

NINE MILE POINT NUCLEAR STATION  
EMERGENCY PLAN IMPLEMENTING PROCEDURES  
PROCEDURE NO. EPP-2

**FOR INFORMATION ONLY**

FIRE FIGHTING

<u>APPROVALS</u>	<u>SIGNATURES</u>	<u>DATE AND INITIALS</u>	<u>REVISION 8</u>	<u>REVISION 9</u>	<u>REVISION 10</u>
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Summary of Pages

REVISION 8

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2	June 1982
1,1,3-13	February 1983

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EPP-2

FIRE FIGHTING

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FIRE FIGHTING

1.0 PURPOSE

The purpose of this fire fighting procedure is to provide for the prompt and efficient handling of any fire, regardless of size or presence of radioactivity by the on-site Nine Mile Point Fire Department.

2.0 REFERENCES

- 2.1 EAP-1, Activation and Direction of Emergency Plan
- 2.2 EPP-4, Personnel Injury or Illness
- 2.3 EPP-5, Station Evacuation
- 2.3 EPP-20, Emergency Notifications

3.0 RESPONSIBILITIES

In order to ensure the complete and appropriate handling of any fire related emergency at the site, the following position listing provides associated assignment responsibilities:

3.1 Supervisor Fire Protection

- a. The Fire Protection Supervisor performs general planning, testing, inspection and overseeing of the station fire protection activities. Periodic testing of the systems and portable equipment is performed by shift fire protection personnel under the direction of the Fire Protection Supervisor.

3.2 Nuclear Fire Chief

- a. Maintains administrative responsibilities, which include plant fire preventive inspections, record transient fire loads, acknowledgement of fire protection and detection systems out-of-service, plant fire drills, periodic NMP Fire Department briefings, and participation in fire incident investigations.
- b. Responds to all fire alarms.
- c. Periodically reviews capabilities and limitations of fire fighting equipment; and initiates corrective actions, if necessary.

3.2 Nuclear Fire Chief (Cont.)

- d. Maintains joint response control with off-site fire department Chief, and provides technical advice pertaining to radiological protection of personnel and any special hazards.
- e. Arranges for appropriate departure activities for off-site fire fighters (e.g., contamination control).
- f. Evaluates the effectiveness of communications within the NMP Fire Department and with the on-scene fire team leader, the reactor operators in the control Room, the plant physical security organization (see Sect. 3.6, below), the off-site fire organization, and any other command post.
- g. Coordinate training with off-site fire departments so that responsibilities and duties are delineated in advance, and they are aware of the need for radiological protection of personnel and the special hazards associated with a nuclear power plant.

3.3 Nuclear Fire Fighter

- a. Participates in fire drills and attends periodic fire fighting and familiarization training and refresher sessions.
- b. Responds to ALL fire alarms, and performs actions under the direct guidance of the Fire Chief.
- c. Ensures that any required training/certification is kept current and up-to-date.

3.4 Station Shift Supervisor

- a. Evaluates the consequences of a fire, as it pertains to nuclear safety, and the probability of its effect on the overall operation of the plant; including the potential spreading of the affected areas and systems.
- b. Initiates station evacuation, if necessary.
- c. Assumes the role of Emergency Director, until properly relieved.

3.5 Nuclear Operator "E"

- a. Provides technical advice to the Nuclear Fire Chief in regard to current plant operating status.
- b. Provides current fire status reports to the Station Shift Supervisor.



Chief Shift Operator

- a. Activates station fire alarm in response to a personnel report or as a result of the annunciation of the automatic fire detection system.
- b. Requests off-site fire fighting assistance upon the recommendation of the Nuclear Fire Chief.
- c. Activates station evacuation alarm in response to a fire requiring a general area station evacuation.
- d. Provides a termination announcement to station personnel upon receiving notification from the Nuclear Fire Chief.

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## 3.7

Station Security

- a. Verifies receipt of fire alarm, expedites the arrival of off-site fire fighting assistance on-site and maintains required personnel accountability.
- b. Provides responding off-site personnel with appropriate dosimetry.
- c. Maintains plant physical security and performs required personnel notifications.

## 3.8

Chemistry and Radiation Management Department

- a. Provides radiation protection assistance to the Nuclear Fire Chief during fires.
- b. Assists Personnel Accountability Coordinator in accounting for station personnel at scene of fire.

## 4.0

NOTIFICATION

## 4.1

Visual Detection

The person who discovers a fire notifies the control room, giving the location and type of fire before making any attempt at fire fighting. He should remain on the phone until the announcement is made on the public address system.

Automatic Fire Detection Systems

Automatic fire detection equipment is provided for those areas protected by fixed extinguishing systems and in certain other areas where early fire detection is desirable. The fire detection system actuates an annunciator system in the main Control Room which informs the Control Room Operator of the location of the fire. Once alarms are received, the Chief Shift Operator will inform the Station Shift Supervisor, Nuclear Operator E and the NMP Fire Department of their location.

## 5.0

PROCEDURE

## 5.1

Person Discovering Fire

After he has notified the Control Room of the location and type of fire and the announcement is made on the public address system, he should take initial fire fighting actions or if not knowledgeable in fire fighting techniques leave the area. He should take all necessary precautions to protect himself.

## 5.2

Chief Shift Operator (See Figure 1)

- a. Upon notification of a fire, either by personal report or by annunciation of the automatic detection system, the Chief Shift Operator shall sound the fire alarm for ten (10) seconds and then announce over the public address system "Attention, a fire has been detected in (location of fire). The NMP Fire Department shall report to (location of fire)", repeat alarm and announcement twice.
- b. Turn up the volume on the Oswego County Fire and Station UHF radio base stations.
- c. If the annunciation is from Local Panel 8 (Meteorological Tower) or Local Panel 10 (Energy Information Center) immediately call Oswego County Fire Control requesting fire fighting assistance for the area involved. DO NOT SOUND FIRE ALARM - See Section 6.0. If busy or no answer call . . . . The CSO will then notify security that an offsite Fire Department has been summoned.
- d. If the Control Room Operator does not receive an acknowledgement from the Station Shift Supervisor, Nuclear Fire Chief, Nuclear Operator "E" and Security in approximately 60 seconds, he will repeat Step 5.2.a.

5.2

(Continued)

- e. If requested by the Nuclear Fire Chief call Oswego County Fire Control at the number listed below and request fire fighting assistance at the Nine Mile Point Unit 1.

(if busy or no answer, call

If both numbers are busy or no answer, contact Oswego County Fire Control using the fire radio.

- f. Initiate any "Special Operating Procedures" required.
- g. Observe ARMs, CAMs and stack monitors for increased levels.
- h. Sound the station evacuation alarm if requested to do so by the Nuclear Fire Chief.
- i. Upon notification from the Nuclear Fire Chief that the fire has been extinguished or the event has been determined to be a false alarm. Sound the station alarm for 10 sec. and announce the termination of the event.

5.3

Nuclear Operator E (Advisor to the Nuclear Fire Chief)

- a. Contact Control Room and acknowledge receipt of the fire alarm.
- b. Proceed to the location of the fire with a radio and set up a command post with Nuclear Fire Chief. Investigate area of alarm and immediately report status to the Control Room.

5.4

Nuclear Fire Chief

- a. Contact Control Room and acknowledge receipt of the fire alarm.
- b. Pick up a portable fire radio.
- c. Proceed to the location of the fire and set up a command post. Ensure the Nuclear Operator E and a Security Guard are available to coordinate communications with their respective departments.
- d. Investigate area of alarm and report status to the Control Room directly or through Nuclear Operator E.
- e. Contact Control Room directly or through Nuclear Operator E and request CSO to call Oswego County Fire Control to obtain outside fire fighting assistance, if deemed necessary.
- f. Contact security force directly or through security guard at command post and direct the security force to escort the off-site fire department and any other vehicles required for the emergency to the emergency vehicle staging area when they arrive.

Nuclear Fire Chief (Cont.)

- g. Contact Control Room and request a station evacuation of all non-essential personnel, if deemed necessary.
- h. Supervise and coordinate the efforts of the fire fighters to control and extinguish the fire. Any equipment taken off the trucks shall not be returned to the trucks until surveyed for contamination and released.
- i. Once the fire is extinguished or event has been determined to be a false alarm, contact control room and notify them of fire status.
- j. When off-site fireman are ready to leave, arrange to have ALL firemen and their equipment surveyed. All contaminated equipment should be decontaminated or retained at the station for decontamination.

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Nine Mile Point Fire Department

- a. The NMP Fire Department shift complement is comprised of the following:
  - 1 - Nuclear Fire Chief
  - 4 - Nuclear Fire Fighters
  - 1 - Nuclear Operator "E"

NOTE: During normal working hours the Fire Department will receive assistance from the reserve fire brigade if they are available. This brigade is made up of three individuals from each of the following departments --

- Maintenance
- Instrument and Control
- Chemistry and Radiation Protection

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- b. The NMP Fire Department shall respond to ALL fires.
- c. The NMP Fire Department will immediately proceed to the location of the fire, picking up self-contained breathing apparatus and protective clothing at the nearest storage area. Storage areas are located at:
  - 1. Turbine Building - Elevation 261', S.E. Corner
  - 2. Turbine Building - Elevation 277', S.E. Corner
  - 3. Turbine Building - Elevation 300', S.E. Corner
  - 4. Reactor Building - Elevation 237', N.E. Corner
  - 5. Reactor Building - Elevation 261', N.W. Corner
  - 6. Off-Gas Building - Elevation 261', Entrance
  - 7. Administrative Building - Elevation 261', Locker Room Area
  - 8. Screen House - Elevation 261', S.W. Corner
- d. Persons entering smoky areas or fighting fires shall use the self-contained breathing apparatus.

5.5

(Continued)

- e. If off-site fire fighting assistance has been requested, the Nuclear Fire Chief and the off-site Fire Chief will be jointly in charge of the fire fighting forces.
- f. The NMP Fire Department will assist the off-site fire departments in fire fighting.

NOTE: Off-site Fire Department Coat Identification  
White- Chief  
Yellow- Officers  
Black or Red- Firemen

5.6

Chemistry and Radiation Management Department (See Figure 3)

- a. Upon receipt of a fire alarm and announcement, send an inplant survey team with radio to the location of the fire to assist the Nuclear Fire Chief in evaluating any radiological aspects of the fire. During normal hours this team should be comprised of members of the reserve fire brigade.

NOTE: Departmental assistance will be directed by a Chief Technician until relieved by a Chemistry and Rad. Mgt. Department Supervisor.

- b. Have survey team take air samples as necessary in areas where the fire fighters are working, and ensure that sampling does not interfere with the fire fighting.
- c. When the fire is extinguished, provide the necessary staff to survey all personnel and equipment used at the fire scene.
- d. In the event of a station evacuation perform the following:
  - 1. To aid in accountability, instruct the survey team to report back the names of all individuals at the scene. Ensure this information is passed on to the Personnel Accountability Coordinator.
  - 2. Contact the Chemistry & Radiation Protection Assistant in the Control Room and have him check the CAMs and stack monitors to see if "fouling" is occurring due to smoke removal from plant.
  - 3. Dispatch a survey team to monitor contractors assembling at their work location headquarters (ie north and south trailer areas).
- e. During off-hours utilize departmental callout list to provide radiological assistance to the Nuclear Fire Chief, if necessary.



## 5.7

Station Shift Supervisor

- a. Contact Control Room and acknowledge receipt of the fire.
- b. May proceed to the fire to adequately assess its effect on station operations and shall then proceed to the main Control Room to direct appropriate station operation (e.g., plant shutdown).
- c. If the Nuclear Fire Chief has requested a station evacuation, or requested outside fire fighting assistance, perform steps d) and e), below:
- d. Perform actions required per EAP-1 as Emergency Director until relieved.
- e. To aid in accountability, provide Personnel Accountability Coordinator with the names of any individuals known to be at the fire scene.
- f. Prior to allowing Off-site Fire Departments to depart ensure personnel, vehicles, and equipment have been surveyed by Radiation Protection. Once equipment and personnel contamination levels have been determined to be within station control levels, contact Security Building and notify them of this fact.

## 5.8

Station Personnel

- a. Upon hearing the "fire alarm" station personnel should stay clear of the area described in the announcement and be aware that a station evacuation may be necessary.
- b. If the station evacuation alarm is sounded all personnel in the station and the administrative building, shall evacuate immediately to their designated assembly areas and report to their personnel accountability representative for a head count (see EPP-5, "Station Evacuation"). Personnel actively engaged in fighting the fire will not evacuate, but will make their location and status known to either the inplant survey team or SSS.

## 5.9

Security Force (See Figure 2)

- a. Contact Control Room and acknowledge receipt of fire alarm.
- b. Dispatch a guard with a radio to the fire scene command post to coordinate communications between the Security Department and the Nuclear Fire Chief.
- c. Turn volume up on the fire radio and monitor continuously during the fire emergency.



5.9 (Continued)

- d. During off hours immediately notify the Supervisor Fire Protection \* (or pager), and the Emergency Coordinator \* (or pager). 8
- e. Dispatch a guard and vehicle to Lake Road to direct responding fire vehicles and personnel to appropriate access road and Emergency Vehicle Staging Area. When needed, security will escort trucks to the scene of the fire when directed by the Nuclear Fire Chief. A security guard will stay with the fire trucks at all times. Normal sign-in procedure can be waived and a head count will be taken.
- f. When the off-site fire departments arrive, issue film badges to all personnel and then notify the Nuclear fire Chief and SSS directly or through security guard at the fire command post and Control Room SAS of the number of trucks and time they arrived on-site.
- g. Prior to allowing off-site fire departments to depart ensure the following have been completed: 8
  - 1) Film badges collected.
  - 2) Data for Film badge Issue sheets and entrance registration log has been collected.
  - 3) Personnel, vehicles, and equipment have been surveyed by Radiation Protection and cleared for departure by SSS.
- h. During off hours perform necessary notification required per EPP-20, Figure 3 "Security Off Hours Emergency Contact List."
- i. Notify CSO that call(s) have been made.  
If the evacuation alarm is sounded, perform steps j & k.
- j. Prevent non-emergency personnel from leaving the site. Direct these individuals to their designated assembly areas for accountability.
- k. Sergeant directs a guard to obtain roll call and Entrance Registration Log and proceed to the Operation Support Center area for accountability.

NOTE: During the fire emergency, do not allow personnel into the plant or site unless they have emergency plan responsibility and appropriate identification cards as indicated in EPP-14 "Emergency Access Control".. 8

6.0

LOCAL PANEL 8 (Meteorological Tower) and LOCAL PANEL 10 (Energy Information Center)

a. Chief Shift Operator will perform the following:

1. Call Oswego County Fire Control - and request fire fighting assistance for the area involved (if busy call
2. Inform the Security Department that an alarm has been received from either LP 8 or LP 10.
3. Notify the Station Shift Supervisor on duty of the fire alarm received.

b. Security will perform the following:

1. If conditions permit - dispatch a guard and vehicle to the area involved with a fire radio.
2. Call the following site personnel:
  - i. On-call Supervisor
  - ii. Supervisor Fire Protection - \*
  - iii. Area Safety Director - \*
  - iv. Energy Information Center Director - \*
3. Advise Oswego County Fire Control, via fire radio, of conditions.

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FIGURE 1  
FIRE FIGHTING CHECKLIST  
(Control Room/CSO)

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

INITIAL/TIME

- a. \_\_\_\_\_ Sound fire alarm for 10 seconds and announce over PA system "Attention, a fire has been detected in (location of fire). The NMP Fire Department shall report to (location of fire)." Repeat alarm and announcement twice.
- b. \_\_\_\_\_ Turn up volume on the Oswego Fire/Rescue and UHF radio base stations.
- c. \_\_\_\_\_ Nuclear Operator "E" responded.
- d. \_\_\_\_\_ SSS responded.
- e. \_\_\_\_\_ Nuclear Fire Chief responded.
- f. \_\_\_\_\_ Security Force responded.
- g. \_\_\_\_\_ If requested by the Nuclear Fire Chief call Oswego County Fire Control at the number listed below and request fire fighting assistance at the Nine Mile Point Unit 1.
- (if busy or no answer, call \_\_\_\_\_)
- If both numbers are busy or no answer, contact Oswego County Fire Control using the fire radio.
- h. \_\_\_\_\_ Process monitors checked.
- i. \_\_\_\_\_ Initiate any required Special Operating Procedure(s).
- j. \_\_\_\_\_ When directed by Station Shift Supervisor, sound station evacuation alarm and announce evacuation per EAP-1 Figure 3.
- k. \_\_\_\_\_ Upon notification from the Nuclear Fire Chief that the fire has been extinguished or the event has been determined to be a false alarm, sound station alarm for 10 sec. and announce the termination of the event.

FIGURE 2

FIRE FIGHTING CHECKLIST

(Security Building/Security Shift Supervisors)

8

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

INITIAL/TIME

- a. \_\_\_\_\_ Acknowledge receipt of alarm to CSO.
- b. \_\_\_\_\_ Dispatch a Security Guard with a radio to the fire scene command post to coordinate communications between the Security Department and the Nuclear Fire Chief.
- c. \_\_\_\_\_ Turn up volume on Oswego Fire/Rescue and UHF base stations.
- d. \_\_\_\_\_ Off Hours: Contact Supervisor Fire Protection  
\* or pager) and the Emergency Coordinator  
\* or pager).
- e. \_\_\_\_\_ Dispatch a guard and vehicle to Lake Road to direct responding fire vehicles and personnel to the appropriate access road and Emergency Vehicle Staging area.
- f. \_\_\_\_\_ Issue film badges to firemen.
- g. \_\_\_\_\_ Notify Nuclear Fire Chief and SSS directly or through security guard at command post and Control Room SAS, of the number of fire trucks and the time they arrived on Site.
- h. \_\_\_\_\_ Off Hours: Make calls per EPP-20, Figure 3.
- i. \_\_\_\_\_ CSO notified that call(s) have been made.
- j. \_\_\_\_\_ If a Station Evacuation Alarm is sounded, dispatch a roll call & visitor list to Operations Support Center.
- k. \_\_\_\_\_ Prior to allowing off-site Fire Departments to depart ensure:
  - 1) Film badges collected and data logged.
  - 2) Data for film badge issue sheets and entrance registration log has been collected.
  - 3) Personnel, vehicles, and equipment have been surveyed by Radiation Protection and cleared for department by SSS.

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FIGURE 3

FIRE FIGHTING CHECKLIST

(Chemistry and Radiation Management Department)

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

INITIAL/TIME

- a. \_\_\_\_\_ When fire alarm is sounded send an inplant survey team to fire location to assist Nuclear Fire Chief in evaluating radiological aspects of fire.
- b. \_\_\_\_\_ Take air samples as necessary in area fire fighters are working.
- c. \_\_\_\_\_ When fire is extinguished, provide necessary support to survey personnel and equipment at fire scene.
- d. \_\_\_\_\_ If Station Evacuation Alarm is sounded, have a survey team report back names of all at scene of fire and refer names to Personnel Accountability Coordinator.
- e. \_\_\_\_\_ CAMs and stack monitors being checked.
- f. \_\_\_\_\_ Off-hours utilize departmental callout list to provide radiological assistance to the Nuclear Fire Chief if necessary.
- g. \_\_\_\_\_ During a station evacuation dispatch a survey team to monitor contractors assembling at their work location headquarters.


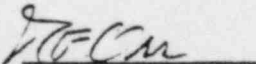
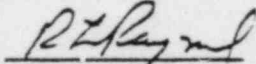
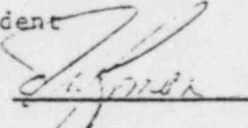
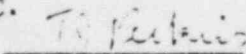
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NINE MILE POINT NUCLEAR STATION

EMERGENCY PLAN IMPLEMENTING PROCEDURES

PROCEDURE NO. EPP-3

SEARCH AND RESCUE

<u>APPROVALS</u>	<u>SIGNATURES</u>	<u>DATE AND INITIALS</u>	<u>REVISION 4</u>	<u>REVISION 5</u>	<u>REVISION 6</u>
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Summary of Pages

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Pages

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Date

May 1982  
February 1983

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EPP-3

SEARCH AND RESCUE

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SEARCH AND RESCUE

1.0 PURPOSE

This procedure provides the guidelines for determining the actions to be taken for the search and/or rescue of personnel who may be trapped or disabled in some area of the station.

2.0 REFERENCES

- 2.1 NCRP Report No. 39 Basic Radiation Protection Criteria
- 2.2 EPP-2 Fire Fighting
- 2.3 EPP-4 Personnel Injury or Illness

3.0 RESPONSIBILITIES

The following position listing provides associated assignment responsibilities for key staff involved in plant search and rescue activities.

3.1 Station Shift Supervisor

- a. Maintains knowledge, through the Chief Shift Operator, Nuclear Operator "E", and Nuclear Fire Chief regarding the current status of search and rescue activities as they pertain to plant operations and potential/actual system operational changes.

3.2 Chief Shift Operator

- a. Activates search and/or rescue activities in response to reports by station personnel.
- b. Activates additional search and rescue assistance if requested by the Nuclear Fire Chief, or warranted by station operating conditions, and contact required personnel.
- c. Provides the Station Shift Supervisor with current search and rescue status reports; including potential/actual impacts on station operations.

3.3 Nuclear Operator "E"

- a. Provides technical advice to the Nuclear Fire Chief in regards to current plant operating status.
- b. Provides current search and rescue status reports to the Chief Shift Operator and/or the Station Shift Supervisor.

3.4 Nuclear Fire Chief

- a. Periodically reviews capabilities and limitations of search and rescue equipment; and initiates corrective actions, if necessary.
- b. Responds to and directs all search and rescue operations.

3.5 Nuclear Fire Fighter

- a. Responds to ALL search and rescue announcements, and performs actions under the direction of the Nuclear Fire Chief.
- b. Ensures that any required training/certification is kept current and up-to-date.
- c. Participates in search and rescue drills and attends periodic training and plant familiarization classes.

3.6 Station Security

- a. Assists the Chief Shift Operator (or Control Room) in determining location of missing personnel.
- b. Maintains plant physical security and performs required personnel notifications.

3.7 Chemistry and Radiation Management Department

- a. Provides radiation protection assistance during search and rescue operations.

4.0 PROCEDURE

4.1 Notification of Missing or Trapped Person

4.1.1 Immediately upon being aware that an individual may be missing and/or trapped or disabled, the individual who discovers the situation shall call the Control Room, report the situation, and provide the following information if known:

- a. Name of the individual missing and/or trapped or disabled.
- b. Location of the individual if the individual is trapped or disabled; or, last known location and possible present location of an individual who is missing.
- c. Any circumstances which may affect search and rescue operations, such as fire, explosion, or high radiation levels.

4.1.2 If an individual is missing, the Chief Shift Operator shall proceed in accordance with Section 4.2. If an individual is trapped or disabled, the Chief Shift Operator shall proceed in accordance with Section 4.3.

#### 4.2 Initiation of Search and Rescue Operations

##### 4.2.1 Search Operations

Chief Shift Operator:

- a. Call the Security Building and find out whether or not the missing individual's security badge is in the rack and whether or not the computer shows the individual to be onsite or offsite. If the individual is shown to be off-site, no further action is necessary.
- b. If the individual is shown to be on-site, contact the individual's supervisor.
- c. If the individual's supervisor does not know his location, page the individual using the PA system.
- d. If the page is not answered in a minute or two, repeat the page.
- e. If an answer is not received in another three or four minutes, make the following announcement twice over the PA system:

"ATTENTION ALL PERSONNEL: IF ANYONE KNOWS THE PRESENT LOCATION OF (name of missing individual), PLEASE CALL THE CONTROL ROOM IMMEDIATELY".

4.2.2 If the missing individual has not been located following the completion of step 4.2.1 proceed to step 4.2.3.

##### 4.2.3 Rescue Operations

Chief Shift Operator (See Figure 1):

- a. When it is determined that a person is missing or trapped, the Chief Shift Operator should sound the station alarm for approximately 10 seconds and then announce: "Attention, the NMP Fire Department should report to (location of area)." Repeat alarm and announcement one time. If location of missing person is not known, NMP Fire Department should be told to report to the Control Room.
- b. If the Chief Shift Operator does not receive an acknowledgement from the Nuclear Fire Chief and Nuclear Operator "E" in 60 seconds, he will repeat 4.2.3(a). If the Nuclear Fire Chief and Nuclear Operator "E" do not acknowledge the second call, the CSO will proceed with d & e below.
- c. Turn up volume on the fire and UHF radio base stations.
- d. If the rescue operation occurs on the day shift, contact the Station Superintendent to arrange for backup rescue personnel.

#### 4.2.3 Rescue Operations (Cont.)

- e. If the rescue operation occurs on off-hours, contact the NMP-1 Security and request they call the following individuals:
  - 1) On-Call Operations Supervisor (See on-call list)
  - 2) Supervisor Fire Protection - \*
  - 3) On-Call Chemistry and Radiation Mgt. Dept. Supervisor (See on-call list)
  - 4) Area Safety Director - \*

On-Call supervisors will be requested to contact other station personnel as required for backup rescue personnel.

- f. When requested by the Nuclear Fire Chief contact the Radiation Protection office or a department supervisor and direct them to dispatch an inplant survey team to the rescue location.

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#### 4.3 Personnel Actions

##### 4.3.1 Station Shift Supervisor

Contact Control Room and acknowledge receipt of the rescue announcement.

##### 4.3.2 Nuclear Fire Chief

- a. Contact Control Room and acknowledge receipt of the rescue announcement.
- b. If location of missing person is not known, proceed to the Control Room. Gather information from various members of the station staff to try to determine where the missing person might be. Organize a search to locate the missing person assigning members of the NMP Fire Department to specific search areas. Include the individual's department or company work area.
- c. Once he is found, report location and status of individual to Control Room and have entire NMP Fire Department report to that area. If the area is known to be highly contaminated, request the Control Room send an inplant survey team to provide health physics coverage for the fire department.
- d. Proceed to the area with required equipment from Station Storeroom, Instrument Storage Room, Rescue Kit or In-Plant Survey Kit. Lifelines, teletector and High Range dosimeter should be considered to augment required tools and equipment.
- e. Direct the rescue operation. Have the Chief Shift Operator call for additional help, if needed.

5



#### 4.3.3

##### Nine Mile Point Fire Department

- a. The NMP Fire Department (normally consisting of the Nuclear Operator "E" (advisor), four Nuclear Fire Fighters and one Nuclear Fire Chief) will report to the area specified in the public address announcement or the Control Room for assignment of search areas.
- b. Once the location of the trapped or injured person is known, proceed to that location. Enroute to the area:
  - 1) One Nuclear Fire Fighter should pick up a stretcher in the most convenient location if contamination is present in the rescue area. He should also pick up protective clothing from the fire cabinet at the entrance to the building where the rescue is to take place.
  - 2) If airborne activity is potentially significant in the rescue area, another Nuclear Fire Fighter should pick up two Scott Air Paks from the fire cabinet at the entrance to the building where the rescue is to take place.
  - 3) Another Nuclear Fire Fighter will pick up a first aid kit from the fire cabinet nearest the entrance to the building where the rescue will take place.

- c. At the rescue area, a minimum of two persons will enter the immediate area to assess the situation.

If the area is known to be highly contaminated, or if an explosion or massive escape of steam is involved in the incident, protective clothing and Scott Air Paks should be worn.

If the area is smoke or steam filled, or if the area is in a sarray because of a fire or explosion, the men should use life-lines.

Radiation levels should be monitored as the area is entered.

- d. On the basis of this inspection of the area, if the rescue is complicated by the condition of the area, the NMP Fire Department will retire to a safe area and plan the method of rescue.

#### 4.3.4

##### Nuclear Operator "E"

- a. Contact Control Room and acknowledge receipt of the rescue announcement.
- b. Upon activation of the NMP Fire Department, the Nuclear Operator "E" will function as an advisor to the Nuclear Fire Chief, and assist in coordinating search and rescue activities with the Control Room.



#### 4.3.5 Chemistry and Radiation Management Department

- a. Contact Control Room to determine whether Chemistry and Radiation Management assistance is required as part of the search and rescue operations.

NOTE: Departmental assistance will be directed by the Departments Chief Technician until relieved by a Chemistry and Radiation Management Department supervisor.

#### 4.3.6 Security

- a. Dispatch a guard with a radio to assist the Fire Chief in determining location of individual.
- b. A guard from the Security Building will meet an ambulance, if required, to assign film badges and other equipment as needed from the Ambulance and Fire Kit.
- c. Off-hours - when requested by the Control Room contact the following individuals for additional rescue personnel.
  - 1) On-call Operations Supervisor
  - 2) On-call Chem & Rad Mgt. Dept. Supervisor
  - 3) Supervisor Fire Protection
  - 4) Area Safety Director

#### 4.4 Guidelines for Complicating Conditions

##### 4.4.1 High Radiation

- a. Changes from normal radiation protection procedures.

If an individual is trapped or disabled in an area in which the dose received during the rescue effort will be greater than 200 mrem, the rescue must be carried out as expeditiously as possible to keep the dose to the victim as low as possible. Therefore, for the rescue of personnel in which undue delay may result in the victim's death, the following modifications are made to Station Radiation Protection Procedure:

- 1) No prior authorization for exposure need be made out.
- 2) Exposure in excess of 10 CFR 20 limits may be taken, keeping in mind the biological effects of large doses of radiation.
- 3) A dose of up to 75 rem may be received once in a lifetime to save a life.
- 4) If time permits adequate planning and protection, this dose should be limited to 12 rem.

- b. Action to be taken:

- 1) Complete all items in 4.3.3c.
- 2) Wearing O-5R or O-50R self-reading dosimeters as appropriate and using the teletector, enter the area and attempt to complete the rescue (Equipment available from Inplant Survey Kit).

#### 4.4.2 Fire

- a. Rescue of a victim shall take precedence over fire fighting unless necessary to suppress the fire to accomplish rescue.
- b. Action to be taken:
  - 1. Complete all items in 4.3.3.c
  - 2. One person should spray water ahead of the other two while they perform the rescue.

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#### 4.4.3 Steam or Hot Water

- a. Rescue of a victim shall take precedence over isolation of a system unless:
  - 1) It is necessary to isolate the system to perform the rescue.
  - 2) The action of not isolating the system will place the lives of other personnel in immediate danger.
- b. Action to be taken:
  - 1) Complete all items in 4.3.3 c.
  - 2) Enter the area and perform rescue.

#### 4.5 Termination of Search and Rescue Emergency Actions

4

##### 4.5.1 Nuclear Fire Chief

- a. Once individual has been found, rescued and/or extricated, the Nuclear Fire Chief shall notify the Control Room of individual's status and request that an appropriate announcement be made.
- b. Remove the victim to the closest safe area and apply any required first aid.
- c. If victim is injured and contaminated refer to Procedure EPP-4, "Personnel Injury or Illness".

##### 4.5.2 Chief Shift Operator (CSO)

- a. Once CSO is informed of completed rescue, he shall announce termination of station alarm situation and contact individual's supervisor (or individual calling in alarm) to relay information concerning victim's status.

EPP-3

FIGURE 1

CSO CHECKLIST

SEARCH AND RESCUE

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

INITIAL/TIME

1.     /     When it is determined that a person is missing or trapped, sound Station Alarm and announce over PA system "Attention, the NMP Fire Department shall report to (location)". Repeat alarm and announcement twice.
2.     /     Contact established with Nuclear Fire Chief and Nuclear Operator "E", or repeat alarm and announcement.
3.     /     Contact Station Superintendent, or security for back-up personnel callouts.
4.     /     Security callouts completed (off hours only)
5.     /     Turn up volume on the UHF and fire radio base stations.
6.     /     When requested by the Nuclear Fire Chief, contact Radiation Protection office or department supervisor and direct them to send an inplant survey team to rescue location.
7.     /     Announce termination of station alarm situation.
8.     /     Contact victim's supervisor or person calling in alarm and inform about victim's status.

5

NINE MILE POINT NUCLEAR STATION  
EMERGENCY PLAN IMPLEMENTING PROCEDURES

**FOR INFORMATION ONLY**

PROCEDURE NO. EPP-4

PERSONNEL INJURY OR ILLNESS

<u>APPROVALS</u>	<u>SIGNATURES</u>	<u>DATE AND INITIALS</u>		
		<u>REVISION 6</u>	<u>REVISION 7</u>	<u>REVISION 8</u>
Chemistry & Radiation Management Superintendent E. W. Leach	<u><i>E. W. Leach</i></u>	<u>2/2 3/1/83</u>	_____	_____
Supervisor Nuclear Security R. F. Orr	<u><i>R. F. Orr</i></u>	<u>3/4/83 VFC</u>	_____	_____
Fire Protection Supervisor R. L. Raymond	<u><i>R. L. Raymond</i></u>	<u>3/9/83 RER</u>	_____	_____
Station Superintendent NMPNS T. W. Roman	<u><i>T. W. Roman</i></u>	<u>3/13/83</u>	_____	_____
General Superintendent Nuclear Generation Chairman of S.O.R.C. T. J. Perkins	<u><i>T. J. Perkins</i></u>	<u>3/5/83 TJP</u>	_____	_____

Summary of Pages

REVISION 6

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1, 2-16, 18  
1, 17

DATE  
February 1983  
May 1982

NIAGARA MOHAWK POWER CORPORATION

THIS PROCEDURE NOT TO BE  
USED AFTER March 1985  
SUBJECT TO PERIODIC REVIEW.

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EPP-4

PERSONNEL INJURY OR ILLNESS

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EPP-4

PERSONNEL INJURY OR ILLNESS

1.0 PURPOSE

The purpose of this procedure is to assure that prompt medical attention is provided to all ill or injured personnel, and to prevent the unnecessary spread of radioactive contamination to the responding ambulance or receiving hospital.

2.0 REFERENCES

- 2.1 Oswego Hospital Plan for the Decontamination and Treatment of Radioactively Contaminated Patients.
- 2.2 State University Hospital at Upstate Medical Center, Radiologic Emergency Plan.
- 2.3 EAP-1-Activation and Direction of the Emergency Plan
- 2.4 EAP-2-Classifications of Emergency Conditions
- 2.5 EPP-20-Emergency Notifications

3.0 RESPONSIBILITIES

The following position listing provides associated assignment responsibilities for key staff involved in Personnel Injury or Illness activities:

3.1 Chief Shift Operator

- a. Provides the Station Shift Supervisor with initial and periodic status reports of personnel injuries or illness, including potential/actual impacts on station operations.
- b. After receiving information of personnel injury/illness, initiates appropriate responses. These may include activating a medical response team via station alarm and announcement, and performing required personnel notifications.

3.2 Station Shift Supervisor

- a. Maintains knowledge, through either the Chief Shift Operator or the Nuclear Fire Chief, regarding the current status of personnel injuries or illness as they pertain to plant operations and potential/actual system operational changes.
- b. Assumes the role of Emergency Director, until properly relieved.
- c. Performs actions required per EAP-1 and 2, and EPP-20 (Classification and Notification of Emergency Conditions).



3.2 Station Shift Supervisor (Cont.)

- d. Makes required and appropriate assignments of emergency functions including assigning an individual to meet ambulance at the correct building door and issuing protective clothing and equipment to ambulance personnel.

3.3 Supervisor Fire Protection

- a. In conjunction with Area Safety Director investigates all personnel injury/illness incidents, and initiates restorative and/or preventive actions (if required).
- b. Initiates review of procedures, methods, plant layout, etc., to determine and correct any existing or potential safety hazard.
- c. Ensures that any required training/certification is kept current and up to date.

3.4 Nuclear Fire Chief

- a. Periodically reviews capabilities and limitations of personnel injury/illness medical response equipment; and initiates corrective actions, if required.
- b. Initiates training and drills, in order to ensure the appropriate response to personnel injury/illness.
- c. Responds to and direct all personnel injury/illness operations.

3.5 Nuclear Fire Fighters

- a. Responds to ALL Personnel Injury/Illness announcements, and performs actions under the direct guidance of the Nuclear Fire Chief and/or in accordance with standard first aid techniques.
- b. Participates in personnel injury/illness drills and attend periodic training.

3.6 Station Security

- a. Provides responding off-site personnel (if required) with appropriate dosimetry, expedites their arrival on site, accompanies ambulance, and maintains required personnel accountability.
- b. Performs required off hours personnel notification.

3.7 Chemistry and Radiation Management Department

- a. Determines the need for medical advice regarding decontamination of contaminated wounds.

3.7 Chemistry and Radiation Management Department (Cont.)

- b. Proceeds to the hospital (for contaminated wounds) and provides hospital personnel with all pertinent information regarding contamination control measures.
- c. Provides radiation protection assistance to the NMP Fire Department and hospital personnel.
- d. Provides for follow-up bioassays, as necessary, per established station procedures.

4.0 DEFINITION

- 4.1 Minor Injury or Illness is a disability which does not require immediate medical attention (other than normal first aid techniques) for the well being of the patient.
- 4.2 Major Injury or Illness is a disability which requires immediate medical attention by emergency medical personnel for the well being of the patient.

5.0 PROCEDURE

5.1 Notification of Injury

- 5.1.1 Immediately upon becoming aware that an injury or illness has occurred, the injured (if the injury is minor) or someone witnessing the injury, shall contact the Control Room and report the occurrence.
- 5.1.2 If the injury or illness occurred in a radiological controlled area and is minor, the injured should leave or be removed from the area. Any protective clothing being worn should be removed and the individual surveyed if the area is contaminated. Otherwise, the injured should be moved to a low radiation area if injuries permit.
- 5.1.3 Chief Shift Operator
  - a. If the injury is judged to be minor based upon a verbal description, give instructions for the injured to proceed to the plant decontamination room. If the injured is known to be contaminated, he should be informed to wear clean protective clothing enroute to the decontamination room.
  - b. If the injury is judged to be a major injury, proceed with actions required per section 5.3. In addition, should the injured be contaminated and need hospitalization, the Emergency Director or his designee shall also perform actions required per EAP-1, Figure 2, "Emergency Director's Checklist".

5.1.3 Chief Shift Operator (Cont.)

- c. Dispatch individual(s) trained in personnel decontamination and first aid to the decontamination room. Normally a member of the Chemistry and Radiation Protection Department shall perform any necessary survey required per Section 5.2 and a Nuclear Fire Fighter trained in first aid will be dispatched to meet the individual and provide medical assistance.
- d. Notify the Area Safety Director and the Supervisor Fire Protection.
- e. CSO should contact the SSS and inform him of injury status.

5.2 Minor Injury or Illness

If injury is superficial and does not require immediate medical attention for the well-being of the patient, take the following action:

5.2.1 Nuclear Fire Fighter

- a. If an open wound is involved, the wound should be flushed promptly for at least 5 minutes with slightly warm water. If the injury is not an open wound (such as a shallow cut or puncture) flush for 2 minutes. In both cases, light to moderate bleeding should be enhanced to help flush the wound. Such flushing can be done at any sink in the restricted area but the sink in the personnel decontamination area is preferred.
- b. The object causing the injury and any clothing through which the object passed should be saved for analysis by Radiation Protection.
- c. If contamination levels in or around the wound do not exceed 150 cpm above background (1500 dpm on a 15cm<sup>2</sup> probe area), administer necessary first aid to treat the wound. Survey remaining skin also. Contamination which is not immediately around the wound should be removed carefully using one of the decontamination techniques described in EPP-15 or the following technique:
  - 1. Using swabs dipped in a thick detergent paste, rub small areas of the skin with a rubbing motion that is away from the wound. Follow with swabs moistened with water to clean off any remaining detergent. Repeat until the decontamination is removed.
  - 2. Cover the wound with tape or a bandage to prevent decontaminating solution from entering the wound. Then use standard skin decontamination procedures.
- d. If hospitalization of patient is necessary, proceed to section 5.4.

### 5.2.2 Chemistry and Radiation Management Department

- a. After flushing is complete and the area is carefully blotted dry, the wound area should be surveyed with a GM detector.
- b. Records of all decontamination efforts must be reported on the Skin Decontamination Record form (see Figure 2) available in the Radiation Protection Office and the personnel decontamination room.
- c. If contamination levels in the wound exceed 150 cpm (1500 dpm on a 15 cm<sup>2</sup> probe area), a Chemistry & Radiation Management Department Supervisor will decide if medical advice is necessary.

If such advice or assistance is required, contact the following physicians:

	Office Phone	Home Phone
Dr. David O'Brien	*	*
	(Summer months)	*

\*On off-hours this number is answered by an answering service. Ask for Dr. O'Brien to call the station on

	Office Phone	Home Phone
Dr. Gerald Holzwasser	*	---
Radiation Management Corp	*	(24 hrs)
	*	

### 5.3 Major Injury or Illness

If an injury or illness requires immediate medical attention, take the following actions (see Figure 1 - CSO Checklist).

#### 5.3.1 Chief Shift Operator

- a. As soon as the Chief Shift Operator knows that a major injury or illness has occurred, he will sound the station alarm for approximately 10 seconds and then announce over the public address system.

"Attention ALL Personnel: An injury has occurred (location of injured). The Nine Mile Point Fire Department shall report to (location of injured) immediately. All other personnel remain clear of that area". (See Figure 1.) Repeat alarm and announcement twice.

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5.3.1 Chief Shift Operator (Cont.)

- b. If it is determined that the injured is contaminated, contact Radiation Protection Department and verify that a survey team has been dispatched to the area.
- c. If requested by the Nuclear Fire Chief, summons an ambulance by notifying Oswego County Fire Control per section 5.4.2

5.3.2 Station Shift Supervisor

- a. Assumes the role of Emergency Director, until properly relieved.
- b. The Emergency Director (or his designee) will evaluate emergency per EAP-1 and commence emergency classifications per EAP-2 and notifications per EPP-20 as soon as information becomes available on injuries and contamination levels.

5.3.3 Nuclear Fire Chief

- a. Contact control room and acknowledge receipt of alarm.
- b. Proceed to injury location and set up command post. Ensure the Nuclear Operator E and Security Guard are available to coordinate communication with their respective departments.
- c. Under the direction of the Nuclear Fire Chief, normal first aid techniques should be used except that efforts should be taken to prevent contaminating the patient or spreading any contamination which might be on him. Contamination control efforts should always take second place to the well-being of the patient.
- d. If the injury is such that an ambulance is required, the Nuclear Fire Chief shall call the Chief Shift Operator or the Control Room and request an ambulance be summoned to the site (see section 5.4.3). While waiting for the ambulance he should perform as much decontamination as the injuries permit (at least removing any protective clothing, if not done previously).
- e. Once ambulance has left the site or the medical emergency has been terminated, contact Control Room and notify them of event status.

5.3.4 Nuclear Fire Fighter

- a. The NMP Fire Department should report to the location specified. Enroute to the area:
  - 1. One Nuclear Fire Fighter should pick up a stretcher and blanket in the most convenient location.
  - 2. Another Nuclear Fire Fighter should pick up a first aid kit.



#### 5.3.4 Nuclear Fire Fighter (Cont)

- b. To remove an injured person from a contaminated area, a stretcher should be placed on a blanket next to the patient and another blanket placed inside the stretcher, and then wrapped around the patient. This will not only keep the patient comfortable but also contain any loose contamination. If a Scoop stretcher is used, wrap the individual and stretcher in blankets to prevent the further spread of contamination.
- c. If the patient is contaminated to greater than 50,000 cpm (500,000 dpm on a 15 cm<sup>2</sup> probe area) consideration should be given to using the Contaminated Patient Carrier. If it is determined that the Contaminated Patient Carrier should be used, advise the ambulance personnel of this and relocate the carrier to a noncontaminated area close to the injured prior to the ambulance's arrival.

#### 5.3.5 Chemistry and Radiation Management Department

- a. Upon notification of a contaminated injured person, the Chemistry and Radiation Protection Department shall dispatch a survey team with a radio to survey and isolate the area. 6
- b. Once the injured is stabilized, he should be surveyed for contamination. The injured should only be moved if conditions in the immediate area (extremely high radiation levels or danger of fire/explosion or dangerous atmosphere) would cause further injury.
- c. Depending on the number of individuals injured and/or contaminated, personnel monitoring techniques should be adjusted accordingly (eg, quick frisk for establishing levels, segregate per gross levels of contamination, and full survey prior to release. 6
- d. Provide radiological assistance during the transfer of individual from the station to the ambulance. Prior to loading the patient in the ambulance, ensure a cover (herculite or paper) is placed on the floor of the ambulance.
- e. Perform appropriate follow-up bioassays per established station procedures.

#### 5.3.6 Security Force

- a. Contact Control Room and verifies receipt of alarm. 6
- b. Dispatches a guard with a radio to the injury scene command post to coordinate communication between the Security Department and the Nuclear Fire Chief.

#### 5.4 Hospitalization

5.4.1 General

- a. All potentially serious injuries should be referred to the Oswego Hospital Emergency Room .

5.4.1 General (Cont.)

- b. The injured will be stabilized and evaluated at the hospital. If he has received a radiation dose in excess of 100 rem, need for neurosurgery is indicated, or the special equipment or skills of the medical center are required, then Oswego Hospital should refer him to the State University Hospital at Upstate Medical Center in Syracuse once his injuries have been stabilized.

5.4.2 Chief Shift Operator

- a. Call Oswego County Fire Control at \_\_\_\_\_ (if busy or no answer, call \_\_\_\_\_)

Tell the dispatcher:

1. If a patient is not contaminated and requires an ambulance:

"An ambulance is needed at the Nine Mile Point Nuclear Station Unit 1. The injured person(s) is (are) not contaminated. He can be handled as a routine patient. He appears to have the following injuries: (describe injuries \_\_\_\_\_)."

2. If a patient is not contaminated and does not require an ambulance:

"This is the Nine Mile Point Nuclear Station Unit 1. Please inform Oswego Hospital that an injured person is enroute to the hospital. The injured person is not contaminated and can be handled as a routine patient. He appears to have the following injuries: (describe injuries \_\_\_\_\_)."

3. If the patient is contaminated and requires an ambulance:

"An ambulance is needed at the Nine Mile Point Nuclear Station Unit 1. Please initiate emergency procedures as the patient(s) is (are) contaminated. Please ensure that Oswego Hospital is notified and given the following information:

# of injured persons \_\_\_\_\_  
# of contaminated injured persons \_\_\_\_\_  
Contamination levels are \_\_\_\_\_ dpm or mr/hr  
Description of injuries \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5.4.2 Chief Shift Operator (Cont.)

4. If the patient is contaminated but does not require an ambulance:

"This is the Nine Mile Point Nuclear Station Unit 1. Please inform Oswego Hospital to initiate emergency procedures as a contaminated patient(s) is (are) enroute to the hospital. Please ensure that Oswego Hospital is notified and given the following information:

# of injured persons \_\_\_\_\_  
# of contaminated injured persons \_\_\_\_\_  
Contamination levels are \_\_\_\_\_ dpm or mcr/hr  
Description of injuries \_\_\_\_\_  
\_\_\_\_\_  
Expected time of arrival \_\_\_\_\_

6

- c. Notify the Security Force that "an ambulance is enroute to the plant". When it arrives, permit immediate entry and escort it to (location).
- d. If the patient is contaminated, call a physician who is prepared to handle contaminated injuries. Inform him that a contaminated, injured person has been sent to the hospital. Advise the person riding in the ambulance with the patient on the availability or non-availability of the doctor.

	Office Phone	Home Phone
Dr. David O'Brien	*	*
	(Summer months)	*

\*On off-hours this number is answered by an answering service. Ask for Dr. O'Brien to call the station on

	Office Phone	Home Phone
Dr. Gerald Holzwasser	*	---
Radiation Management Corp.	*	(24 hrs)
	*	

- e. If the patient is contaminated and being transported to the hospital, notify the On-Call Chemistry & Radiation Management Supervisor to meet the ambulance at the Oswego Hospital. Give him pertinent information as to contamination levels of the patient and extent of injuries.
- f. Upon notification from the Nuclear Fire Chief that the medical emergency has been terminated, sound the station alarm and announce the termination of the event.

6

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#### 5.4.3 Station Shift Supervisor

- a. The Station Shift Supervisor shall assign at least one Radiation Protection Technician to ride in the ambulance. The SSS shall assign an individual to meet the ambulance at the appropriate door and issue attendants any protective clothing, respiratory, or ambulance contamination control equipment necessary to pick up and transport the patient.

#### 5.4.4 NMP Fire Department

- a. While waiting for the arrival of ambulance, the NMP Fire Department should continuously monitor the injured for bleeding, respiration, shock and record patients vital signs on Ambulance Run Record (Fig. 3). Any information relative to the contamination levels on the various parts of the patients body should be indicated on Fig. 3 and recorded in the comments section of the form. In addition, the contaminated Patient Carrier, if being used, should be moved to a non-contaminated area close to the injured. 6
- b. When ambulance arrives, assist ambulance personnel as well as advise them in matters of contamination control. Ensure a cover is placed on floor of ambulance prior to loading, victim to prevent the spread of contamination during transport. Provide ambulance attendants with run sheet containing patients vital signs. 6

#### 5.4.5 Chemistry and Radiation Management Department

- a. A Chemistry and Radiation Protection Technician or Supervisor will ride with the injured in the ambulance. This individual should take a count rate and a dose rate meter (ion chamber type) with him to the hospital.

In addition a Chemistry and Radiation Management Department Supervisor will meet the ambulance at the hospital and provide assistance to hospital personnel in radiological controls.

- b. At the Oswego Hospital, the Radiation Protection Technician and Supervisor should assure that the entry way and the room to be used have been adequately prepared for the contaminated condition of the patient. Ensure film badges have been issued from the Nuclear Emergency Cabinet to doctors and nurses who will work with the patient if contamination level is such that a person treating him would be likely to receive greater than 1 mr/hr. Issue respiratory equipment from Emergency Cabinet to selected personnel if contamination levels are greater than 25,000 cpm (250,000 dpm on a 15 cm<sup>2</sup> probe area) over more than 2 square feet or greater than 500 mrad/hr over a smaller area. All handling of the patient at the hospital will be in accordance with the "Oswego Hospital Plan for the Decontamination and Treatment of Radioactively Contaminated Patients". 6

5.4.5 Chemistry and Radiation Management Department (Cont.)

- b. In addition to the above plan, NMP Radiation Protection personnel shall make recommendations to supplement this plan, as appropriate. Supplies for handling contaminated patients are stored in the Nuclear Emergency Cabinet near the X-ray Department.
- c. Any excised tissue should be placed in separate vials, provided in the RMC sample taking kit, identified and kept for later analysis.
- d. At the completion of the treatment, all paper and plastic should be removed. The hospital area, personnel and equipment involved in the treatment will be surveyed, decontaminated, (if required), and released by Niagara Mohawk. All waste, both liquid and solid, will be returned to Nine Mile Point for handling. Collect all film badges and obtain data for the Film Badge Issue Sheet.
- e. If the decision is made to move the injured to the State University Hospital at Upstate Medical Center, the Chemistry and Radiation Protection technician should accompany the ambulance to Syracuse and ensure this information is relayed to responding Chemistry and Radiation Management Department Supervisor. Enroute he will advise the ambulance personnel on contamination problems, and will assist in decontaminating the ambulance in Syracuse after completion of the transport. (See Figures 2 & 3.)
- f. At the State University Hospital at Upstate Medical Center, make sure the ambulance has gone to the Emergency Room entrance if the patient is contaminated. State University Hospital personnel will meet the ambulance at the Emergency Room entrance and will handle the patient(s) in accordance with the State University Hospital Radiologic Emergency Plan.
- g. Once it has been determined that the ambulance will not be needed further, the ambulance will be surveyed. If it is free from contamination, it will be released. Film badges should be obtained from the driver and attendant, and they should be surveyed for contamination. Data for the Film Badge Issue Sheet will be obtained at this time. If no film badges were required, obtain names of attendants for Entrance Registration Log. If the ambulance is contaminated, and decontamination cannot be accomplished at the hospital, it must be sent back to Nine Mile Point for decontamination and release.

5.4.6 Security Force

- a. Ensure roadway to ambulance pickup point is kept clear of any obstruction.



#### 5.4.6 Security Force (Cont.)

- b. When notified by the or CSO that an ambulance is on its way, dispatch a security guard and vehicle to Lake Road to direct responding medical vehicles to the appropriate access road. The emergency medical vehicle(s) and attendants should be allowed immediate access to the station and escorted to the Emergency Vehicle Staging Area.. A security guard should accompany the vehicles. 6
- c. Normal sign-in procedures shall be waived; names shall be obtained for the Entrance Registration Log when station personnel return from the hospital.
- d. Bring the Ambulance and Fire kit to the designated building entrance. 6
- e. Issue film badges to responding offsite personnel, if in restricted area or patient is known to be contaminated.
- f. During off-hours immediately notify the Station Safety Director  
\* Supervisor Fire Protection \* (or pager) and  
Emergency Coordinator \* (or pager).
- g. When notified by the Emergency Director (or his designee) perform notifications required per EPP-20 Figure 3, "Security Off Hours Emergency Contact List". 6

#### 6.0 CONTAMINATED INJURY PATIENT CARRIER

##### 6.1 Purpose of Equipment

NMP-1 is equipped with a contaminated injury patient carrier. This carrier is designed to minimize attendant exposures and the contamination of medical facilities and to facilitate care and decontamination of the patients.

##### 6.2 Description of Equipment

###### 6.2.1 Carrier

The patient carrier, located under the stairs of the Admin. Bldg. El 261' OSC area, consists of a heavy plastic carrier which is covered by a rigid transparent top enclosure. The carrier is sized to accommodate one man. The lower portion of the carrier is equipped with a drain system to facilitate decontamination of the patient. The transparent top is equipped with 12 entry holes which are either covered by gasketed tops or equipped with ambidextrous dry-box gloves. The carrier bottom is also equipped with handles for lifting. 6

#### 6.2.2 Gurney

The carrier is supported by a mobile gurney which may be elevated to any necessary position and can also be tilted for drain-off of contaminated waste.

#### 6.2.3 Air Supply

Fresh air is supplied to the patient through a 12 cfm fan. The air is discharged from the enclosure through two absolute filters to minimize the exposure of attendants to airborne particulate radioactivity from the patient.

#### 6.2.4 Scoop Stretcher

The scoop stretcher consists of an aluminum device which can be separated at both ends and can be used to gently "scoop" a victim onto the stretcher in the position found. Since it has an open bottom it greatly facilitates decontamination because decontamination solutions can be washed off and allowed to flow down to the drain end of the carrier.

#### 6.2.5 Miscellaneous Equipment

The carrier is also supplied with the following miscellaneous equipment:

1. Disposable blankets
2. Decontamination solutions
3. Surgeons gloves

EPP-4, FIGURE 1

CHIEF SHIFT OPERATOR CHECKLIST

PERSONNEL ILLNESS OR CONTAMINATED INJURY

DATE: \_\_\_\_\_

CSO NAME: \_\_\_\_\_

Initial/Time

1.     /     When informed that a major injury or illness has occurred, use "Alarm Instruct" button and ensure all PA switches are on (indoor and outdoor) and sound the station alarm for 10 seconds.
2.     /     Make the following announcement: "Attention ... Attention All Personnel. An injury has occurred at (location of injured). The Nine Mile Point Fire Department shall report to (location of injured) immediately. All other personnel remain clear of the area." Repeat alarm and announcement twice.
3.     /     If the injured is contaminated, contact Radiation Protection and verify a survey team has been dispatched to the scene.
4.     /     If the injury requires an ambulance:
  - a.    Call the dispatcher at Oswego County Fire Control at (if busy, .

Tell the dispatcher:

1.    If a patient is not contaminated and requires an ambulance:

"An ambulance is needed at the Nine Mile Point Nuclear Station Unit 1. The injured person(s) is (are) not contaminated. He can be handled as a routine patient. He appears to have the following injuries: (describe injuries

\_\_\_\_\_)"

2.    If a patient is not contaminated and does not require an ambulance:

"This is the Nine Mile Point Nuclear Station Unit 1. Please inform Oswego Hospital that an injured person is enroute to the hospital. The injured person is not contaminated and can be handled as a routine patient. He appears to have the following injuries: (describe injuries

\_\_\_\_\_)"

EPP-4, FIGURE 1 (Cont.)

CHIEF SHIFT OPERATOR CHECKLIST

MAJOR-PERSONNEL ILLNESS OR CONTAMINATED INJURY

3. If the patient is contaminated and requires an ambulance:

"An ambulance is needed at the Nine Mile Point Nuclear Station Unit 1. Please initiate emergency procedures as the patient(s) is (are) contaminated. Please ensure that Oswego Hospital is notified and given the following information:

# of injured persons \_\_\_\_\_  
# of contaminated injured persons \_\_\_\_\_  
Contamination levels are \_\_\_\_\_ dpm or mr/hr  
Description of injuries \_\_\_\_\_

6

4. If the patient is contaminated but does not require an ambulance:

"This is the Nine Mile Point Nuclear Station Unit 1. Please inform Oswego Hospital to initiate emergency procedures as a contaminated patient(s) is (are) enroute to the hospital. Please ensure that Oswego Hospital is notified and given the following information:

# of injured persons \_\_\_\_\_  
# of contaminated injured persons \_\_\_\_\_  
Contamination levels are \_\_\_\_\_ dpm or mr/hr  
Description of injuries \_\_\_\_\_

6

Expected time of arrival \_\_\_\_\_

- b. Notify Security that an ambulance is coming and should be brought to (location) \_\_\_\_\_.
- c. Notify SSS of emergency.
- d. Off Hours: Have Security notify Station Safety Director \* , Supervisor Fire Protection \* (or pager) and Emergency Coordinator \* (or pager).

5. \_\_\_\_\_ / If the patient is not contaminated, skip Steps 6-8 and continue with Step 9.

6

\*Proprietary Information  
for Controlled Copies Only.

EPP-4, FIGURE 1 (Cont.)

CHIEF SHIFT OPERATOR CHECKLIST

MAJOR-PERSONNEL ILLNESS OR CONTAMINATED INJURY

6.     /     For a contaminated patient call:
- |                       |                 |            |
|-----------------------|-----------------|------------|
|                       | Office Phone    | Home Phone |
| Dr. David O'Brien     | *               | *          |
|                       | (Summer months) | *          |
| or                    | *               |            |
| Dr. Gerald Holzwasser |                 |            |
7.     /     Call the on-call Chemistry and Radiation Management  
Department Supervisor, and tell him:
- a. Go to the Oswego Hospital/Upstate Medical Center
  - b. Contamination levels on the patient
  - c. Extent of injuries.
8.     /     Off-Hours: Instruct Security to make notification required  
per EPP-20, Figure 3 "Security Off-Hours Emergency Contact  
List, as directed by SSS.
9.     /     Upon notification from the Nuclear Fire Chief or Nuclear  
Operator E that the medical emergency has been terminated,  
sound station alarm and announce termination of event.

\*Proprietary Information for  
Controlled Copies Only.



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FIGURE 2

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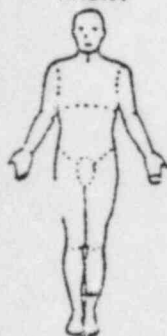
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MARK FIGURE

FRONT



14 ☐ OTHER \_\_\_\_\_

☐ ALCOHOL-L

☐ BEHAVIORAL

☐ CARDIAC \_\_\_\_\_

☐ CONVULSION☐ CVA / STROKE☐ DIABETIC RE☐ DIZZINESS /

☐ DRUG OVER!

☐ ENVIRONMETICS

## ACKNOWLEDGE

SIGNATURE

WITNESS \_\_\_\_\_

HISTORY/COMMI

## SKIN DECONTAMINATION RECORD

100

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1. The first group of variables includes the following:

Location in Sudan where Contamination Occurred:

Commission of New Commission Countries

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Now Begins

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Concerns

Decontamination  
Agent Used

[illegible]

22

NINE MILE POINT NUCLEAR STATION

EMERGENCY PROCEDURES

PROCEDURE NO. EPP-13

**FOR INFORMATION ONLY**

ON-SITE EMERGENCY RESPONSE FACILITIES OPERATIONS

DATE AND INITIALS

<u>APPROVALS</u>	<u>SIGNATURES</u>	<u>REVISION 10</u>	<u>REVISION 11</u>	<u>REVISION 12</u>
Chemistry & Radiation Management Superintendent E. W. Leach	<u>EW Leach</u>	<u>EWL</u> <u>3/3/83</u>	_____	_____
Supervisor Nuclear Security R. F. Orr	<u>RF Orr</u>	<u>3/4/83</u> <u>RF-O</u>	_____	_____
Station Superintendent NMPNS T. W. Roman	<u>TWRoman</u>	<u>3/7/83</u> <u>TWR</u>	_____	_____
General Superintendent Nuclear Generation Chairman of S.O.R.C. T. J. Perkins	<u>TJ Perkins</u>	<u>3/8/83</u> <u>TJP</u>	_____	_____

Summary of Pages

Revision 10

Page  
i, 1-28

Date  
January 1983

NIAGARA MOHAWK POWER CORPORATION

THIS PROCEDURE NOT TO BE  
USED AFTER March 1985  
SUBJECT TO PERIODIC REVIEW.

EPP-13

ON-SITE EMERGENCY RESPONSE FACILITIES OPERATIONS

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EPP-13

ON-SITE EMERGENCY RESPONSE FACILITIES OPERATIONS

1.0 PURPOSE

- 1.1 The purpose of this procedure is to describe the activation and control functions of the available on-site emergency facilities and outline the personnel staffing these facilities. This procedure does not address the near and off-site emergency facilities, e.g., Joint News Center, Emergency Operations Facility (EOF) and Alternate EOF, which are discussed in the NMPC Corporate Emergency Response/Recovery Plan and Implementing Procedures (CPP's).

2.0 REFERENCES

- 2.1 NUREG-0654/FEMA-REP-1, Rev. 1 - Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.
- 2.2 EAP-1, Activation and Direction of Emergency Plan
- 2.3 EAP-3, Emergency Personnel Action Procedure
- 2.4 EPP-5, Station Evacuation
- 2.5 EPP-8, On-site and Off-site Dose Assessment Procedure
- 2.6 EPP-11, Review and Revisions of Site Emergency Plan and Procedures
- 2.7 EPP-20, Emergency Notifications
- 2.8 NMPC Corporate Emergency Response/Recovery Plan and Implementing Procedures (CPP's).

3.0 EMERGENCY RESPONSE FACILITIES

- 3.1 Control Room (CR)
- 3.1.1 Location - The Control Room is located on the 277' elevation of the Turbine Building, in close proximity to the Technical Support Center.
- 3.1.2 Function - During the initial stage of any emergency condition, the Control Room is the primary location for the assessment and coordination of corrective and protective actions. It is equipped with annunciators and controls for major plant systems, as well as emergency communication systems. This area is also designed to protect personnel from radiation hazards and natural phenomena.

### 3.1.3 Staffing

- a. The normal complement of site personnel required to staff the CR for an emergency classification of an Alert or higher, or for any situation during normal hours requiring a station evacuation, shall include: (See Figures 2 and 3)
  - 1) Station Shift Supervisor on duty
  - 2) Ass't Station Shift Supervisor
  - 3) Chief Shift Operator
  - 4) Operators on Shift and in Training
  - 5) Station Superintendent
  - 6) Operations Supervisor
  - 7) Reactor Analyst, Unit Supervisor
  - 8) Instrumentation & Control, Unit Supervisor
  - 9) Chemistry & Rad. Prot. Assistant Supervisor
- b. Staffing for an emergency classification of an Unusual Event may not require full staffing. For this emergency condition the Emergency Director shall determine the staffing complement consistent with the severity of the emergency.
- c. Emergency Advisory personnel (#5-9) above will initially report to the Control Room to be briefed by the SSS on plant status and corrective actions in progress. Their duties will be coordinated by the Station Superintendent and will include interfacing with TSC personnel as required by the Emergency Director.

### 3.2 Technical Support Center (TSC)

3.2.1 Location - The on-site Technical Support Center is located in the Administrative Building on the 277' elevation. It is in close proximity to the Control Room and allows access to records and drawings which describe the as-built conditions and layout of plant structures, systems and components.

3.2.2 Function - The TSC shall provide the necessary area outside the Control Room to accomplish the technical support necessary for the command and control of the emergency situation. These functions include furnishing indepth diagnostic and corrective engineering assistance to Control Room emergency personnel.

### 3.2.3 Staffing

- a. The TSC is activated during the Alert, Site Area Emergency, General Emergency, or when directed by the Emergency Director. In addition, during normal hours the TSC shall also be staffed for any situation requiring a Station Evacuation. (See Figures 2,3,4)



### 3.2.3 Staffing (Cont'd)

- b. The normal positions or expertises to staff the TSC for a Site Area and General Emergency will include:

<u>Position Title or Expertise -</u>	<u>Typical Staffing</u>
1) Emergency Director -	Gen. Superintendent Nucl. Gen.
2) Technical Data Coordinator -	Technical Supt. & Staff
3) Instrumentation & Control Coord. -	Site I & C Supv.
4) Reactor Analyst Coord. -	Site Rx Analyst, Supv.
5) Communication Coordinator & Staff -	QA Operations Supv. & Staff
6) Maintenance Coordinator -	Maintenance Supt.
7) Radiological Assessment Coord. -	Chem. & Rad. Mgt. Supt.
8) Environmental Survey/Sample Team Coord. -	Env. Prot. Coord.
9) Station Survey/Sample Team Coord. -	Chem. & Rad. Prot. Supv.
10) Public Information Coord. -	Operations Supervisor of unaffected Unit
11) Security Coordinator -	Security Representative
*12) Operations Engineering -	A Nuclear Engineering Department Staff Member
*13) Mechanical Engineering -	A Nuclear Engineering Department Staff Member
*14) Electrical Engineering -	A Nuclear Engineering Department Staff Member
*15) Nuclear Engineering -	A Nuclear Engineering Department Staff Member
*16) Meteorological Advisor -	Environmental Affairs Staff Meteorologist
17) NRC Representatives (5)	
* - NMPC Headquarters Support Staff	

- c. For an Alert emergency classification, the TSC shall be manned only by site supervisors (1-11 above). NMPC Headquarters support personnel shall be put on-call for an Alert emergency class and disbursed to the site for a Site Area and General Emergency.

### 3.3 Operations Support Center (OSC)

3.3.1 Location - The on-site Operations Support Center is located in the Administrative Building lunch room areas on the 261' and 277' elevations. The OSC is in close proximity to the Radiation Protection Office, the emergency equipment storage cabinets, the Maintenance Shop, First Aid room, and the Decontamination Facility.

3.3.2 Function - The OSC is the area from which personnel and equipment necessary for the support of emergency operations can be dispatched (i.e., survey teams, damage control teams, fire/rescue/medical brigade).

### 3.3.3 Staffing

- a. The OSC is activated during an Alert, Site Area, or General Emergency or when directed by the Emergency Director. In addition, during normal hours the OSC shall also be staffed for any situation requiring a Station Evacuation (see Figures 2, 3, 4).
- b. The OSC coordinating positions shall be staffed by available first line supervisors or Chief Mechanics/Technicians by means of assignment or via designation by the Emergency Director.

The OSC organization shall include:

<u>Position Title or Expertise</u>	<u>Typical Staffing</u>
1) OSC Coordinator	Maintenance Department Supervisor
2) OSC Communicator	Maintenance Department Supervisor
3) Personnel Accountability Coordinator	Maintenance Department Supervisor
4) Chemistry and Radiation Protection Team Coordinator	Chemistry and Radiation Protection Assistant Supervisor or Chief Tech.
5) Damage Control Team Coordinator	Maintenance Department Supervisor or Chief Mechanic
6) NMP Fire Dept. Coordinator	Fire Department Supervisor

### 4.0 ACTIVATION OF ON-SITE EMERGENCY RESPONSE FACILITIES

NOTE: This section is not applicable to the Control Room as no special actions are required to activate the Control Room as an Emergency Facility.

#### 4.1 Activation of Technical Support Center

4.1.1 The first TSC staff member to arrive shall unlock the TSC at the Document Control/Retrieval Room door using a GM5 or GM key obtainable from the Control Room, activate emergency ventilation system as per attachment 1, and enter name on Assignment Board. The Document Control/Retrieval Room door is the primary entrance and exit to the TSC to ensure accountability of TSC personnel. All other doors should be used only as emergency exits.

4.1.2 As other TSC staff members arrive they should take up assignments and perform the following tasks:

Technical Data Coordinator and staff - activate process computer terminals, control room camera, and prepare to activate TSC status boards.

#### 4.1.2 (cont.)

Radiological Assessment Coordinator and staff - perform TSC habitability surveys (i.e., turn on and check VAMP and CAM), make recommendations on TSC habitability and need for TSC emergency ventilation system to continue operation. Activate radio system and Meteorological/Dose Assessment computer.

Communications Coordinator and staff - ensure hotlines, telecopiers and other communications equipment are ready for service.

#### 4.2 Activation of Operations Support Center

4.2.1 As members of the Operations Support Center staff arrive, they will take up assignments according to their qualifications and perform their assigned tasks.

4.2.2 The first individual(s) to arrive at the OSC should ensure the following have been started:

- 1) Establish communications with the TSC (normal hours) or CR (off hours) as appropriate. Establishing communications includes telephone, radio (with backup) and gaitronics.
- 2) Ensure a radiation survey and air sample of OSC are started and that a stepoff pad and monitor is placed by the employee entrance.
- 3) Unpack and organize the OSC Emergency Operations Kit.
- 4) Move tables and chairs to the front and side of room for the OSC coordinators and staff (see Figure 9).
- 5) Place a sign from OSC Kit on the door utilized to enter the Administration Building lobby indicating that all individuals must utilize the employee entrance.
- 6) Place the names and positions of the OSC coordinating positions on the organization chart.
- 7) Inform the TSC when survey teams are assembled and ready to be dispatched.
- 8) Assure that the OSC Coordinator establishes his command post at the front of the room.

5.0 CONDUCT OF OPERATIONS AT ON-SITE EMERGENCY RESPONSE FACILITIES

5.1 Control Room Staff

5.1.1 Supervisory personnel assigned to the Control Room shall act as Emergency Advisors initially reporting to the Station Shift Supervisor. They will be briefed on plant status and corrective actions in progress. They will report through the Station Superintendent and act as technical advisors concerning actual or potential problems within their particular area of expertise/responsibility. They will analyze current and projected plant status and, through close communications and coordination with the TSC and Emergency Director, provide technical support and recommendations to emergency personnel. These personnel may provide backup to counterparts in the TSC to assure 24 hour per day coverage.

5.1.2 The Station Superintendent shall provide liaison between control room operating staff, Emergency Advisory staff, and the Site Emergency Director. Also, provide technical and administrative direction in accident assessment, and damage control operations.

5.1.3 Operations personnel on duty or reporting to the Control Room shall, under the direction of the Chief Shift Operator or SSS, act to ensure the safe and proper operation of the plant including acts to mitigate off-normal conditions. They shall perform other activities as directed to assess plant conditions and correct problems.

5.1.4 The Station Shift Supervisor shall initially act as Emergency Director until relieved. As SSS he shall be responsible for direct supervision of operations personnel performing normal, off-normal or emergency actions in accordance with appropriate operating, special operating, or emergency operating procedures developed in response to the situation at hand.

5.2 Technical Support Center Staff

5.2.1 TSC General Rules of Conduct

General rules of conduct have been established for the Technical Support Center and are provided as Figure 6. All personnel in the TSC shall adhere to these rules.

5.2.2 TSC Staff Emergency Responsibilities

- a. A list of Emergency Responsibilities has been established in EAP-3 for each emergency position in the TSC with the exception of the Emergency Director which is provided by EAP-1.

5.2.2 TSC Staff Emergency Responsibilities (cont.)

- b. The list of Emergency responsibilities contained in EAP-3 are outlined below:

<u>EAP-3 Reference</u>	<u>Position</u>
Enclosure 2	Station Superintendent
3	Technical Data Coordinator
4	I&C Coordinator
" 5	Reactor Analyst Coordinator
" 6	Communications Coordinator
" 7	Maintenance Coordinator
" 8	Radiological Assessment Coordinator
" 9	Environmental Survey/Sample Team Coordinator
" 10	Station Survey/Sample Team Coordinator
" 11	Meteorological Advisor
" 12	Security Coordinator
" 13	Public Information Coordinator
" 14	Engineering TSC Coordinator

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5.3 Operations Support Center Staff

5.3.1 OSC General Rules of Conduct

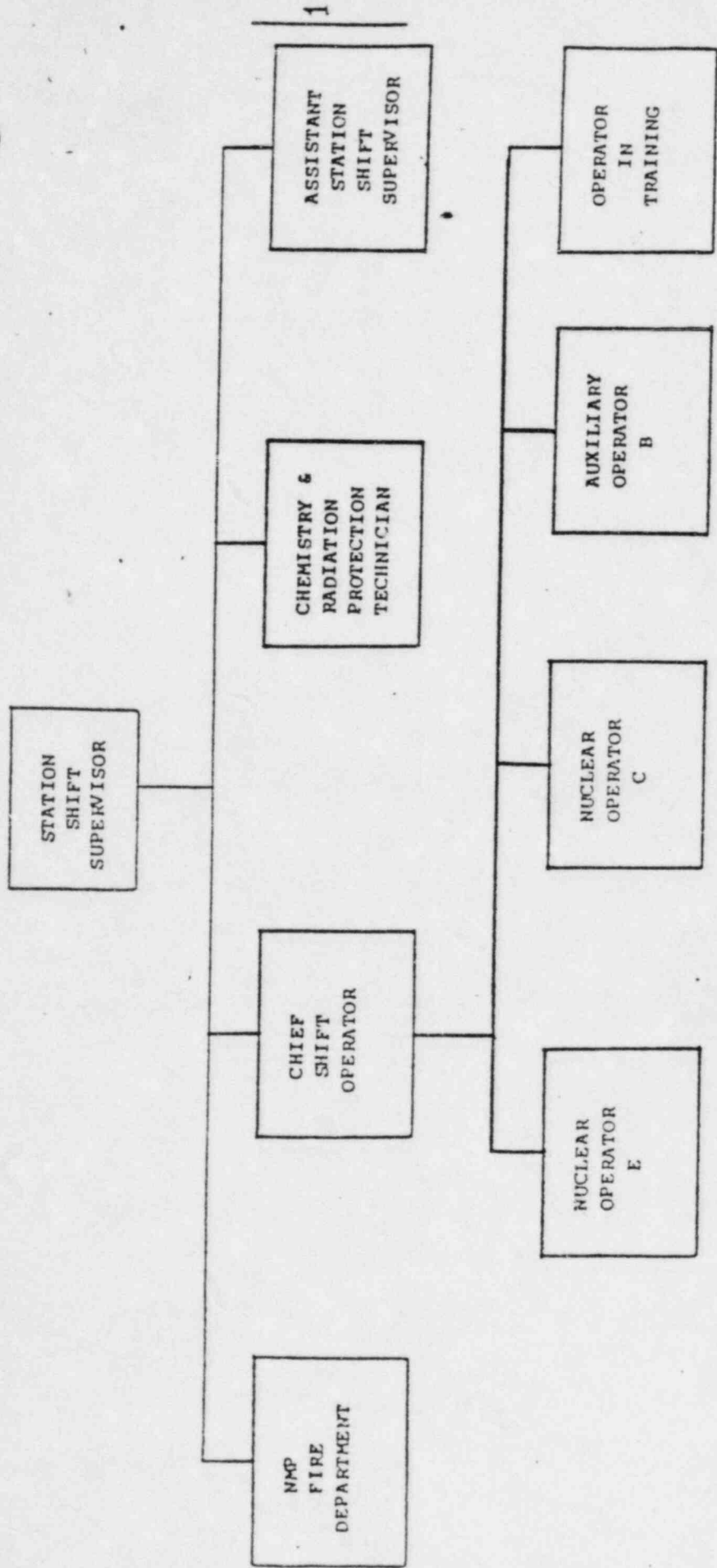
General rules of conduct have been established for the Operations Support Center and are provided in Figure 7. All OSC coordinating positions shall adhere to these rules and ensure they are observed by other personnel in the OSC.

5.3.2 OSC Staff Emergency Responsibilities

- a. A list of Emergency responsibilities are contained in EAP-3 and are outlined below:

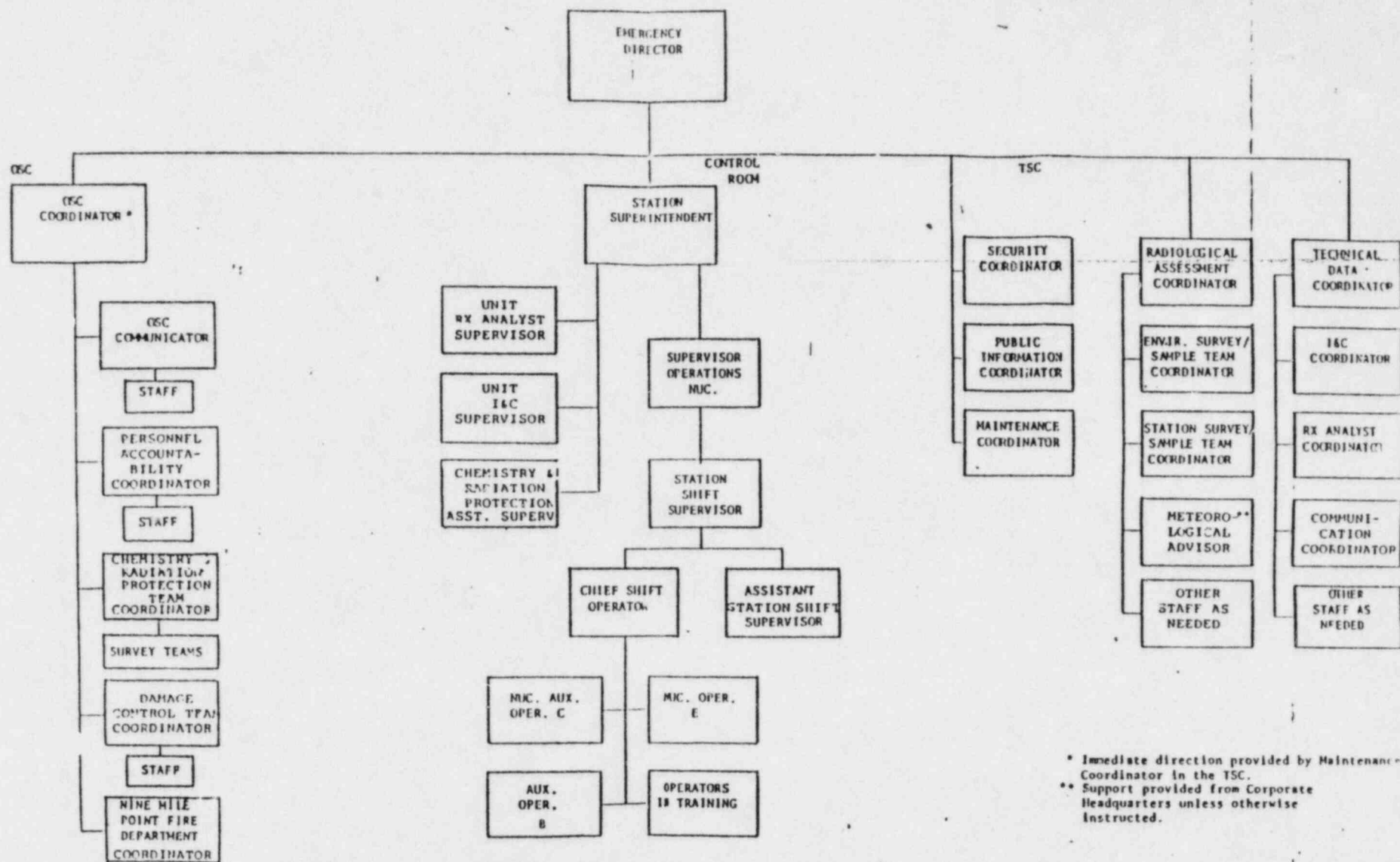
<u>EAP-3 Reference</u>	<u>Coordinating Position</u>
15	OSC Coordinator
16	OSC Communicator
17	Personnel Accountability Coord.
18	Chemistry & Radiation Protection Team Coordinator
19	Damage Control Team Coordinator
20	NMP Fire Department Coordinator





STAFFING LEVEL I

Figure 1



\* Immediate direction provided by Maintenance Coordinator in the TSC.  
 \*\* Support provided from Corporate Headquarters unless otherwise instructed.



FIGURE 4

NMP EMERGENCY RESPONSE ORGANIZATION STAFFING AND ASSIGNED DUTIES

CONTROL ROOM

<u>STAFFING</u>	<u>RESPONSIBILITIES</u>
SSS on Duty Asst. SSS CSO Operators on Shift & in Training	Maintain constant communications with the TSC and at the direction of the Emergency Director perform actions necessary to reduce the severity of the emergency.
Station Superintendent	Provide liaison between control room Operating staff, Emergency Advisory staff, and the Site Emergency Director. Also, provide technical and administrative direction in accident assessment, and damage control operations.
Operations Supervisor	Perform emergency functions and maintenance. Also, provide technical advise.
Rx Analyst, Unit Supervisor I&C, Unit Supervisor Chem & Rad Prot. Asst. Supervisor	Assist Operations staff in accident assessment and damage control operations.

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TECHNICAL SUPPORT CENTER

<u>POSITION/EXPERTISE</u>	<u>TYPICAL STAFFING</u>	<u>RESPONSIBILITIES</u>
Emergency Director	General Supt. Nuclear Gen. or ranking number	Direct emerg. operations
Technical Data Coord.	Technical Supt. or Tech. Services Supt.	Assist Director in collection
I&C Coord.	Site I&C Supvr. or an I&C Dept. Supvr.	Advise Director on I&C problems
Rx Analyst Coord.	Site Rx Analyst Supvr. or a RX Analyst Dept. Supvr.	Advise Director on core protection problems
Communications Coord.	Q.A. Supervisor or Q.A. Department Supvr.	Maintain TSC communications
Maintenance Coord.	Maintenance Supt. or Maint. Dept. Supvr.	Direct emerg. repair activities

FIGURE 4 (cont.)

TECHNICAL SUPPORT CENTER

<u>POSITION/EXPERTISE</u>	<u>TYPICAL STAFFING</u>	<u>RESPONSIBILITIES</u>
Radiological Assessment Coord.	Chem. & Rad. Mgt. Supt. or Chem. & Rad. Mgt. Supvr.	Overall radiological assessment
Environmental Survey/ Sample Team Coord.	Environmental Prot. Coord. or a Chem. & Rad. Mgt. Dept. Supvr.	Direct environmental sampling teams
Station Survey/ Sample Team Coord.	Chem. & Rad. Prot. Supvr. or a Chem. & Rad. Mgt. Dept. Supvr.	Direct inplant sampling teams
*Meteorological Advisor	Environmental Affairs Staff Meteorologist	Advise on Meteorology
Public Information Coord.	Supt. of Production NMP-2 or NMP-2 Operations Supvr. or SSS	Liason with PACC Dept.
Security Coordinator	Security Representative	Liason to Emerg. Dir. on security matters
*Mechanical Eng.	A Nuclear Engineering Depart- ment Staff Member	Corporate Advisors to the Emergency Director
*Electrical Eng.	A Nuclear Engineering Depart- ment Staff Member	"
*Nuclear Eng.	A Nuclear Engineering De- partment Staff Member	"
*Operations Eng.	A Nuclear Engineering Department Staff Member	"
*Structural Eng.	A Nuclear Engineering Department Staff Member	"
*Radiological Eng.	A Nuclear Engineering Department Staff Member	"

\*NMPC Corporate Staff personnel will respond only to a Site Area Emergency, General Emergency or when requested by the Emergency Director.



FIGURE 4 (cont.)

OPERATIONS SUPPORT CENTER

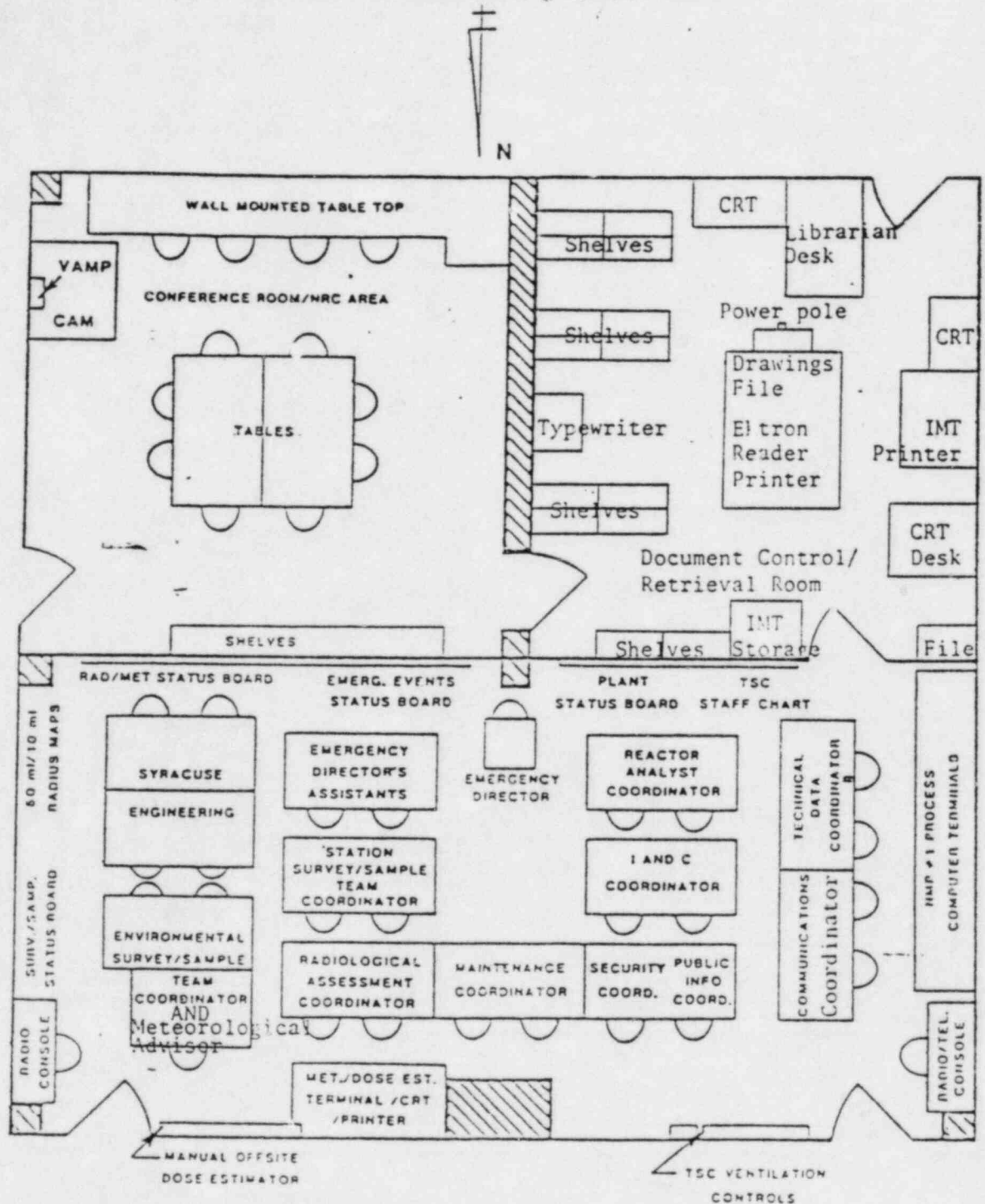
<u>Position</u>	<u>Staffing</u>	<u>Responsibilities</u>
OSC Coordinator	A Maintenance Department Supvr.	Direct OSC operations
OSC Communicator	A Maintenance Department Supvr.	Maintain OSC communication
Personnel Accountability Coordinator	A Maintenance Department Supvr.	Account for station personnel
Chem. & Rad. Prot. Team Coordinator	Chemistry & Radiation Protection Assistant Supervisor or Chief Technician	surveys, sampling
Damage Control Team Coordinator	A Maintenance Department Supervisor or Chief Mechanic	repair and damage control
NMP Fire Dept. Coordinator	A Fire Department Supervisor	Fire/Rescue/Medical Brigade

- NOTE:
- 1) In the absence of the General Superintendent Nuclear Generation, the ranking member present will act as Emergency Director.
  - 2) The Emergency Director will assign duties in the absence of the person usually occupying the position (using approved personnel lists in EPP-11).

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FIGURE 5

TYPICAL TECHNICAL SUPPORT CENTER ARRANGEMENT



EPP-13

FIGURE 6

TECHNICAL SUPPORT CENTER GENERAL RULES OF CONDUCT

This figure provides a listing of general rules of conduct for the TSC. All personnel in the TSC shall adhere to these rules.

1. The first TSC staff member to arrive shall perform the following:
  - a. Unlock the TSC at the Document Control/Retrieval Room door using a GM5 or GM key obtainable from the control room.
  - b. Activate the TSC emergency ventilation system (refer to EPP-13 Attachment 1 for its operation).
  - c. Enter name on Assignment Board.
2. Other TSC staff members to arrive should take up assignments and perform the following:
  - a. Technical Data Coordinator and staff - Activate process computer terminals, Control room camera and prepare to activate TSC Status boards.
  - b. Radiological Assessment Coordinator and staff - Perform habitability surveys (i.e., turn on and check VAMP and CAM), make recommendations on TSC habitability and need for TSC emergency ventilation system to continue operation. Activate radio system and Meteorological Dose Assessment computer.
  - c. Communications Coordinator and staff - Ensure hotlines, telecopiers and other communications equipment are ready for service.
3. Personnel filling designated staff positions in the TSC shall place their names in the appropriate box on the Assignment Board. When relieved, assure the relieving individuals name is placed in the appropriate box.
4. All individuals entering and exiting the TSC shall log in and out with the Technical Data Coordinator or his designee. An example of the entrance log to be utilized is shown as Figure 10.
5. Record and disburse all messages received or transmitted as follows:
  - a. Incoming Messages

All messages received from outside the TSC shall be recorded on triplicate forms which are provided in the TSC emergency operations kit and disbursed as follows:

1st copy - To appropriate TSC staff member for action  
2nd copy - To Technical Data Coordinator for status logging  
3rd copy - To be retained by message taker

FIGURE 6 (Cont'd)

b. Outgoing Messages

All outgoing messages from the TSC shall be recorded on triplicate forms which are provided in the TSC emergency operations kit and disbursed as follows:

Step 1

1st and 2nd copy - To appropriate TSC staff member for response

3rd copy - To be retained by message originator

Step 2

1st copy - To message originator with response and for status logging if necessary.

2nd copy - To be retained by appropriate TSC staff member providing response.

6. When you receive a message, (e.g., copy of the triplicate message form), take appropriate action required and also initial the message to signify you have acknowledged its receipt.
7. Periodically inform the Emergency Director (directly or through the individual to whom you report of actions/assessments/results within your area of responsibility.
8. Periodically review the various status boards within the TSC. Verify that information relative to your area of responsibility is up to date and correct.
9. Periodically assess personnel requirements:
  - a. Determine if sufficient personnel are on hand (e.g., are in the Operations Support Center) to provide any assistance you may anticipate. Have additional personnel called in if necessary.
  - b. If it appears that the emergency may be protected, (i.e., may require shift-type coverage) determine if sufficient personnel are available to provide for continuous 24-hour coverage and set up a duty rotation system. Notify appropriate personnel of their duty schedules.
  - c. Utilize the approved personnel lists of EPP-11 when selecting/assigning personnel.
  - d. If additional personnel are required, (e.g., JAFNPP, consultants, etc.) coordinate through the Emergency Director to obtain these people.

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FIGURE 6 (Cont'd)

10. The document control system can be accessed through the document control terminal, located adjacent to the TSC.
11. If additional materials/parts/supplies/etc. are required beyond availability at the station, requests should be coordinated through the Emergency Director to the Administrative/Logistics Manager in the Emergency Operations Facility (if activated).
12. If necessary, food will be periodically provided through the Administrative/Logistics Manager (in the EOF if activated).
13. A calm professional atmosphere shall be maintained at all times.

10



FIGURE 7

OPERATIONS SUPPORT CENTER GENERAL RULES OF CONDUCT

This figure provides a listing of general rules of conduct for the OSC. All personnel staffing OSC coordinating positions shall adhere to these rules and assure they are observed by other personnel in the OSC.

1. As members of the Operations Support Center arrive, they will pick up their appropriate assignment binders from the OSC Operations Kit and perform the assigned tasks.
2. The first individual(s) to arrive at the OSC should ensure the following have been started:
  - a. Establish communications with the TSC (normal hours) or CR (off hours) as appropriate. Establishing communications includes telephone, radio (with backup) and gaitronics.
  - b. Ensure a radiation survey and air sample of OSC are started and that a stepoff pad and monitor is placed by the employee entrance.
  - c. Unpack and organize the OSC Emergency Operations Kit.
  - d. Move tables and chairs to the front and side of room for the OSC coordinators and staff as per EPP-13 Figure 9.
  - e. Place a sign on the door utilized to enter the Administration Building lobby to the OSC area indicating that all individuals must utilize the employee entrance.
  - f. Place the names and positions of the three OSC Coordinators on the organization chart.
  - g. Inform the TSC when the survey teams are assembled and ready to be dispatched.
  - h. Assure that the OSC Coordinator establishes his command post at the front of the room.
3. Personnel filling designated staff positions in the OSC shall ensure that their name/position is identified on the Organization Board.
4. All individuals entering and exiting the OSC shall log in and out with the OSC Coordinator or his designee. An example of the entrance log to be utilized is shown as Figure 10.

FIGURE 7 (Cont'd)

5. Record and disburse all messages received or transmitted as follows:

a. Incoming Messages

All messages received from outside the OSC shall be recorded on triplicate forms which are provided in the OSC emergency operations kit and disbursed as follows:

Step 1

1st and 2nd copy - To appropriate OSC staff member for response

2nd copy - To OSC Coordinator

3rd copy - To be retained by message taker

b. Outgoing Messages

All outgoing messages from the OSC shall be recorded on triplicate forms which are provided in the OSC emergency operations kit and disbursed as follows:

Step 1

1st and 2nd copy - To appropriate OSC staff member for response

3rd copy - To be retained by message originator

Step 2

1st copy - To message originator with response and for status logging if necessary.

2nd copy - To be retained by appropriate OSC staff member providing response.

6. When you receive a message (e.g., copy of the triplicate message form), take appropriate action required and also initial the message to signify you have acknowledged its receipt.
7. Periodically assess personnel requirements in consultation with appropriate coordinators in the TSC.
8. Keep the OSC Coordinator appraised of actions/assessment/results within your area of responsibility.

FIGURE 7 (Cont'd)

9. If necessary, food will be periodically provided through the Administrative/Logistics Manager (in the Emergency Operations Facility if activated).
10. A calm, professional atmosphere shall be maintained at all times.

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FORM 1

FIGURE 8

Page \_\_\_\_ of \_\_\_\_

EMERGENCY RESPONSE / RECOVERY ACTION LOG

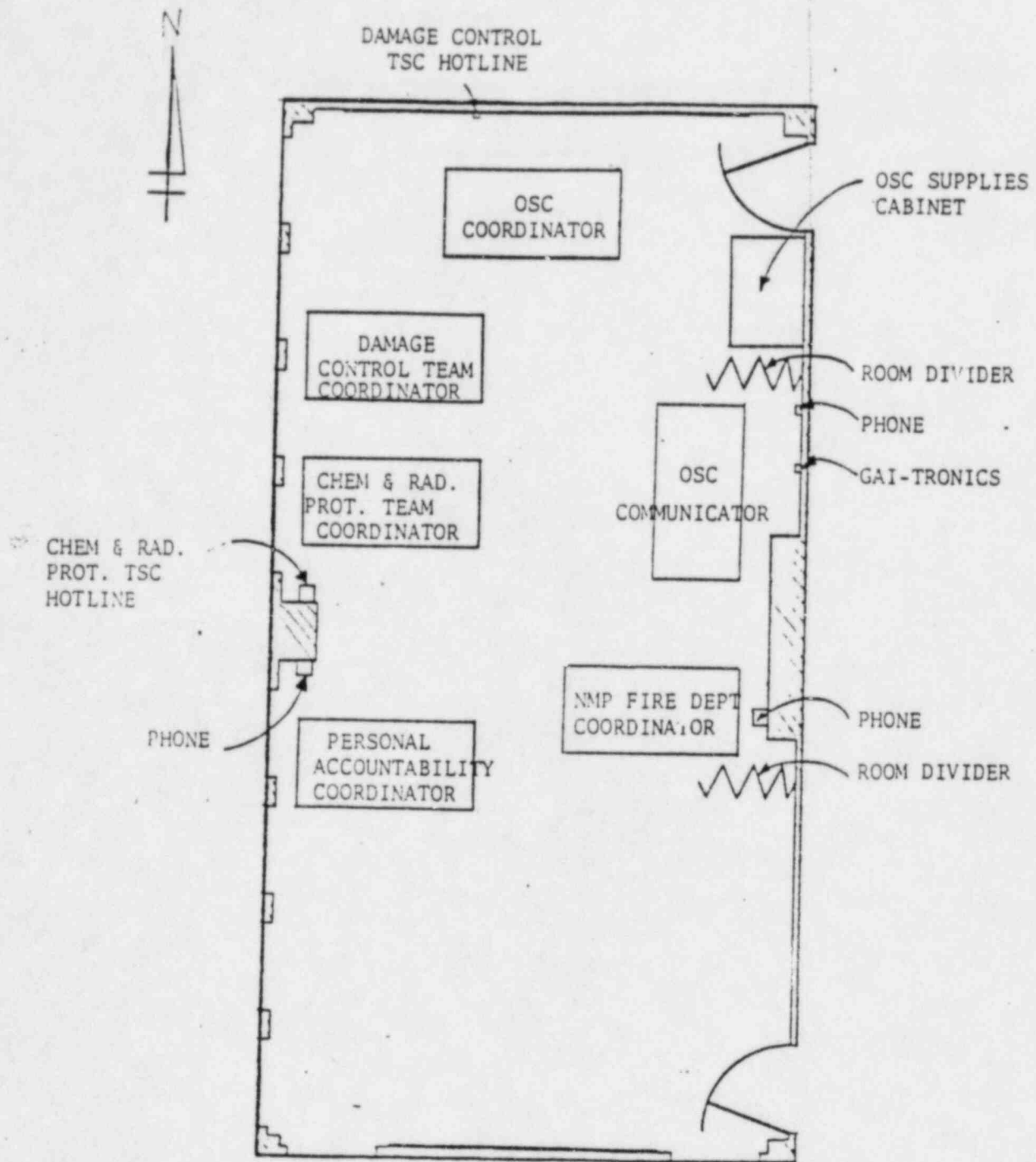
Position \_\_\_\_\_

Person \_\_\_\_\_

Date/Time	Actions/Requests	Assignments	Action Completion	Comments
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EPP-13, FIGURE 9

OSC AR. ANGEEMENT





EPP-13

FIGURE 10

SIGN-IN/OUT LOG

<u>Name</u>	<u>Dept/Company</u>	<u>Time-In</u>	<u>Time-Out</u>	<u>Destination</u>
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Attachment 1

TECHNICAL SUPPORT CENTER EMERGENCY VENTILATION OPERATION PROCEDURE

This attachment provides the procedure for operation of the TSC Emergency Ventilation System.

1.0

SYSTEM DESCRIPTION

Normal ventilation for the Technical Support Center is provided by the new Administration Building HVAC system. In the event of air contamination in the Administration Building, the outside air supply must be transferred to the TSC Emergency Ventilation System which is independent from the normal Administration Building HVAC system. The outside air supply must be continued to establish and maintain a positive pressure within the TSC. This outside air will be supplied by one full capacity fan which then passes through a HEPA and charcoal filter train.

The TSC Emergency Ventilation system is designed to provide air at a rate of approximately 2000 SCFM. A positive pressure of approximately .125 inches of water is to be maintained within the TSC relative to the immediate surroundings (while the system is in operation) in order to prevent infiltration of potentially contaminated air. Doors are weather-stripped and penetrations are sealed to aid in maintaining the positive pressure. This pressure is maintained by the exhaust damper modulating to keep the space at .125 inches of water. Ductwork distributes air to various areas of the TSC (including the area above the ceiling of the TSC and the rooms adjacent to the TSC; namely, the NRC Operations Room and Site Library). Heating in the TSC is provided by thermostatically controlled ventilation duct heaters. Air cooling is provided by one air-cooled condensing unit on the inlet to the TSC.

Ventilation flow through the System during operation is as follows:

Air enters the System through a louvered intake after which it passes through the supply damper to the supply fan. Air then passes through a duct heater (used for humidity control) and on to the filter train. The filter train comprises of a pre-filter, HEPA filter, charcoal filter and a second HEPA filter. Air then passes through the single ventilation cooler and air duct heaters.

The system components are controlled remotely from the TSC Emergency Ventilaiton Control Panel located in the TSC.

2.0

Initiate System Start

2.1

Check Emergency Ventilation system "POWER ON" "Red" indicator light is on. If not, push and release "Green" "POWER RESET" push button and "POWER ON" "Red" indicator light should come "ON".

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Attachment 1 (cont.)

- 2.2 Push and release "Red" "VENT SYSTEM START" pushbutton. Check "VENT SYSTEM ON" "Red" indicator light is "ON".
- 3.0 Allow system to stabilize (approximately 10 minutes)
- 3.1 Check "INLET AIR DAMPER D1" "OPEN" "Red" indicator light is "ON"; "CLOSED" "Green" indicator light is "OFF".
- 3.2 Check "Supply Air Fan", "FAN ON" "Red" indicator light is "ON".
- 3.3 Check damper D4 "OPEN" "RED" indicator light is "ON"; "CLOSED" "Green" indicator light is "OFF".
- 3.4 Check "EXISTING SUPPLY DAMPER D5" "CLOSED" "Green" indicating light is "ON"; "OPEN" "Red" indicating light is "OFF".
- 3.5 Check "Damper D2" "OPEN" "Red" indicator light is "ON"; "CLOSED" "Green" indicator light is "OFF".
- 3.6 Check "EXISTING SUPPLY DAMPER D3"; "CLOSED" "Green" indicator light is "ON"; "OPEN" "Red" indicator light is "OFF".
- 3.7 Check "Air Flow" "ON" "Red" indicator light is "ON".
- 3.8 Check "EXISTING SUPPLY DAMPER D6" "CLOSED" "Green" indicating light is "ON"; "OPEN" "Red" indicating light is "OFF".

4.0 NORMAL OPERATION

The TSC Emergency Ventilation System requires little operator action during operation. However, the control panel should be checked regularly during operation to ensure continued proper operation.

NOTE: To maintain TSC positive pressure, all outside entrance doors to the TSC and adjoining rooms should be kept closed as much as possible.

5.0 SHUTDOWN PROCEDURE

After it has been determined that continued operation of the system is no longer necessary, the system may be secured by depressing the green "Vent System Off" pushbutton (on the Control Panel). This will secure the system supply fan, air cooler, and duct heaters. It will also open/close appropriate dampers to allow resumption of normal HVAC. Then push Red "POWER OFF" pushbutton to reset all relays.

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Attachment 1 (cont.)

5.0 (cont.)

PROCEDURE FOR CORRECTING ALARM CONDITIONS

1. Annunciator Location: TSC Emergency Ventilation Control Panel  
Annunciator Title: Differential Pressure Switches-Zone 1,  
2, 3, or 4
- A. Alarm Contacts: Zone 1 - 212-09  
Zone 2 - 212-11  
Zone 3 - 212-13  
Zone 4 - 212-15

Computer Input: No Input to Process Computer

CORRECTIVE ACTIONS

1. Alarm indicates high dP across the respective filter.
2. Determine and correct cause of high dP.

G. PROCEDURE FOR CORRECTING ALARM CONDITIONS (Cont.)

2. Annunciator Location: TSC Emergency Ventilation Control Panel  
Annunciator Title: Air Flow
- A. Alarm Contacts: 212-03

Computer Input: No Input to Process Computer

CORRECTIVE ACTIONS

1. Alarm indicates low inlet air flow.
  2. Check that inlet damper 212-02 is OPEN
  3. Check zones 1-4 dP
  4. Check supply fan is operating properly
  5. Check that all duct heaters have tripped
  6. Determine and correct cause of low inlet air flow
3. Annunciator Location: TSC Emergency Ventilation Control Panel  
Annunciator Title: High Humidity

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Attachment 1 (cont.)

5.0 (cont.)

- A. Alarm Contacts: 212-07  
Computer Input: No Input to Process Computer

CORRECTIVE ACTION

1. Alarm indicates inlet air high humidity
  2. Check heater 212-04 is energized
  3. Determine and correct cause of high humidity
4. Annunciator Location: TSC Emergency Ventilation Control Panel  
Annunciator Location: Thermal Detection Panel

- A. Alarm Contacts: 212-16 ("Pre-alarm")  
Computer Input: No Input to Process Computer

CORRECTIVE ACTIONS

1. Alarm indicates high temperature in charcoal filter
2. Check supply fan tripped
3. Determine and correct cause of "Pre-alarm"

- B. Alarm Contacts: 212-16 ("Alarm")

1. Alarm indicates increased high temperature in charcoal filter
2. Determine and correct cause of high temperature "Alarm"

- C. Alarm Contacts: 212-16 ("Trouble")

1. Alarm indicates increased high temperature in charcoal filter
2. Check SPRAY WATER "Flowing" indicator light is ON
3. Determine and correct cause of "Trouble" alarm



EPP-13

Attachment 1 (cont.)

5.0 (cont.)

5. Annunciator Location: TSC Emergency Ventilation Control Panel

Annunciator Title: Ionization Detector Alarm

A. Alarm Contacts: Ion #1, #2

Computer Input: No Input to Process computer

CORRECTIVE ACTIONS

1. Alarm indicates smoke or fire in Penthouse
2. Notify Control Room of alarm condition
3. Determine and correct cause of alarm

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