Volume 10

Section 01

10-S-01-19

Revision 3

Date: 11-3-83

EMERGENCY PLAN PROCEDURE

PERSONNEL INJURY

SAFETY RELATED

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List of TCN's Incorporated:

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2	None
3	None

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1.0 PURPOSE

1.1 To provide guidance for the management of internally or externally over-exposed individuals, injured individuals, and injuries complicated with contamination and radiation exposures once an emergency condition has been declared.

2.0 RESPONSIBILITIES

2.1 Any individual happening upon an accident shall report it to the Control Room immediately.

2.2 During Alert, Site, and General Emergency classes, the Emergency Director will notify the Operational Support Center Coordinator of reported injuries. The Operational Support Center coordinator is responsible for organizing, informing and dispatching of Emergency First Aid Teams. The OSC Coordinator must ensure that response teams carry a radio.

2.3 While the plant is under normal operating conditions or an Unusual Event emergency class, the Health Physics Supervisor or Senior Health Physicist is responsible for implementation and coordination of this procedure. He will be notified of any injury by the Shift Supervisor from the Control Room.

2.4 The Shift Security Supervisor or equally qualified person is responsible for ensuring the responding ambulance and crew receive dosimetry and the ambulance kit and are directed to the location designated by the Operations Support Center Coordinator or Health Physics Supervisor to pick up the patient.

2.5 The injured employee's supervisor is responsible for notifying the Site Safety Coordinator of the accident or incident and proper documentation of the appropriate accounts of the accident.

2.6 The Site Safety Coordinator is responsible for notifying Public Relations for any significant and/or serious accidents or injuries.

3.0 REFERENCES

3.1 NCRP Report No. 65, Management of Persons Accidentally Contaminated with Radionuclides.

4.0 ATTACHMENTS

4.1 Attachment I - Accident Report

4.2 Attachment II - Ambulance and hospital notification checklist

4.3 Attachment III - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 Emergency Vehicle Kit(s) - Kit(s) are maintained in the Security Island at the plant access point. Kit includes protective clothing, and other contamination control equipment to protect the ambulance personnel and vehicle. TLD's are issued with Key cards and/or Visitor cards to responding emergency personnel.

6.0 DETAILS

6.1 Any individual who finds an injured person is to contact the Control Room by the most convenient means. He should give the name and location of the injured person(s), the extent of injuries and the name of the caller. The caller should not break contact with the Control Room until the reported information is clearly understood.

6.2 The Control room should make an announcement over the plant P.A. System, giving the location of the injured person(s) and any other information crucial to the situation.

6.3 The Control Room will contact the Health Physics Section to set up the First Aid station and/or respond to the scene of the accident if necessary.

6.3.1 Personnel responding should pick up a portable radio, trauma kit, survey instrument, then proceed to the location of the injured person. First Aid must be administered as quickly as possible to stabilize the patient.

CAUTION

During emergency situations the radiological conditions may have changed. Continuous surveying may be required during rescue and First Aid treatment. Airborne sampling may also be required. Radiation levels may be very high and the removal of the patient from such areas is of vital importance for their safety as well as your own.

6.4 Communications should always be maintained between the First Aid team(s) and their dispatching agency, (portable radio preferred). Back-up assistance should be requested as soon as the need arises.

NOTE

Stretchers located throughout the plant are usually immediately available in the vicinity of most accidents. Make-shift lifters should be used if the patient must be removed from an area to prevent further injury, radiation exposure or contamination.

6.5 Initial Situation Assessment

6.5.1 As the First Aid Team arrives at the accident scene, the Health Physicist will be assessing the radiological conditions and directing the team accordingly. If high radiation levels are encountered, the Emergency Director should authorize appropriate emergency lifesaving doses up to 75 rem for members of the team volunteering to remove the injured individual. During the rescue maneuver and first aid administration, it is the Health Physicists' responsibility to take all reasonable measures to minimize the individuals' and/or team exposure.

NOTE

External exposure to radiation or external and internal contamination of personnel by radioactive materials, with rare exceptions, does not constitute a medical emergency. The medical status of an individual takes precedence over the contamination and exposure status. Primary attention should always be directed to traumatic life threatening injuries, e.g., airway obstruction, severe bleeding, etc. However good hygiene and common sense require that whenever possible, external and internal contamination be removed promptly to diminish the level of contamination or eliminiate it.

6.6 Minor Injuries

6.6.1 The First Aid Team should classify the accident situation according to its severity. An individual that has not lost consciousness and has superficial versus life-threatening injuries can be treated as a minor injury condition. Hospitalization usually will not be needed in these cases. The First Aid Team should perform the actions listed below as appropriate:

a. Provide immediate first aid for any injury demanding it. Injuries of lesser consequence can wait until an initial contamination survey has been completed.

b. Remove the individual to an area of lesser contamination.

c. Obtain individuals dosimetry and have processed as soon as possible.

d. Survey individual for surface contamination. With high contamination levels, a smear sample should be taken for later isotopic analysis to aid in any dose determinations.

e. Remove contaminated clothing as long as it will not aggravate the individual's condition and replace with clean coveralls or wrap with blanket.

f. Escort patient to First Aid Station or Operational Support Center and commence decontaminaton in accordance with Radiation Protection Procedure 08-S-02-22, Personnel Decontamination. Ensure nasal swabs are taken, if required.

g. Cover wounds with sterile dressings before and after decontamintion efforts.

h. After the patient has been stablized and decontaminated to the fullest extent possible, transport the patient to the hospital if the injuries require medical treatment beyond normal first aid. Refer to section 6.10 for the means by which to transfer the individual to the hospital.

i. Ensure that the accident scene is secured and appropriate measures are taken to return the area to its normal condition.

j. Documentation of the incident shall be completed, reviewed and disseminated as appropriate. Attachment I contains provisions and guidance for an adequate description of the circumstances associated with the accident.

6.7 Severe Injuries

6.7.1 The First Aid Team will ascertain the injured individual's condition. Unconsciousness, respiratory problems, broken bones and other life-threatening injuries are cause for immediate notification of the ambulance service and the hospital. The First Aid Team should perform the following as appropriate:

a. Administer first aid necessary to sustain life and stabilize the injured individual.

b. If radiological or other physical hazards are life-threatening, move the individual to a safer place. Particular attention must be paid to neck and back injuries during this movement.

c. Make notifications of the individual's name, extent of injury and contamination and its associated levels, and request for an ambulance. This information will be relayed to the Control Room who will notify the ambulance and hospital. The Control

Room should fill out the Ambulance and Hospital Notification Form (similar to Attachment II). The Control Room should call the onsite ambulance at 80-2600 and report a Code 3 Emergency and give location of injured person. If the onsite Ambulance is not available, then call Clairborne County Ambulance Service at 437-8751. The Clairborne County Ambulance Service will normally call back to verify the emergency prior to sending the ambulance.

d. Collect all dosimetry from the individual and have them sent for immediate processing if high radiation levels were indicated by initial surveys or if the injured individual was working in a potentially high radiation area.

e. In the case of severe trauma, contamination is of secondary concern unless its magnitude could be of significant consequence. If such is the case, contaminated clothing, etc. may be removed or cut away and other decontamination measures taken while waiting for the ambulance.

f. Save all clothing and other articles removed from the individual in case the contamination still present on it is needed for radiation spectrum analysis, particle size analysis, etc.

g. During movement of the patient to the ambulance transfer location, a clean transfer should be arranged for. This is accomplished by establishing a boundary at the most suitable location between the injury scene and the transfer location. The area between the boundary and ambulance transfer location should be free of contamination. Additional personnel will be assembled to accept the injured individual on the clean side of the boundary. A blanket should be laid on th clean side adjacent to the boundary. The First Aid Team on the contaminated side of the boundary should place the stretcher on the blanket without stepping over the boundary. The blanket then can be wrapped around the stretcher and injured individual without covering the face and be secured by the personnel on the clean side of the boundary. Appropriate action should be taken if the stretcher handles are suspected of being contaminated.

h. The patient should be placed in the ambulance and accompanied by a Health Physicist.

i. Ensure that the accident area is secured and appropriate measures taken to return the involved area to normal conditions.

j. Documentation of the accident must be compiled and reported to the appropriate individuals, e.g., Radiation Protection Manager, medical personnel. Site Safety Coordinator. Attachment I may be used to document the incident in conjunction with any supplemental information.

6.8 Overexposure to Penetrating Radiation

6.8.1 External overexposure may be concurrent with injury and contamination. Care for external overexposures consists of keeping the individual comfortable and observing symptoms to help determine the clinical course of events. Injury and decontamination care shall take priority over attention directed toward the overexposure. After the recovery and stabilization of an overexposed individual, the following should be performed as appropriate.

a. Collect all dosimetry and have processed.

b. Assist a Senior Health Physicist in assembling all information pertinent to the reconstruction of the accident. Interview the involved individual(s) and his associates to establish the history of the incident, i.e., location of individual, his actions, length of time individual in accident environment, etc.

c. Supplement dosimetry results with information from area monitors, dose rate surveys, etc.

d. Record all symptoms exhibited by the individual.

e. Save all biological excretions and other samples in case they are needed for later evaluation. In the case of possible neutron exposure, collect jewelry, buttons, etc. for neutron activation analysis.

f. Transfer individual to the hospital in accordance with section 6.10 of this procedure.

6.8.2 The Senior Health Physicist investigating the overexposure will notify the physician managing the case as soon as an estimated exposure has been calculated from the information gathered from the incident.

6.8.3 Radiation Management Corporation may be consulted at any point during the investigation to assist in managing the overexposed individual.

6.9 Internal Overexposure

6.9.1 The nature of an internal overexposure depends on the radionuclide involved. The course of patient management is also based upon the internally contaminating radionuclide. Excessive body burdens of radionuclides require detection and initial treatment as soon as possible. The following steps can provide guidance in gathering information to assist the Staff Health Physicist in assessing internal dose and the physician in handling the case. Injuries, as usual, take precedence over exposure.

a. Question the involved individual and his associates to obtain the complete history of the exposure incident.

b. Obtain smears, fixed monitor readings, surveys, etc. of the incident area.

c. Save an individual's clothing for later analysis, if needed.

d. Obtain nasal smears.

e. Save all biological samples and excreta.

f. If a radioiodine overexposure is indicated, administer potassium iodine immediately in accordance with Emergency Plan Procedure 10-S-01-20, Administration of Thyroid Blocking Agents.

6.9.2 After external decontamintaion is complete, whole body counting may be in order. A Senior Health Physicist will essentially be managing the case from this point on.

6.9.3 A Health Physicist or equally qualified person will be involved in further investigation and documentation in the case. As pertinent information is assembled, he will inform the physician attending to the patient. Radiation Management Corporation may be consulted as any time throughtout the course of the incident.

6.10 Transportation to Hospital

6.10.1 Transportation may be via company vehicle or ambulance depending upon the patient's condition. A Health Physicist or equally qualified person knowledgeable of the incident should accompany a contaminated patient to the hospital. The control room will be notified if the patient is to be transferred by company vehicle and that the hospital should be alerted of an incoming patient.

NOTE

Transfer of a contaminated and injured person is to be classified as an Unusual Event.

6.10.2 The Control Room will be notified and supplied with information concerning the incident.

6.10.3 The Control Room will notify Security of the incoming ambulance and the location where the injured will be transferred to the ambulance. It is the responsibility of the Security Coordinator to ensure that the ambulance crew receives their dosimetry and ambulance kit. Security will escort the ambulance to the patient transfer point in accordance with References 3.2 and 3.3.

6.10.4 After the ambulance arrives at the pick-up point, a Health Physicist will ensure that the ambulance crew is properly wearing their dosimetry and any necessary protective clothing. If the potential for contamination is present, the ambulance floor should be covered with the herculite provided in the ambulance kit.

6.10.5 The ambulance personnel may have to enter a controlled area of the plant to help transfer the patient to the ambulance. It is the responsibility of the Health Physicist involved to supervise their conduct during the transfer.

6.10.6 A Health Physicist will accompany the ambulance to the hospital advising the ambulance crew on contamination control measures. The ambulance should maintain contact with the hospital during transit to alert the awaiting medical personnel of the patient's status and any changes that may occur.

6.10.7 Once at the hospital the Health Physicist will ensure that the ambulance parks in the appropriate area near the Radiation Emergency Area and that the area is roped off. If there is no contamination involved, the normal emergency entrance should be used and roping off is not needed. The Health Physicist will inform the physician in charge of all presently available information concerning the accident and contamination hazards.

6.10.8 The ambulance personnel will have their dosimetry collected and logged on the appropriate form maintained by the medical personnel at the hospital. They will be supervised in removing any protective clothing, be surveyed, and decontaminated if necessary. The ambulance will also be surveyed before release. If decontamination is necessary the ambulance will return to GGNS under the supervision of a Health Physicist and be deconaminated. Decontamination of the ambulance will be postponed if it must return for other injured personnel. Hospital and Health Physics Personnel will coordinate the proper collection and disposal of all generated radioactive waste material.

ACCIDENT REPORT

DATE _____

The nature of this report is to document the circumstances of an accident. Listed below are items that may assist in reconstruction the incident. Be as specific as possible and use as many pages as needed. Attach Personnel Contamination Report if appropriate.

NAME _____

BADGE NO. _____

RECORD THE FOLLOWING INFORMATION

When did accident occur?

What was source of accident?

Plant conditions at time of accident.

Obtain history and sequence of events of accident from individuals involved in or near the accident. Record activities of the individual, e.g., what was he doing, location, exit path, symptoms, how long was individual in accident environment, etc.

Description of injuries and first aid response.

Radionuclides involved - possible exposure pathways.

Radioactivity measurements made at site of accident, e.g., air monitor, smears, fixed radiation monitors, skin contamination levels, etc.

Chemistry of compounds containing radioactivity, e.g., soluable, insoluable, toxic, corrosive, particle sizes, etc.

Bioassay performed, whole body counts, etc.

Names and phone numbers of people from whom additional information can be obtained at a later date.

AMBULANCE AND HOSPITAL NOTIFICATION CHECKLIST

On-Site Ambulance Phone Number 80-2600

Report Code 3 Emergency Location _____

Number of People _____

Extent of Injuries _____

Contamination Involved _____

Claiborne County Hospital Phone Number 437-8751

Time of Notification _____

Number of Patients _____

Extent of Injuries _____

Contamination levels of Patients _____

Report to South Gate

Vicksburg Medical Center Phone Number 636-2661

Time of Notification _____

Number of Patients _____

Extent of Injuries _____

Contamination of Patients _____

Report to South Gate

SAFETY EVALUATION APPLICABILITY REVIEW

	Yes	No
(1) Change to Facility as Desc. in FSAR	—	✓
(2) Change to Procedure as Desc. in FSAR	—	✓
(3) Test or Experiment not Desc. in FSAR	—	✓
(4) Change to Tech. Specs.	—	✓
(If Yes, perform 10CFR50.59 Safety Eval.)	—	✓

ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW

(1) Change to Environmental Protection Plan	—	✓
(2) Will or may effect environment	—	✓
(If Yes, perform Environmental Eval.)		

Signature John Vincell Date 10/29/83

Volume 10

Section 01

10-S-01-20

Revision 3

Date: 11-3-83

EMERGENCY PLAN PROCEDURE

ADMINISTRATION OF THYROID BLOCKING AGENTS

SAFETY RELATED

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Technical Review — Plant Quality Supt.

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0	none - ltr 8, 11-3-83
1	~~None~~ 0
2	None
3	None

Title: Administration of Thyroid Blocking Agents	No.: 10-S-01-20	Revision: 3	Page: 1

1.0 PURPOSE

To provide guidance on the use of potassium iodide as a thyroid blocking agent in order to prevent the accumulation of radioiodines in the thyroid gland and the subsequent dose.

2.0 RESPONSIBILITIES

2.1 During the situations allowing for planned exposures to radioiodines, the Emergency Director will authorize the administration of potassium iodide. The Radiation Protection Manager should be consulted as to the efficiency of potassium iodide administration in connection to the emergency conditions.

3.0 REFERENCES

3.1 NCRP Report No. 55, Protection of the Thyroid Gland in the Event of Releases of Radioiodine

3.2 Federal Register 12-15-79, Part VII, HEW, FDA; Potassium Iodide as a Thyroid Blocking Agent in a Radiation Emergency

4.0 ATTACHMENTS

Attachment I - Thyroid Blocking Agent Instruction Sheet

Attachment II - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 KI - Potassium iodide

6.0 DETAILS

6.1 When radioiodines are inhaled or ingested they rapidly accumulate in the thyroid gland. Stable iodide in the form of potassium iodide may be used to block deposition of radioiodines in the thyroid. This blocking effect is primarily due to the ability of KI to saturate the iodide transport system. Blocks of radioiodine depositon of 90 percent or greater are possible by the oral administration of 130 mg of KI just before or at the time of exposure. A substantial block of 50 percent is attainable by KI adminstration 3 to 4 hours after exposure and limited benefit 12 hours after exposure. Daily administration of 130 mg KI should be continued for seven to ten days to prevent recycling of radioiodine to the thyroid.

6.2 Storage Locations

6.2.1 Potassium iodide in 130 mg tablets must be stored in sufficient quantity at each of the locations listed below:

a. Control Room

b. Technical Support Center

c. Operations Support Center

d. First Aid Room at the 93' Elevation

e. Site Access Point

6.2.2 All stores of KI must be replaced with fresh supplies near the expiration date label on the KI containers. Expired KI stores must be returned to the prescribing physician or taken to a local medical facility for proper disposal.

6.3 Iodine Sensitivity Detection

6.3.1 Personnel must be evaluated as to their sensitivity to iodine prior to any issuance of (KI) Potassium Iodide. The Dosimetry Section will require all personnel to fill out a medical questionnaire addressing iodine sensitivity. These forms must be screened by qualified medical personnel for any indication that an iodine reaction might result from KI administration.

6.3.2 A roster of plant personnel authorized to use KI as a blocking agent is made available quarterly and will be maintained with all stores of KI tablets.

6.4 Dose Administration

6.4.1 Potassium Iodide (KI) should be administered as soon as possible after being subjected to air concentration of I-131 of 10^{-5} uc/cc or greater for (1) one hour or a calculated dose of 25 rem or greater to the thyroid gland. Follow the instruction as per Attachment I and/or on bottle label. This guideline will be exceeded only during unusual emergency conditions where quick response is essential or protective response is impossible based on current circumstances.

6.4.2 During an accident or emergency situation where radioiodine levels are high and an exposure to the thyroid in excess of 25 rem is a reasonable possibility, potassium iodide may be administered upon approval of the Emergency Director by recommendation of the Radiation Protection Manager. Refer to Attachment I for dosage instructions.

6.4.3 The Emergency Director must designate personnel who may distribute the potassium iodide as prescribed (i.e., emergency facility coordinators, supervisors, team leaders etc.).

6.4.4 The designated individual who is to distribute the KI must perform the following:

a. Ensure individuals who are to take KI are authorized to do so (section 6.3.2).

b. Record names of the individuals who are to take the KI. Submit the list to the Emergency Director as soon as possible.

c. A Thyroid Blocking Agent Instruction Sheet (Attachment I), available with the KI stores, should be distributed to all individuals who are to take the drug.

6.5 Thyroid Exposure Calculation

6.5.1 A conservative approximation of the projected thyroid dose may be calculated based upon the following formula:

$$\text{Thyroid Dose (rem)} = (3 \times 10^5)(\text{hrs})(\text{uCi/cc})$$

Where: hrs = Time individual is in radioiodine
uCi/cc = Airborne concentration of radioiodine

6.6 Administration of KI to plant personnel should be noted in the Emergency Director's log. In addition, the prescribing physician should be notified as soon as possible at the following phone numbers:

Dr. Thomas Linnemann
Radiation Management Corporation
(215) 243-2990 Primary number
(215) 841-5141 Secondary number

THYROID BLOCKING AGENT INSTRUCTION SHEET

Patient Package Insert For

THYRO-BLOCK™

(POTASSIUM IODIDE)
(pronounced poe-TASS-e-um EYE-on-dyed)
(abbreviated: KI)
TABLETS and SOLUTION U.S.P.

TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU. IN A RADIATION EMERGENCY, RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR. POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. *DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE.* (SEE SIDE EFFECTS BELOW.)

INDICATIONS

THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

DIRECTIONS FOR USE

Use only as directed by State or local public health authorities in the event of a radiation emergency.

DOSE

Tablets:
ADULTS AND CHILDREN 1 YEAR OF AGE OR OLDER: One (1) tablet once a day. Crush for small children.
BABIES UNDER 1 YEAR OF AGE: One-half (1/2) tablet once a day. Crush first.

Solution:
ADULTS AND CHILDREN 1 YEAR OF AGE OR OLDER: Add 6 drops to one-half glass of liquid and drink each day.
BABIES UNDER 1 YEAR OF AGE: Add 3 drops to a small amount of liquid once a day.

For all dosage forms: Take for 10 days unless directed otherwise by State or local public health authorities.

Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep container tightly closed and protect from light. Do not use the solution if it appears brownish in the nozzle of the bottle.

WARNING

Potassium iodide should not be used by people allergic to iodide. Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the public health authority.

DESCRIPTION

Each THYRO-BLOCK™ TABLET contains 130 mg of potassium iodide.

Each drop of THYRO-BLOCK™ SOLUTION contains 21 mg of potassium iodide.

HOW POTASSIUM IODIDE WORKS

Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods, like iodized salt or fish. The thyroid can "store" or hold only a certain amount of iodine.

In a radiation emergency, radioactive iodine may be released in the air. This material may be breathed or swallowed. It may enter the thyroid gland and damage it. The damage would probably not show itself for years. Children are most likely to have thyroid damage.

If you take potassium iodide, it will fill-up your thyroid gland. This reduces the chance that harmful radioactive iodine will enter the thyroid gland.

WHO SHOULD NOT TAKE POTASSIUM IODIDE

The only people who should not take potassium iodide are people who know they are allergic to iodide. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or antithyroid drug). Pregnant and nursing women and babies and children may also take this drug.

HOW AND WHEN TO TAKE POTASSIUM IODIDE

Potassium Iodide should be taken as soon as possible after public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "hold" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than 10 days.

SIDE EFFECTS

Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).

A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains, or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.

Taking iodide may rarely cause overactivity of the thyroid gland, underactivity of the thyroid gland, or enlargement of the thyroid gland (goiter).

WHAT TO DO IF SIDE EFFECTS OCCUR

If the side effects are severe or if you have an allergic reaction, stop taking potassium iodide. Then, if possible, call a doctor or public health authority for instructions.

HOW SUPPLIED

THYRO-BLOCK™ TABLETS (Potassium Iodide, U.S.P.) bottles of 14 tablets (NDC 0037-0472-20.) Each white, round, scored tablet contains 130 mg potassium iodide.

THYRO-BLOCK™ SOLUTION (Potassium Iodide Solution, U.S.P.) 30 ml (1 fl. oz.) light-resistant, measured-drop dispensing units (NDC 0037-4287-25). Each drop contains 21 mg potassium iodide.

WALLACE LABORATORIES
Division of
CARTER-WALLACE, INC.
Cranbury, New Jersey 08512

CW—107915—10/79 Issue 10/79

SAFETY EVALUATION APPLICABILITY REVIEW

	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Specs.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		

ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW

(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		

Signature John Vinall Date 10/31/83

PLANT OPERATIONS MANUAL

Volume 10 | 10-S-01-21

Section 01 | Revision: 4

Date: 11-2-83

EMERGENCY PLAN PROCEDURE

EVACUATING PERSONNEL AND VEHICLE

CONTAMINATION CONTROL

SAFETY RELATED

Prepared: Jeri Hurley

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Technical Review | Plant Quality Superintendent

Concurrence: R Conn
Assistant Plant Manager

Approved: C. K. M. Cy
Plant Manager

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Attachment I-III

List of TCN's Incorporated:

Revision	TCN No.
1	None
2	None
3	None
4	None

1.0 PURPOSE

1.1 To delineate contamination control measures for personnel and vehicles departing the restricted area during an emergency situation.

2.0 RESPONSIBILITIES

2.1 It is the responsibility of the Emergency Director to activate the Site Access Point (SAP) in response to site and general emergency classes. Activation of the Site Access Point (SAP) during Unusual Event And Alert emergency classes is left to the Emergency Director's discretion.

2.2 The SAP Coordinator should ensure that existing non-emergency personnel and vehicles are surveyed and decontaminated as appropriate for the existing plant and radiological conditions.

3.0 REFERENCES

None

4.0 ATTACHMENTS

Attachment I - Personnel Contamination Report (side 1)
Attachment II - Personnel Contamination Report (side 2)
Attachment III - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 SAP - Site Access Point

6.0 DETAILS

6.1 A site or general emergency may require evacuation of onsite non-emergency personnel. The evacuation will be in accordance with Emergency Plan Procedure 10-S-01-11, Evacuation of Onsite Personnel.

6.2 The Site Access Point is the normal assembly point for decontamination of evacuating personnel and vehicles. The Site Access Point may also be used if the normal plant decontamination facilities are not available. An alternate SAP may be designated by the Emergency Director if conditions preclude the use of the normal SAP. Normally, the alternate SAP will be the Bechtel Guard Shack at the north entrance to the site. All Emergency Supplies located in the SAP must be moved to the new SAP if it is relocated for radiological reasons.

6.3 Personnel Survey and Decontamination

6.3.1 All personnel are considered to be contaminated if found to have contamination greater than 100 cpm/scan above background levels for beta-gamma.

6.3.2 Personnel decontamination should be performed in accordance with Radiation Protection Instruction 08-S-02-22, Personnel Decontamination. If documentation is required per Radiation Protection Instruction 08-S-02-22, then record the result on Form HP-221, similar to Attachment I and II, Personnel Contamintaion Report.

6.3.3 Any decontamination that requires other than soap and water for cleaning should be performed under the direction of a Health Physicist.

6.3.4 Any decontamination that involves internal contamination (absorption through wounds, ingestion, etc.) should be performed under the supervision of qualified medical personnel.

6.4 Vehicle Survey and Decontamination

6.4.1 A vehicle survey and decontamintaion area should be established adjacent to the Site Access Point in the event that a radiological release has occured with the possibility of contaminating vehicles. The decontamination area should be situated such that run-off waste water produced by vehicle decontamination will not spread to areas of traffic.

NOTE

All decontamination areas should be roped off to preclude unauthorized entry. Radiological or plant conditions may inhibit the decontamination of personnel and/or vehicles at the SAP. In such cases, personnel and vehicles should be directed to state assembly areas as directed by Local Law Enforcement Agencies (LLEA). The decision to conduct survey and/or decontaminate vehicles will be made by the Site Access Point Coordinator with concurrence of the Radiation Protection Manager.

6.4.2 If vehicles are found to be contaminated greater than 100 cpm/scan above background, decontamination may be warranted. During an emergency, if the delay due to the decontamination poses an undue risk on evacuating personnel, then the vehicle will not be decontaminated. This decision should be made by the SAP Coordinator with concurrence of the Radiation Protection Manager.

6.5 Equipment, Supplies, and Other Material Survey and Decontamination

6.5.1 To be released for unrestricted use, any equipment, supplies or other material must be less than 1000 dpm/100 cm^2 for beta-gamma.

6.5.2 Any articles that are contaminated greater than the limits above must be contained and tagged to identify it as contaminated.

6.5.3 Decontamination of equipment, supplies, and other material will be at the discretion of the Health Physicist in charge using standard Health Physics methods and techniques. In cases where decontamination is not feasible or too costly, consideration will be given to discarding the item as radioactive waste.

6.6 Survey Data Sheets

6.6.1 All survey data sheets generated during an emergency will be delivered to the Health Physics Coordinator, the Site Access Point Coordinator, or the Radiation Emergency Manager, as appropriate.

6.6.2 The final disposition of data sheets generated during an emergency will be in accordance with Radiation Protection Procedure 08-S-01-11, Health Physics Document Handling and Control.

PERSONNEL CONTAMINATION REPORT

NAME _____ BADGE# _____ Date __/__/__ TIME _____

EMPLOYER _____ DEPT. _____ RWP# _____ SOC.SEC.# _____

EXTERNAL CONTAMINATION

Give a description of contamination incident: _____

_____

_____

_____

_____

Describe decontamination methods used and cleaning agents employed: _____

_____

_____

Use form 221-A to denote location and extent of external contamination. Use the comments section below to explain if there remained any contamination after a reasonable decontamination effort was performed. Be sure to include location and extent of any reamining contamination.

Comments: _____

_____

_____

_____

_____

INTERNAL CONTAMINATION

If any internal contamination is suspected or detected employ form HP333 BIOASSAY TRACKING SHEET.

Has form HP333A been employed? YES ___ NO ___

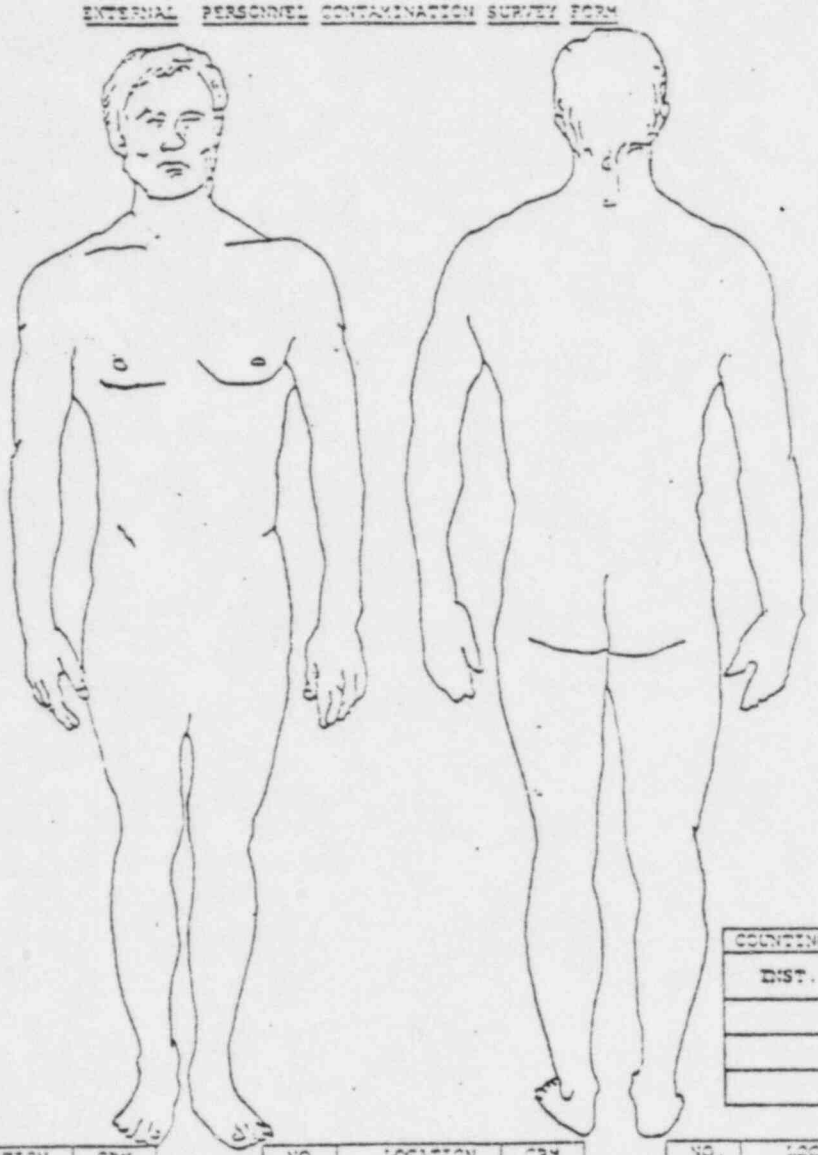
Did the individual require outside medical attention? YES ___ NO ___
Is this a reportable incident (per 01-S-06-5)? YES ___ NO ___
Have the proper authorities been notified? YES ___ NO ___

PERFORMED BY _____ H.P. REVIEW BY _____
H.P. Supervisor

HP-221

_____
RAD/CON SUPERVISOR

EXTERNAL PERSONNEL CONTAMINATION SURVEY FORM



COUNTING EQUIPMENT	
INST.	SER. #

NO.	LOCATION	CPM

NO.	LOCATION	CPM

NO.	LOCATION	CPM

Has all contamination been reduced to acceptable levels? YES___ NO___

If no, explain action taken on front of form - (HP-221) in the post-decon comments section.

SURVEY H.P.

HP-221A

IOA RECORD	NUMBER of PAGES

INITIALS	NUMBER=

SAFETY EVALUATION APPLICABILITY REVIEW	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Specs.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		

Signature John Vinell Date 10/24/83

PLANT OPERATIONS MANUAL

Volume 10

Section 01

10-S-01-23

Revision: 4

Date: 11-7-83

EMERGENCY PLAN PROCEDURE

EMERGENCY PLAN TRAINING AND DRILLS

SAFETY RELATED

Prepared: Jim Hurley

Reviewed: John Vinella / A M Bullen
Technical Review — Plant Quality Supt.

Concurrence: J E Cross
Asst. Plant Manager

Approved: C M Crane
Plant Manager

List of Effective Pages:

Page

1-9
Attachments I-IV

List of TCN's Incorporated:

Revision	TCN No.
0	None 11-7-83
1	None
2	None
3	None
4	None

Title: Emergency Plan Training and Drills	Procedure No.: 10-S-01-23	Revision: 4	Page: 1

1.0 PURPOSE

The purpose of this procedure is to describe the:

1.1 Responsibilities of the Site Emergency Planning Coordinator, the Emergency Planning Coordinator, the Training Superintendent, and the Assistant Plant Manager associated with drills and exercises.

1.2 Type and frequency of drills and exercises to be conducted.

1.3 Procedure to be followed in order to conduct a drill or exercise.

1.4 GGNS emergency response training requirements as they apply to emergency organization personnel, Grand Gulf MP&L employees, contractors, and support agencies.

1.5 Method of management review and approval of the drills and exercises specified in this procedure.

2.0 RESPONSIBILITIES

2.1 The Training Superintendent is responsible for providing and implementing emergency response training for emergency organization and non-emergency personnel.

2.2 The Emergency Planning Coordinator is responsible for:

2.2.1 Coordinating MP&L General Office and offsite support agency training with the Training Superintendent.

2.2.2 Scheduling of major drills and exercises, in conjunction with the Site Emergency Planning Coordinator.

2.3 The Site Emergency Planning Coordinator, in conjunction with the Training Superintendent and Emergency Planning Coordinator, is responsible for:

2.3.1 The development and preparation of scenarios for drills and exercises. This function will be performed by the Scenario Development Team.

2.3.2 Obtaining management review and approval to conduct a drill or exercise.

2.3.3 Conducting the drill or exercise.

2.3.4 Critiquing the results of the drill or exercise.

2.3.5 Using results from the critique to formulate changes to training, Emergency Plan Procedures, Emergency Plan, equipment, administration, or plant directives, as necessary.

2.4 An Assistant Plant Manager Operations has the following responsibilities:

2.4.1 Approval of the scheduled date and time of the drill or exercise.

2.4.2 Approve the scenario for the drill or exercise. If he is to be a participant in a drill or exercise, then he will select another manager or superintendent to approve the scenario.

2.4.3 Appoint personnel as members of the Scenario Development Team.

2.5 The Fire Protection Coordinator, is responsible for conducting fire brigade drills in accordance with this procedure.

2.6 The Training Superintendent is responsible for ensuring that GGNS personnel are trained in accordance with Reference 3.3 and 3.4. He is also responsible for ensuring that proper records are maintained to verify participation in drills required by Section 6.1.3. In addition, as part of the Emergency Preparedness Training Program, drills conducted are to be documented in accordance with Training Section Procedures.

3.0 REFERENCES

3.1 NUREG - 0654, Revision 1

3.2 GGNS Emergency Plan

3.3 Plant Administrative Procedure 01-S-04-21, Emergency Preparedness Training Program

3.4 Plant Administrative Procedure 01-S-04-4, General Employee Training Program

3.5 FSAR, Appendix 9B

3.6 FSAR, Section 13.3

3.7 Plant Administrative Procedure 01-S-04-12, Fire Protection Training Program

3.8 Plant Administrative Procedure 01-S-04-14, Training Records

4.0 ATTACHMENTS

4.1 Attachment I - Drill/Exercise Scenario

4.2 Attachment II - Drill/Exercise Observation Sheet

4.3 Attachment III - Drill/Exercise Evaluation Report

4.4 Attachment IV - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 Controller - An individual appointed by the Emergency Planning Coordirator who provides inputs or cues intended to trigger actions in a drill or exercise. A controller may prevent actions by the participants that, if left unchecked, would disrupt or significantly alter the course of the Scenario, resulting in insufficient testing of the objectives of the exercise.

5.2 Drill - A supervised instruction and learning session to test, develop and maintain skills in a particular operation or sequence of events.

5.3 Exercise - A test or an event to demonstrate the effectiveness of the Emergency Plan and the capability of the state, local personnel and resources to adequately respond to an accident.

5.4 Observer - An individual assigned to evaluate particular aspects of a drill or exercise. These individuals are normally not to provide information nor disrupt the actions of participants during the course of the drill or exercise.

5.5 Emergency Response Training - Training provided for both emergency response personnel as well as non-emergency personnel who may be involved in an emergency at GGNS.

5.6 Emergency Response Personnel - MP&L personnel who are expected to participate in a GGNS emergency as directed, and who are to maintain the necessary qualifications.

5.7 Emergency Preparedness Training (EPT) Program - A two part training program for emergency response personnel.

5.8 FEMA - Federal Emergency Management Agency.

5.9 Scenario Development Team - Those individuals responsible for the development of scenarios for exercise. The Emergency Planning Coordinator will normally serve as Chairman of this group.

5.10 Site Access Point Coordinator - During a major emergency at GGNS, this person is responsible for screening non-MP&L personnel for access and training requirements prior to access to site.

5.11 Practice Sessions - Sessions which provide brigade members with experience in actual fire extinguishment and the use of emergency breathing apparatus under strenuous conditions encountered in fire fighting.

6.0 DETAILS

6.1 Drills and Exercises

6.1.1 Precautions and Limitations

a. Announcements over the PA System, notifications of any agencies and radio communciations associated with the drill or exercise should be preceeded by the words, "This is a drill". Personnel should also be notified over the PA System when a drill or exercise is terminated.

b. If a drill is in progress and a real emergency or casualty situation arises, the drill will be terminated immediately and the appropriate announcements will be made stressing that an actual emergency or casualty situation exists.

6.1.2 Communication Drills

a. Monthly - GGNS Operational Hotline (OHL) connecting state and local agencies within the 10 mile Plume Exposure Emergency Planning Zone (EPZ).

b. Monthly - Telephone Communications with the National Weather Service (NWS) in Jackson or the Corps of Engineers Waterways Experimental Station in Vicksburg to ensure that routine meteorological observations and forecasts are available. Jackson 936-2121. Vicksburg 634-7000.

c. Quarterly - GGNS Operational Hotline (OHL) connecting state and local agencies within the 50 mile Ingestion Exposure Pathway. Communication is also verified to local and regional NRC personnel.

6.1.3 Fire Brigade Drills

a. Each fire brigade shall be drilled at least quarterly.

b. Each fire brigade member should participate in each drill of Step 6.1.3a. Each fire brigade member shall participate in two drills per year, as a minimum.

c. One drill per year for each fire brigade shall be unannounced. Each unannounced drill shall be separated by a minimum of four (4) weeks.

d. One drill per year will be conducted on a backshift for each fire brigade.

e. All drills will be preplanned to meet established training objectives and shall be critiqued to determine the effectiveness in meeting these objectives.

f. Unannounced drills shall be preplanned and a drill critique shall be held by a board of responsible management personnel.

g. Performance deficiencies of fire brigades or individual fire brigade members will be corrected by providing additional training for noted weak areas. This training should be completed within 30 days.

h. An unsatisfactory drill performance by a fire brigade will be corrected by providing additional training for noted weak areas. A repeat drill will be held within 30 days of the critique.

i. At least once every three (3) years a randomly selected unannounced drill shall be monitored and critiqued by a group of qualified individuals who are independent of the GGNS staff.

j. Each fire brigade drill shall be evaluated on the following, as a minimum:

(1) Assessment of fire alarm effectiveness.

(2) The time required to notify and assemble the fire brigade.

(3) The selection, placement, and use of equipment and fire fighting strategies.

(4) An assessment of each fire brigade member's knowledge in the firefighting strategy and techniques for the fire area.

(5) An assessment of the brigade's conformance to establish plant firefighting procedures and use of the firefighting equipment, including self-contained breathing equipment, communication equipment, and ventilation equipment when applicable.

(6) Assessment of the fire brigade leader's effectiveness in directing the brigade's activities.

k. One drill per year will be conducted involving the local fire department to determine their effectiveness working in conjunction with the Fire Brigade.

6.1.4 Emergency Repair Team Drill

a. One drill per year will be conducted to determine the effectiveness of the Emergency Repair Team members and their equipment.

6.1.5 Medical Emergency Drill

a. One drill per year will be conducted involving the First Aid Team and local support hospitals and shall include simulated radiological emergencies.

6.1.6 Radiological Monitoring Drill

a. One drill per year will be conducted both on-site and off-site to determine the effectiveness of collecting and analyzing different types of sample media.

6.1.7 Health Physics Drills

a. One drill will be conducted semi-annually involving response to and analysis of simulated airborne and liquid samples and radiation measurements.

b. One drill per year will be conducted to perform actual analysis of samples obtained frc the Post Accident Monitoring System.

6.1.8 Radiation Emergency Exercise - annually

a. Scenarios should vary from year to year, such that it includes all major elements of the plan in a five year period.

b. Once every 6 years there should be an exercise between 6:00 p.m. and midnight and another between midnight and 6:00 a.m.

c. Exercises should be conducted under various weather conditions.

d. Some exercises should be unannounced.

6.1.9 More information on drills and exercises can be obtained in the GGNS Emergency Plan, Section 8.0.

6.1.10 Additional, limited drills may be conducted as desired for the training of individuals in emergency response. These drills will be scheduled, coordinated, and supervised by the Training Section.

6.1.11 Conducting Drills and Exercises

a. The Emergency Planning Coordinator or the Site Emergency Planning Coordinator should determine the scope of the drill or exercise to be held, and the date and time on which it is to be conducted well in advance of the planned drill or exercise. Coordination with state and local agencies may be necessary.

b. The Assistant Plant Manager Operations should:

(1) Appoint a Scenario Development Team based on the recommendations of the Site Emergency Planning Coordinator. This team should be composed of the following personnel, as necessary:

(a) Emergency Planning Coordinator

(b) Site Emergency Planning Coordinator

(c) Operations Representative

(d) Training Representative

(e) Health Physics Representative

(f) Engineering Representative

(h) Safety Coordinator

(i) Others as deemed necessary

(2) Approve the Scenario, date and time of the drill or exercise. If an Assistant Plant Manager is not available, the Plant Manager may approve drill/exercise Scenario.

(3) Determine who, if any, will be non-participants in the drill.

c. The Scenario Development Team is to develop a scenario and will normally serve as observers for the drill/exercise. Cue cards may be used to trigger actions and to provide simulated information to participants.

d. The Emergency Planning Coordinator will brief drill observers on the Scenario, including any details or information they are to provide to the drill participants and discuss expected actions of the participants.

e. If required, the Emergency Planning Coordinator will notify offsite agencies of the drill or exercise in advance to confirm their level of participation.

6.1.12 Critique

The observers are to critique the drill as soon as possible after the termination of the drill. Each observer is to give a brief report of their assigned tasks, pointing out any significant deficiencies in procedures, equipment, or training that they observe. The names of participants and their roles, as well as

any comments, should be recorded on the Drill/Exercise Observation sheet (similar to Attachment II). All observation sheets should be turned in to the Site Emergency Planning Coordinator as soon as possible upon completion of the drill/exercise. A copy is to be forwarded to the Emergency Planning Coordinator. Any drill participant who wishes to do so, may provide comments to the observers to be included in the critique. Comments should be turned in to the Site Emergency Planning Coordinator.

6.1.13 Reports and Review

a. The Site Emergency Planning Coordinator is to complete the Drill/Exercise Evaluation Report (Similar to Attachment III). This report should include any recommendations of improvements in procedures, equipment, training or administration. Drill observation sheets from the Controller/Observers are to be attached to the Drill/Exercise Observation Sheets to the report and submit the original to the Plant Manager for review and then to the Emergency Planning Coordinator for incorporation into file.

b. Deficiencies or recommendations that are identified during the drill or exercise are evaluated by the Emergency Planning Coordinator or the Site Emergency Planning Coordinator and reviewed by the Plant Manager. Significant items which affect the state of preparedness and/or require action or resolution are to be tracked by the Emergency Planning Coordinator (site or corporate) so that the item can be assigned to a responsible person and corrective action taken. Documentation of the resolution of items is handled in accordance with normal procedures.

6.1.14 Documentation

a. An entry will be made in each fire brigade drill participant's training record to reflect participation in a drill in Section 6.1.3.

b. Copies of all records generated as a result of the drill/exercise will be forwarded to the Emergency Planning Coordinator. The Emergency Planning Coordinator will transmit these records to file by memo.

6.2 Emergency Response Training

6.2.1 Temporary and permanently assigned employees of GGNS are to receive emergency indoctrination training as part of the General Employee Training Program (Reference 3.4).

6.2.2 GGNS emergency response personnel are to receive Radiation Worker II training.

6.2.3 MP&L emergency response personnel are to participate in the Emergency Preparedness Training Program (Reference 3.3) and the General Employee Training Program (Reference 3.4).

6.2.4 During emergencies and drills when the EOF is activated, non-MP&L augmentation personnel will receive emergency response training as deemed necessary by the Site Access Point Coordinator.

DRILL/EXERCISE SCENARIO

Drill/Exercise Title: _____ Drill Date: _____

INTENT OF DRILL OR EXERCISE

NOTE: List here those outstanding procedures, instructions, equipment and communications, including specific actions of personnel or emergency teams that the drill or exercise is to check.

DRILL/EXERCISE SCENARIO

NOTES: (1) Scenario will be sufficiently detailed such that simulated emergency conditions, locations and reports (including values) are described fully enough to enable responsible actions (may be simulated) to be taken.

(2) All scenarios will include the following notes:

NOTE 1: Advise the Shift Supervisor to terminate the drill or exercise if plant operating conditions warrant such an action.

NOTE 2: For all notification to local, state and federal agencies, predetermined statements should be available to prevent confusion.

NOTE 3: Use additional pages as necessary.

Prepared By: _____ Approved By: _____
Management Representative

Return completed copy to the Site Emergency Planning Coordinator

HP-1024

DRILL/EXERCISE OBSERVATION SHEET

Observer's Name: _____ Location: _____

Drill Title: _____

Time/Date Drill Commenced: _____ Time/Date Drill Terminated: _____

OBSERVATIONS, COMMENTS AND RECOMMENDATIONS Page ____ of ____

NOTE: Observations should include verification of the proper and effective use of procedures, equipment and personnel.

NOTE: Use additional pages as necessary.

Signature: _____ Title: _____

Return completed copy to the Site Emergency Planning Coordinator

HP-1025

DRILL/EXERCISE EVALUATION SHEET

Page ___ of ___

Drill/Exercise Title: _____ Drill Date _____

Evaluated By: _____ Date _____

COMMENTS AND DEFICIENCIES

RECOMMENDATIONS

Prepared By: _____ Approved By: _____

Site Emergency Planning Coord. Plant Manager

HP-1026

SAFETY EVALUATION APPLICABILITY REVIEW		
	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Spec.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		

Signature John Vinelli Date 10/31/83

PLANT OPERATION MANUAL

Volume 10

Section 01

10-S-01-24

Revision: 1

Date: 11-7-83

EMERGENCY PLAN PROCEDURE

MAINTENANCE OF EMERGENCY PREPAREDNESS

SAFETY RELATED

Prepared: Jessie Hurley

Reviewed: John Vinell / W. M. Butler
Technical Review — Plant Quality Superintendent

Concurrence: J. K. Moore
Assistant Plant Manager

Approved: C. K. McCoy
Plant Manager

List of Effective Pages:

Page
1-3
Attachment I

List of TCN's Incorporated:

Revision	TCN No.
0	None
1	None

Title:: Maintenance of Emergency Preparedness	No.: 10-S-01-24	Revision: 1	Page: 1

1.0 PURPOSE

1.1 The purpose of this procedure is to maintain an adequate supply of operable emergency equipment.

2.0 RESPONSIBILITIES

2.1 The Site Emergency Planning Coordinator is responsible for ensuring that emergency equipment listed on HP Form 1010 is properly maintained and inventoried and for submitting proper reports to the Emergency Planning Coordinator.

NOTE

Fire protection equipment will be the responsibility of the Fire Protection Coordinator.

3.0 REFERENCES

None

4.0 ATTACHMENTS

Attachment I - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

None

6.0 DETAILS

6.1 Quarterly inventory of emergency equipment is to be recorded on Form HP-1010, Emergency Response Inventory List. A current copy of the inventory is placed in each emergency locker.

6.2 General Guidelines for the Quarterly Inventory and Inspection of Emergency Equipment.

6.2.1 Visually inspect all equipment and replace defective units as necessary. Ensure spare batteries are not leaking.

6.2.2 Replace all items which have past due expiration or calibration dates.

6.2.3 Inventory the emergency equipment locker of kit per the appropriate Form HP-1010 (i.e., SAP, OSC, TSC, etc.). Any discrepancies will be reported in the REMARKS section of Form HP-1010. Discrepancies should be corrected as soon as possible (no later than 96 hours, except when ordering equipment).

6.3 Inventories will be performed within ± 25% of frequency designated, or after use of equipment.

6.4 Inventory frequency of emergency equipment is designated in Table A:

Table A

	EQUIPMENT	RESPONSIBILITY	FREQUENCY
A)	Damage Control Kits	Maintenance	Quarterly
B)	Emergency Lockers, Offsite Monitoring Kits, Spill Kits, Emergency Vehicle Kits	Emergency Planning	Quarterly
	1) Respirators*	Health Physics	Monthly
	2) Meters in Emergency Lockers	Emergency Planning	1. Monthly - Source Check and Battery Check
	NOTE Spare batteries (except rechargeable type) in emergency lockers/kits are used as needed in the instruments, which are checked monthly and prior to actual use.		
C)	First Aid kit, 93' Control Building	Health Physics	Quarterly
D)	Trauma kit, Control Room	Emergency Planning	Quarterly
E)	Phone Lists	Perspective Sections (with an update of any changes to the Site Emergency Planning Coordinator)	Quarterly

* In accordance with Radiation Protection Procedure 08-S-02-42, Inspection and Maintenance of Respiratory Protective Devices.

6.5 A quarterly inventory memo containing the following information is to be submitted to the Emergency Planning Coordinator for entry into file.

6.5.1 Date inventory completed

6.5.2 Deficiencies noted

6.5.3 Resolution of deficiencies noted

6.6 The emergency facilities listed below should be inspected by the Site Emergency Planning Coordinator on a quarterly basis (± 25%). The purpose of this inspection is to ensure each facility is properly equipped and prepared to handle an emergency condition.

6.6.1 TSC, OSC, SAP, Control Room, EVK's, Vicksburg and Port Gibson Hospitals and Security Island

6.6.2 Health Physics Laboratory and Decontamination Facility

6.6.3 First Aid Stations

SAFETY EVALUATION APPLICABILITY REVIEW		
	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Specs.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		
Signature John Vinell Date 10/31/83		

PLANT OPERATION MANUAL

Volume 10

Section 01

10-S-01-25

Revision: 3

Date: 11-7-83

EMERGENCY PLAN PROCEDURE

ONSITE PERSONNEL RESPONSE

SAFETY RELATED

Prepared: Jeri Hurley

Reviewed: John Vinella — Technical Review; A. M. Butler — Plant Quality Superintendent

Concurrence: [signature] — Assistant Plant Manager

Approved: [signature] — Plant Manager

List of Effective Pages:

Page
1-4
Atts. I-III

List of TCN's Incorporated:

Revision	TCN No.
0	NONE HHS 11-7-83
1	None
2	None
3	None

Title: Onsite Personnel Response	No.: 10-S-01-25	Revision: 5	Page: 1

1.0 PURPOSE

For the purpose of emergency planning, onsite personnel are divided into two categories:

1.1 Emergency Personnel

1.2 Non-emergency personnel

In addition, the site is divided into two basic areas:

1.3 Protected Area (the area within the Unit 1 security fence)

1.4 Non-Protected Area (Administrative Building, construction site, other MP&L property outside the protected area)

The purpose of this procedure is to provide instructions for the response of these personnel to an emergency at GGNS.

2.0 RESPONSIBILITIES

2.1 It is the responsibility of all personnel at GGNS to follow the instructions of this procedure once an emergency condition has been declared at GGNS. This applies to both GGNS staff employees and non-staff personnel (i.e., contractors, visitors, construction workers, etc.).

2.2 It is the responsibility of the Training Superintendent to ensure that all onsite personnel are adequately trained to properly respond to an emergency at GGNS in accordance with this procedure.

3.0 REFERENCES

None

4.0 ATTACHMENTS

4.1 Attachment I Onsite Personnel Response Flowchart

4.2 Attachment II OSC Designated Areas for Emergency Personnel

4.3 Attachment III Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 Emergency Personnel - Personnel qualified as Radiation Worker II or III and Security personnel (or equivalent as determined by the Emergency Director). In addition, these personnel should be qualified to wear respiratory equipment.

5.2 Non-Emergency Personnel - Plant staff personnel not qualified Radiation Worker II or III, visitors, non-emergency related contractors, vendors, construction workers, etc.

5.3 P.A. System - Public Address announcing system for site.

6.0 DETAILS

6.1 Non-Emergency Personnel Response

6.1.1 Site Evacuation

Once the site evacuation alarm is sounded, all non-emergency personnel within the protected area of the site shall exit through the Security Island and proceed as directed by the PA system. If applicable, an individual's escort is to ensure that the proper evacuation process has been observed. Depending on conditions, personnel will be directed to report to the Site Access Point (SAP), to proceed directly home, or to proceed to another designated point. A specific route may also be specified. Non-emergency personnel not within the protected area of the site (i.e., Administrative Building, construction site) will also proceed as directed by the PA system (construction workers will normally leave the site via the Bechtel gate).

NOTE

Personnel who may be contaminated should proceed to the Site Access Point (or other designated area) for decontamination and further instructions, as required, before release from the site.

In addition, if the site evacuation alarm is sounded and no destination point is announced on the P.A. System, all non-emergency personnel on the Unit 1 side of the site are to proceed to the SAP. All non-emergency personnel on the Unit 2 side are to exit via the Bechtel gate after being accounted for at pre-designated points.

6.1.2 Limited Evacuation (i.e., section of the plant)

a. Non-emergency personnel in the affected (evacuated) area:

Report to the Health Physics Lab on the 93' level of the Control Building for accountability and decontamination as appropriate. Then proceed as directed by Health Physics personnel.

b. Non-emergency personnel NOT in the affected (evacuated) area:

Proceed as directed by supervision or by the P.A. System.

6.1.3 Declared Emergency with no Evacuation

Non-emergency personnel shall continue working at their stations unless directed to do otherwise by the P.A. System.

6.2 Emergency Personnel Response

6.2.1 Site Evacuation

Once the site evacuation alarm is sounded, all emergency personnel (except Control Room, SAS, and TSC), report to the OSC for accountability and formation into any necessary emergency response teams (i.e., First Aid Team, Emergency Repair Team, Search and Rescue Team). Then proceed as directed by the OSC Coordinator.

NOTE

The HP Supervisor or the Senior HP on duty must insure that portable air sampling and radiation detecting equipment (instruments) be brought to the OSC when the HP Lab (93' level control building) is evacuated. Type and amount of equipment will be at the discretion of the person in charge at the time of the evacuation.

6.2.2 Limited Evacuation (i.e., section of the plant)

a. Emergency personnel in the affected (evacuated) area:

(1) Proceed to the Health Physics Lab on the 93' level of the Control Building for accountability and decontamination, if necessary, then report to the OSC (Maintenance Shop) to support emergency response actions.

b. Emergency personnel NOT in the affected (evacuated) area:

(1) Report to the OSC (Maintenance Shop), as directed by immediate supervisor or by the P.A. System, to support emergency response actions.

NOTE

The immediate supervisor on station should determine the MINIMUM staffing requirements for his station, extra emergency personnel are to report to the OSC.

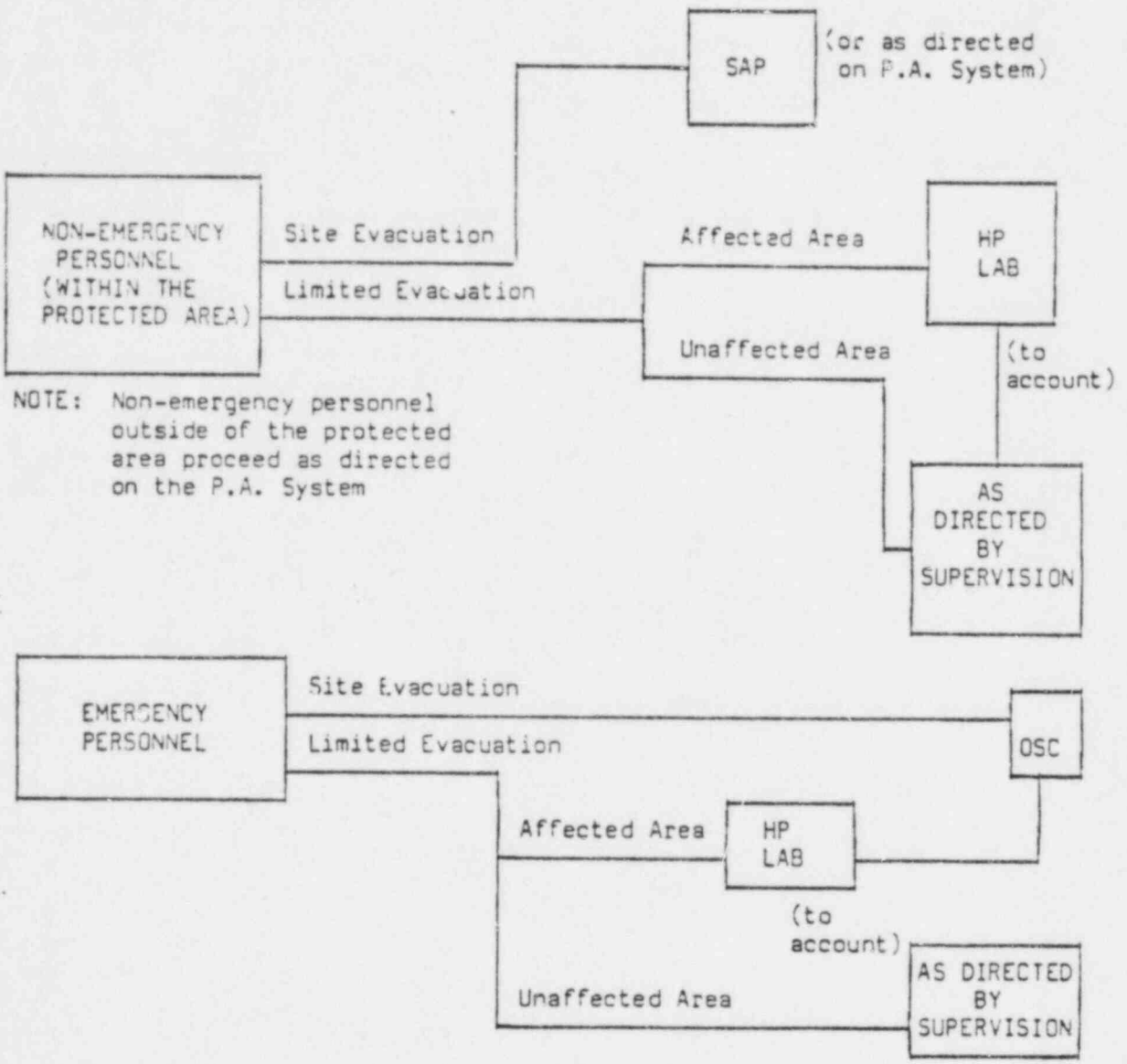
6.2.3 Declared Emergency with no Evacuation (except Unusual Event)

Report to the OSC (Maintenance Shop), as directed by immediate supervisor or by the P.A. System, to support emergency response actions.

NOTE

The immediate supervisor on station should determine the MINIMUM staffing requirements for his station, extra emergency personnel are to report to the OSC.

ONSITE PERSONNEL RESPONSE FLOWCHART



OSC DESIGNATION AREAS FOR EMERGENCY PERSONNEL

1) MAINTENANCE PERSONNEL - Respective Shops.

2) OPERATIONS PERSONNEL - Maintenance Shop Work Area

3) TECHNICAL SUPPORT ENGINEERS - Maintenance Planning Area (once the appropriate TLD and dosimetry are obtained from Security Island or OSC engineers not required by the OSC Coordinator may proceed to their normal work areas in the Administrative Building.)

4) SECURITY - As directed by the Security Coordinator.

5) HEALTH PHYSICS, CHEMISTRY, ENVIRONMENTAL PERSONNEL - If Health Physics Lab is habitable, obtain permission from OSC Coordinator to report to the Health Physics Lab. If Health Physics Lab is not habitable, report to the Maintenance Shop Work Area.

6) ALL OTHER PERSONNEL - Maintenance Shop Work Area.

7) OSC COORDINATOR, COMMUNICATIONS, OSC SUPERVISION, DESIGNATED EMERGENCY REPONSE TEAM MEMBERS - Maintenance Break Room.

SAFETY EVALUATION APPLICABILITY REVIEW		
	Yes	No
(1) Change to Facility as Desc. in FSAR	—	✓
(2) Change to Procedure as Desc. in FSAR	—	✓
(3) Test or Experiment not Desc. in FSAR	—	✓
(4) Change to Tech. Specs.	—	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	—	✓
(2) Will or may effect environment	—	✓
(If Yes, perform Environmental Eval.)	—	—

Signature John Kuelle Date 10/24/83

Volume 10

Section 01

10-S-01-26

Revision: 1

Date: 11-7-83

EMERGENCY PLAN PROCEDURE

OFFSITE EMERGENCY RESPONSE

SAFETY RELATED

Prepared: Jim Hurley

Reviewed: _____ _____
Technical Review — Plant Quality Superintendent

Concurrence: _____
Assistant Plant Manager

Approved: _____
Plant Manager

List of Effective Pages:

Page
1-2
Attachments: I-II

List of TCN's Incorporated:

Revision	TCN No.
0	None
1	None

Tittle: Offsite Emergency Personnel Response	No.: 10-S-01-26	Revision: 1	Page: 1

1.0 PURPOSE

The purpose of this procedure is to provide instructions to Offsite Emergency Personnel that are ordered to report to the site during an emergency condition.

2.0 RESPONSIBILITIES

2.1 It is the responsibility of all emergency personnel to be familiar with the instruction of this procedure.

2.2 It is the responsibility of the Training Superintendent to ensure that all emergency personnel are adequately trained to properly respond to an emergency at GGNS in accordance with this procedure.

3.0 REFERENCES

None

4.0 ATTACHMENTS

4.1 Attachment I - OSC Designation Areas Emergency Personnel

4.2 Attachment II - Safety and Environmental Evaluation Applicability Review

5.0 DEFINITIONS

5.1 Emergency Personnel - Plant staff radiation workers (i.e., Operations, Maintenance, Security, Health Physics, Chemistry, Environmental. Technical Engineering, Nuclear Instructors, Management, and selected other personnel).

6.0 DETAILS

6.1 Once instructed to report to the site to provide support during an emergency at GGNS, proceed directly to the site (unless you are instructed to contact additional personnel prior to coming to the site).

6.2 Present MP&L identification badge to law enforcement and Security personnel, if requested, enroute to the site.

6.3 All personnel arriving at the site must stop at the (SAP) Site Access point, if it is activated. Dosimetry may be issued by the SAP Coordinator depending upon current plant status, atmospheric conditions and radiation levels. Persons with permanently assigned key cards (with TLD's) may only be issued dosimeters.

6.3.1 All personnel must obtain a site authorization pass and a briefing on current plant conditions before proceeding to the site.

NOTE

Access into the Protected Area may be denied unless you have a Site Authorization Pass. Security guards will control access to the site at a security gate located at the intersection of Waterloo Road and the Grand Gulf Nuclear Station entrance road.

6.3.2 If the SAP is not activated, or unless told to do otherwise, all personnel, must stop at the (OSC) Operations Support Center. Appropriate dosimetry may be issued at the OSC based upon plant status, atmospheric conditions and radiation levels.

6.4 Report to the designated area in the OSC (refer to OSC Designation Areas for Emergency Personnel, Attachment I) or request permission from OSC Coordinator to proceed to the plant (i.e., if required to be in TSC, Control Room, Health Physics Lab, etc.)

OSC DESIGNATION AREAS FOR EMERGENCY PERSONNEL

1) MAINTENANCE PERSONNEL - Respective Shops.

2) OPERATIONS PERSONNEL - Maintenance Shop Work Area

3) TECHNICAL SUPPORT ENGINEERS - Maintenance Planning Area (once the appropriate TLD and dosimetry are obtained from Security Island or OSC. Engineers not required by the OSC Coordinator may proceed to their normal work areas in the Administrative Building.)

4) SECURITY - As directed by the Security Coordinator.

5) HEALTH PHYSICS, CHEMISTRY, ENVIRONMENTAL PERSONNEL - If Health Physics Lab is habitable, obtain permission from OSC Coordinator to report to the Health Physics Lab. If Health Physics Lab is not habitable, report to the Maintenance Shop Work Area.

6) ALL OTHER PERSONNEL - Maintenance Shop Work Area.

7) OSC COORDINATOR, COMMUNICATIONS, OSC SUPERVISION, DESIGNATED EMERGENCY REPONSE TEAM MEMBERS - Maintenance Break Room.

SAFETY EVALUATION APPLICABILITY REVIEW		
	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Specs.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		

Signature John Vinell Date 10/21/83

PLANT OPERATIONS MANUAL

Volume 10

Section 01

10-S-01-28

Revision 1

Date: 11-7-83

EMERGENCY PLAN PROCEDURE

CONTROL OF DESIGNATED EMERGENCY VEHICLES

SAFETY RELATED

Prepared: Jim Hurley

Reviewed: [signature] / [signature]
Technical Review — Plant Quality Supt.

Concurrence: [signature]
Asst. Plant Manager

Approved: [signature]
Plant Manager

List of Effective Pages:

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1-3

Attachment: I

List of TCN's Incorporated:

Revision	TCN No.
0	None
1	None

Title: Control of Designated Emergency Vechicles	No.: 10-S-01-28	Revision: 1	Page: 1

1.0 PURPOSE

1.1 To provide a means of ensuring the availability of company owned vehicles for use during an emergency.

2 0 RESPONSIBILITIES

2.1 The Shift Superintendent is responsible for maintaining two vehicles available on site at all times for use during an emergency. He may delegate the responsibility of physically maintaining the key board and/or contacting vehicle controllers to a shift clerk, operator trainee or other personnel under his supervision.

2.2 Vehicle Controllers are responsible for informing the Shift Superintendent when their vehicle must leave the site if it is designated as a primary emergency vehicle. They may delegate this responsibility to a secretary, clerk or other personnel under their supervision.

3.0 REFERENCES

None

4.0 ATTACHMENTS

None

5.0 DEFINITIONS

5.1 Primary Emergency Vehicle - Any two company owned vehicles designated for onsite availability on a 24-hour/day basis. These will normally be one of the following:

5.1.1 Training Van - #928

5.1.2 I&C Van - #931

5.1.3 One or more of the secondary emergency vehicles designated by the Shift Superintendent.

5.2 Secondary Emergency Vehicle - Those company owned vehicles designated as back-ups to the primary emergency vehicles. These normally consist of the following:

5.2.1 Maintenance Pickup - #946

5.2.2 Environmental Pickup - #914

5.2.3 Operations Pickup - #945

5.2.4 Operations Superintendent's Car - #924

5.2.5 Assistant Plant Manager's Operations Car - #940

5.2.6 Nuclear Support Manager's - Assistant Plant Manager's Maintenance Car - #930

5.2.7 Assistant Plant Manager Supports, Car # _____

5.2.8 Plant Manager's Car - #937

5.3 Alternate Emergency Vehicle - Any other company owned vehicle on site that can be made available during an emergency.

5.4 Vehicle Controller - The individual designated in control of the normal use of the primary or secondary emergency vehicles.

5.4.1 Training Van - Training Superintendent, Extension 328

5.4.2 I&C Van - I & C Superintendent, Extension 308

5.4.3 Maintenance Pickup - Mechanical Superintendent, Extension 117

5.4.4 Environmental Pickup - Chem/Rad Control Secretary, Extension 154

5.4.5 Operations Pickup - Shift Superintendent, Extension 354

5.4.6 Operations Superintendent's Car - Secretary, Extension 136

5.4.7 Assistant Plant Manager's Car - Secretary, Extension 130

5.4.8 Nuclear Support Manager's Car - Secretary, Extension 131

5.4.9 Plant Manager's Car - Secretary, Extension 130

6.0 DETAILS

6.1 A keyboard will be maintained in the Shift Superintendent's office that will contain keys and specify the two primary vehicles, any secondary vehicles, and any unavailable vehicles.

6.2 When a primary emergency vehicle must leave the site for any reason, the Vehicle Controller must call the Shift Superintendent to advise him of the vehicle's status and expected duration of absence.

6.2.1 The Shift Superintendent will call any of the secondary Vehicle Controllers to assure that one of these can be made available as a primary emergency vehicle during the period that the primary emergency vehicle is gone.

6.2.2 The Shift Superintendent removes the absent vehicle keys and place them on an UNAVAILABLE VEHICLE hook. He then places the secondary emergency vehicle keys on a PRIMARY EMERGENCY VEHICLE hook. The Controller for the secondary vehicle must notify the Shift Superintendent as required in section 6.2.

6.2.3 If all secondary emergency vehicles have been utilized or are unavailable and one of the designated primary vehicles must leave the site, then the Controller of that vehicle is responsible for locating and delivering the keys for an alternate emergency vehicle to the Shift Superintendent.

6.3 The Shift Superintendent, during an emergency, may designate any company owned vehicle as an emergency vehicle.

6.4 The Shift Superintendent, during an emergency, may request and authorize the use of privately owned vehicles as emergency vehicles, if required to ensure the health and safety of the public.

SAFETY EVALUATION APPLICABILITY REVIEW		
	Yes	No
(1) Change to Facility as Desc. in FSAR	___	✓
(2) Change to Procedure as Desc. in FSAR	___	✓
(3) Test or Experiment not Desc. in FSAR	___	✓
(4) Change to Tech. Specs.	___	✓
(If Yes, perform 10CFR50.59 Safety Eval.)		
ENVIRONMENTAL EVALUATION APPLICABILITY REVIEW		
(1) Change to Environmental Protection Plan	___	✓
(2) Will or may effect environment	___	✓
(If Yes, perform Environmental Eval.)		

Signature J. Vinell Date 10/24/83