIP-EPP-18, and ensure completion of the remainder of this checklist	☐	☐
5.	**IF**: The Emergency Response Facilities have already been activated, **AND**: An EAL has been reached/exceeded, **THEN**: Inform the TSC/SED and recommend upgrade of the emergency classification as appropriate in accordance with EPIP-EPP-01/02.	☐	☐
6.	Notify or direct the Site Security Supervisor to notify the following departments for incident assessment:		
	• Environmental Protection (use on-call list and/or pagers)	☐	☐
	• Radiation Protection (in-plant accidents only)	☐	☐
	• Safety (use on call list and/or pagers)	☐	☐
	• Affected Plant Manager	☐	☐
7.	Evaluate the necessity of evacuation per EPIP-EPP-05 or EPIP-EPP-19	☐	☐

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

		Completed	N/a
8.	**IF**: 1. It is determined to be a reportable Incident by Environmental Protection, **OR**		
	2. It is not possible to make a determination of reportability, **OR**		
	3. The time is approaching 2 hours from incident identification AND notifications Have not been made to the NYS DEC and the National Response Center,		
	THEN: Perform the notifications in the order listed below.		
NOTE:	The NYS DEC and the National Response Center shall be notified within 2 hours of identification of the incident.		
	a. NYS DEC hotline at 1-518-457-7362	☐	☐
	b. National Response Center at 1-800-424-8802	☐	☐
	c. The USNRC for 10CFR50.72 notification using the ENS telephone (only notified when release causes a major impact on the environment)	☐	☐
9.	Contact on-call Environmental Protection personnel for determination of necessary/required cleanup activities	☐	☐
10.	Direct that appropriate cleanup activities are to be completed (B&G cleanup, or Contracted)	☐	☐
NOTE:	A DER should be generated per NIP-ECA-01.		
11.	**IF**: A HAZMAT EMERGENCY was declared: **THEN**: Direct the CSO to terminate the event when recommended by the Fire Brigade Leader	☐	☐
12.	**IF**: A HAZMAT EMERGENCY was not declared: **THEN**: Terminate the event when cleanup is complete	☐	☐

ATTACHMENT 3: FIRE BRIGADE LEADER HAZMAT CHECKLIST

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

		Complete	N/a
1.0	Acknowledge receipt of the information from the CSO.	☐	☐
2.0	Report to the scene of the HAZMAT release.	☐	☐

3.0 Assess the scene:.

a. **IF:** The scene indicates a release of any potentially hazardous materials which:

1. Presents an unknown hazard, **OR**
2. Requires full fire brigade involvement (as determined by the Fire Brigade Leader), **OR**
3. Has entered a storm drain or the Lake, **OR**
4. Is outside and in excess of quantities/amounts indicated in the table below,

MATERIALS BEING RELEASED	
Substance Involved	**Amount/Quantity**
Gasoline	Forms a puddle or free-flowing
Diesel Fuel	Forms a puddle or free-flowing
Hydraulic Fluid	Forms a puddle or free-flowing
Antifreeze	1 Quart
Car Brake Fluid	Forms a puddle or free-flowing
Transmission Fluid	Forms a puddle or free-flowing

THEN:	1. Notify the CSO that the release should be considered a HAZMAT EMERGENCY	☐	☐
	2. Request the CSO activate the fire brigade	☐	☐
	3. Continue at step 4 below	☐	☐

b. **IF:** The scene does NOT meet the conditions for a HAZMAT EMERGENCY,

THEN:	1. Notify the CSO of the conditions	☐	☐
	2. Request the SSS direct B & G to perform cleanup	☐	☐
	3. Exit this checklist	☐	☐

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

	Complete	N/a
4.0 HAZMAT EMERGENCY (Requires Fire Brigade Response):		
a. Setup a command post near the scene from which actions for incident mitigation may be safely directed..	☐	☐
b. Report location of command post to CSO	☐	☐
c. Assess the situation for actions necessary to mitigate the HAZMAT EMERGENCY..	☐	☐
d. Direct Fire Brigade members to obtain the necessary equipment and respond to the scene to mitigate the HAZMAT EMERGENCY..	☐	☐
e. Direct necessary actions to mitigate the emergency as follows:		
• Ensure appropriate exclusion area is established and maintained by security	☐	☐
• Contain the release (if practical and safe) by deploying dams, absorbent materials, dike, booms, etc..	☐	☐
• Ensure radiological status is determined by RP Technician (if within the protected area)	☐	☐
f. Request assistance through the CSO if additional help in mitigating the emergency is needed. (up to and including calling for the Oswego County HAZMAT Team).	☐	☐
5. FOLLOWING INITIAL MITIGATION ACTIONS		
a. Obtain information concerning cleanup from the SSS	☐	☐
b. Turn over control of the scene to the person assigned cleanup responsibility and oversight	☐	☐

NAME:	DATE:	UNIT: 1 ☐ 2 ☐

	Complete	N/a
b. If offsite assistance was used, ensure escorting responsibilities are maintained..	☐	☐
c. Assist offsite responders in leaving site.	☐	☐
6. Assess the HAZMAT EMERGENCY as appropriate for termination and recommend the SSS terminate the emergency as appropriate..	☐	☐

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EPIP-EPP-16

REVISION 07

ENVIRONMENTAL MONITORING

TECHNICAL SPECIFICATION REQUIRED

Approved by: L. A. Hopkins	L D Hopkins Plant Manager - Unit 1	12/13/99 Date
Approved by: M. F. Peckham	M F Peckham Plant Manager - Unit 2	12/16/99 Date

THIS IS A FULL REVISION

Effective Date: 12/23/1999

PERIODIC REVIEW DUE DATE DECEMBER 2000

LIST OF EFFECTIVE PAGES

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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 **Corporate Emergency Director/Recovery Manager**

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 Corporate Emergency Director (CED) 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 to 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

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 $yard^2$	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.)

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.

NIAGARA MOHAWK

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 Circle: μR/hr or mR/hr or CPM				Comments
	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: μR/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

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 CED 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.

(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 Commission 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.

ATTACHMENT 4: PROTECTIVE ACTION GUIDELINES FOR INGESTION PATHWAY

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

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 Site Emergency Director (SED) in the TSC of the implementation and progress of the refined surveys and the expanded environmental monitoring program, as applicable.

3. Select appropriate collection locations, based on the following order of priority:

   a. Downwind on-site (site boundary area)

   b. Downwind off-site

   c. Upwind on-site

   d. Upwind off-site, as applicable

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 Niagara Mohawk Power Corporation (NMPC)/New York Power Authority Joint 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 (NMPC 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 (NMPC 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.

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 detector.

      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 or approximate the selected sampling area in units of square feet.

5. Sample frozen snow 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.

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 ½ 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 ½ 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 CED

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 CED.

4.0 The CED should share all TPD results with the State and County.