

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION

07-189-91

EP-ESS-QUA-0-5-0 Revision 3

TITLE: EMERGENCY PREPAREDNESS ESSENTIALS QUALIFICATION TRAINING

	<u>SIGNATURE</u>	<u>DATE</u>
PREPARER	<u>[Signature]</u>	<u>8-29-90</u>
TRAINING SUPPORT SUPERVISOR	<u>[Signature] JAL</u>	<u>8-29-90</u>
TRAINING AREA SUPERVISOR	<u>MCHedrick</u>	<u>8-30-90</u>
PLANT SUPERVISOR USER GROUP SUPERVISOR	<u>AM Sol</u>	<u>8-30-90</u>

Summary of Pages

(Effective Date: 10-10-90)

Number of Pages: 38

<u>Date</u>	<u>Pages</u>
August 1990	1 - 38

TRAINING DEPARTMENT RECORDS ADMINISTRATION ONLY:

VERIFICATION: _____

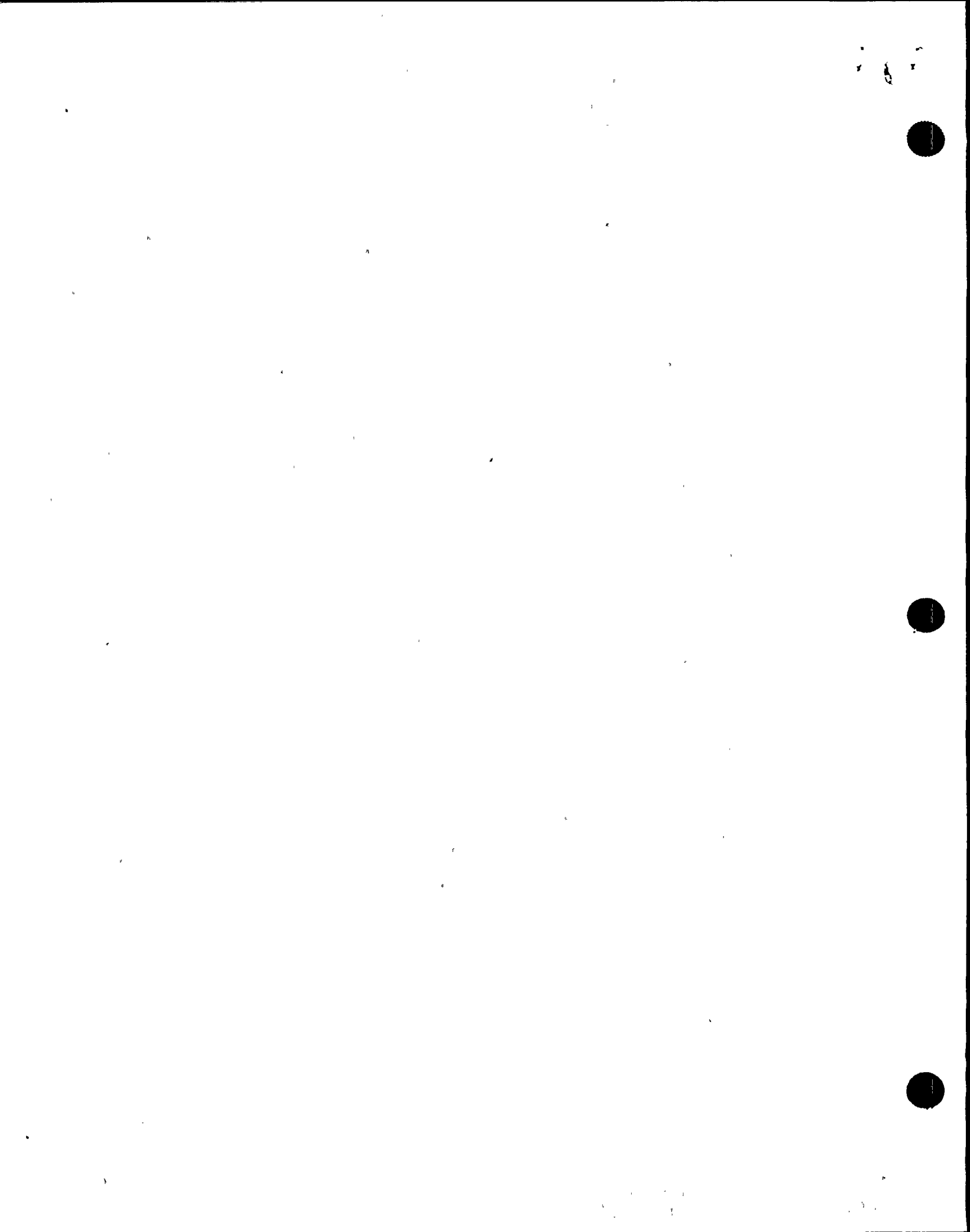
DATA ENTRY: _____

RECORDS: _____

MASTER CONTROLLED DOCUMENT

9305040017 911031
PDR ADDCK 05000410
S PDR

42 PP
5/4/17



ATTACHMENT 3: LESSON PLAN TEMPORARY/PUBLICATION CHANGE FORM

The attached change was made to:

Lesson plan title: Emergency Preparedness Essentials

Lesson plan number: EP-ESS-QUA-0-5-0 Rev 3

Name of instructor initiating change: John McClintock

Reason for the change: ① EP message line to enhance the c/n.

Discuss attached memo, file code NMM-72248 during on-call section (section V, page 20).

② Fitness for Duty clarification - cover memo (FC 0003) VI A.1.b
page 25

Type of change: Temporary change Publication change

Disposition:

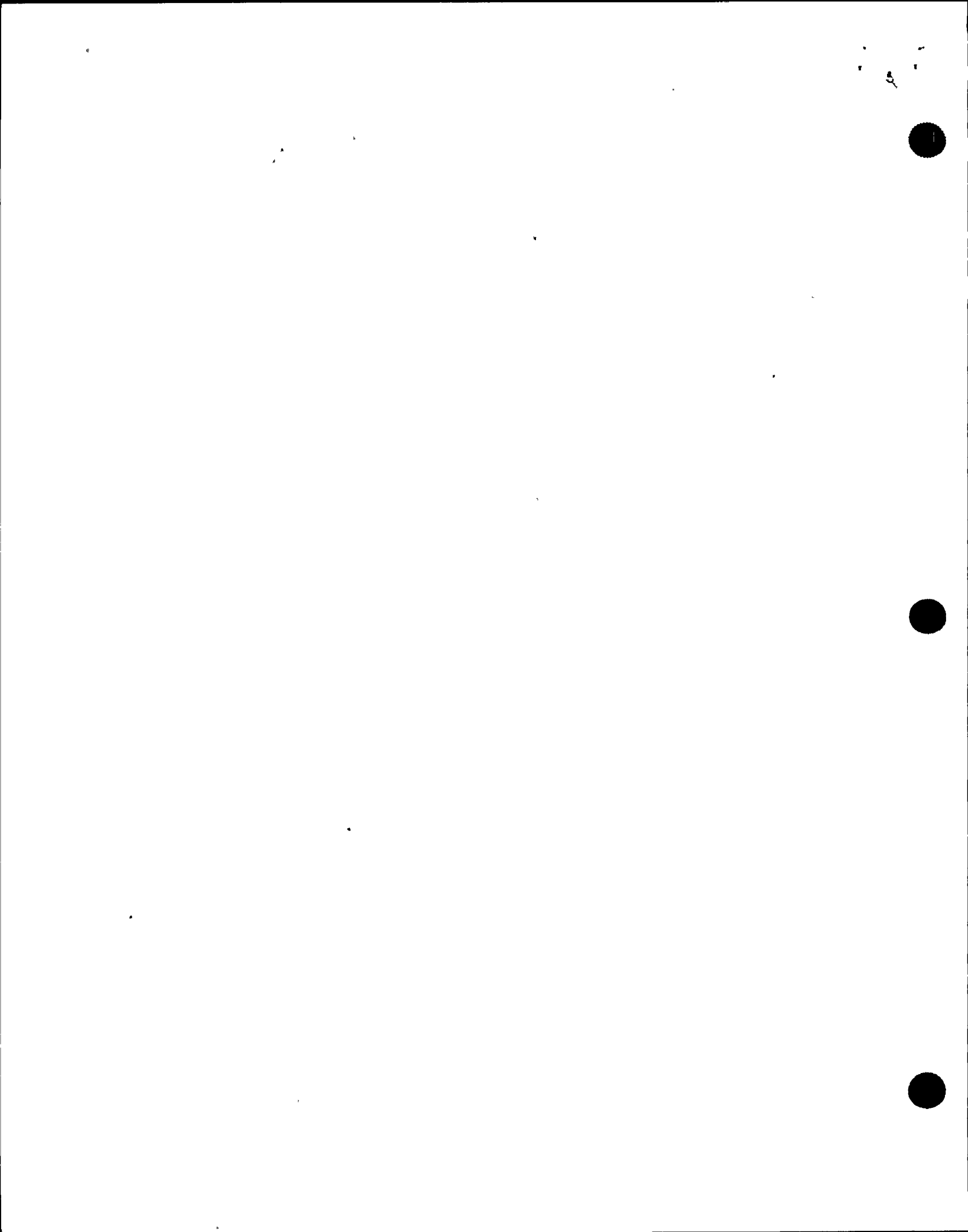
1. Incorporate this change during the next scheduled revision. The change does not alter the intent of the lesson plan.
2. Begin revising the lesson plan immediately. Supervisor initiate the process.

Approvals:

Instructor: John McClintock /Date 9-28-90

Senior Instructor: [Signature] /Date 9-28-90

Supervisor: [Signature] /Date 9-28-90



INTERNAL CORRESPONDENCE

FORM 1122 R 02-80

55-01-013

NIAGARA
MOHAWK

FM D. LeCuyer *DL*
TO CAN Distribution

DISTRICT Nine Mile Point Nuclear Station

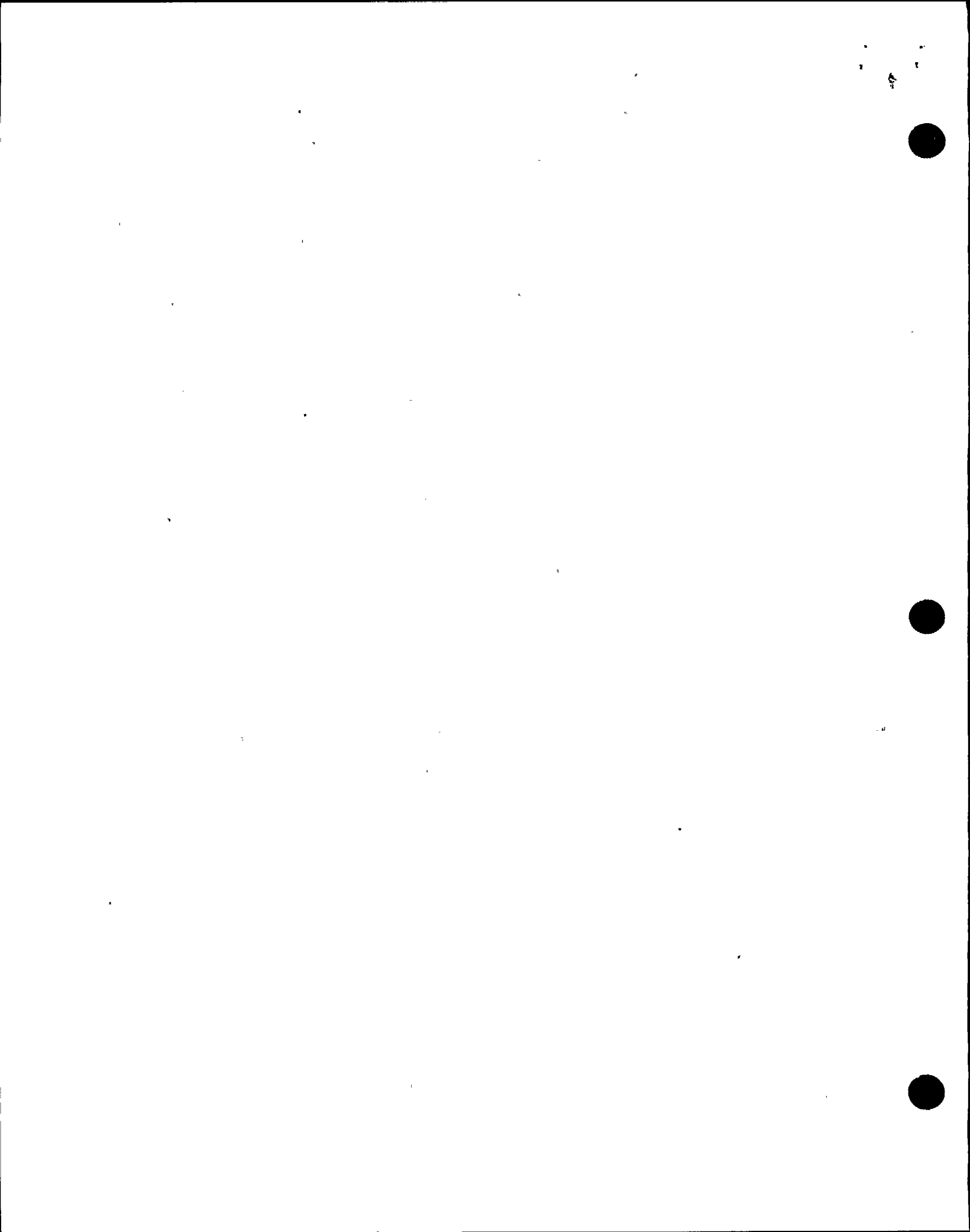
DATE September 20, 1990 FILE CODE NMP-72248

SUBJECT CAN Message

The purpose of this memo is to inform all affected personnel that an Emergency Preparedness Message Line has been set up. If during an emergency you are unable to access the CAN message (eg. because you have a pulse dial phone) or if you want information regarding the Emergency message received on the beeper, you can call the Emergency Preparedness Message Line to receive a brief message similar to the message being delivered by CAN. The Emergency Preparedness message line is located in Salina Meadows and can be reached by calling 428-7822. If you have any questions please contact me at extension 1245. Thanks.

DL: nas
#29/164

xc: M. A. Peifer
S. W. Wilczek
J. M. Benson
G. G. Gazda



INTERNAL CORRESPONDENCE

FORM 112-2 R 02-80

55-01-013

NY NIAGARA
MOHAWK

FROM C. I. Craigmile DISTRICT Empl. Rel. Nuc. ..

TO M. Hedrick DATE May 23, 1990 FILE CODE 00031

A. Salemi

SUBJECT Fitness For Duty Requirements
for Emergency Preparedness
Training

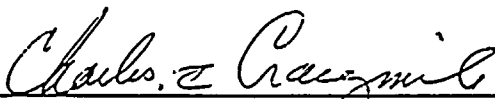
As we have discussed in the past, there are some specific FFD training requirements pertaining to all individuals who are required to respond to a site emergency and are contacted via the CAN system. These training requirements focus on informing all EP responders regarding their responsibility to self-report consumption of alcohol occurring 5 hours prior to their reporting for emergency duties. I would like to request that every training program dealing with emergency preparedness include a statement summarizing this responsibility as described in AP 12.1, Rev. 1 "Fitness For Duty During an Unscheduled Call Out" (currently in revision). A summary of this responsibility is as follows:

Each primary and secondary designee reporting to either the EOF, TSC, or OSC in case of an emergency must report to security personnel at the appropriate access points any consumption of alcohol occurring within 5 hours of the report time. They must also be informed that they should observe the bright red warning/indication signs which will be posted at each access point directing them to self-report alcohol consumption.

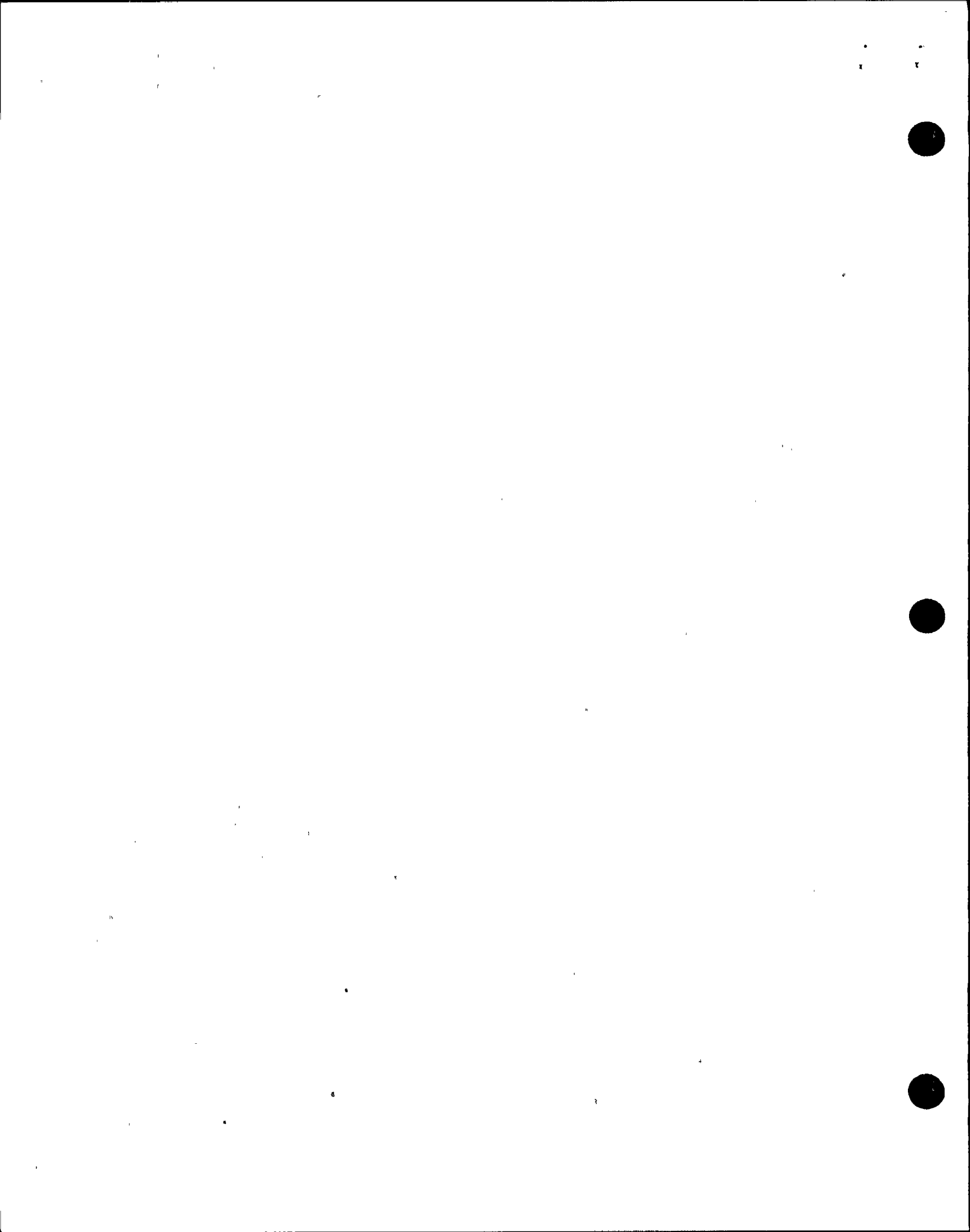
I would also urge that each EP responder be advised that requesting an alcohol test, regardless of the results, will in no way jeopardize or compromise continued employment or result in any disciplinary action, unless they are required to be "fit for duty" at all times due to a job specification.

Timely placement of this information in all EP training classes would be greatly appreciated as it is an NRC auditable item.

I would like to request a list of EP classes where this information is presented for my records so that I can provide it for NRC inspection. Thank you.


Charles I. Craigmile, Director
Nuclear Fitness For Duty

CIC/jmw



I.

TRAINING DESCRIPTION

- A. Title of Lesson: Emergency Preparedness Essentials Qualification Training
- B. Lesson Description: This lesson plan provides the basic information which may be required of individuals assigned specific emergency functions in response to a radiological emergency at the Nine Mile Point Nuclear Station.
- C. Estimate of the Duration of the Lesson: 1-2 Hours
- D. Method of Evaluation, Grade Format, and Standard of Evaluation: Written examination requiring a grade of 80% or above.
- E. Method and Setting of Instruction: Classroom Lecture
- F. Prerequisites:
 - 1. Instructor:
 - a. Shall be qualified per NTP-16.
 - 2. Trainee:
 - a. None
- G. References:
 - 1. Nine Mile Point Nuclear Station Site Emergency Plan, Current Revision
 - 2. EPP-13, Emergency Response Facilities, Current Revision
 - 3. CPP-2, Emergency Operations Facility, Current Revision
 - 4. EPP-14, Emergency Access Control, Current Revision
 - 5. EPP-15, Health Physics Procedure, Current Revision
 - 6. EPP-10, Security Contingency Events, Current Revision
 - 7. Nine Mile Point Nuclear Station Radiation Protection Manual, Current Revision
 - 8. S-EPMP-5, Emergency On Call Procedure, Current Revision
 - 9. NMPC Internal Correspondence File Code #63793 and #63795

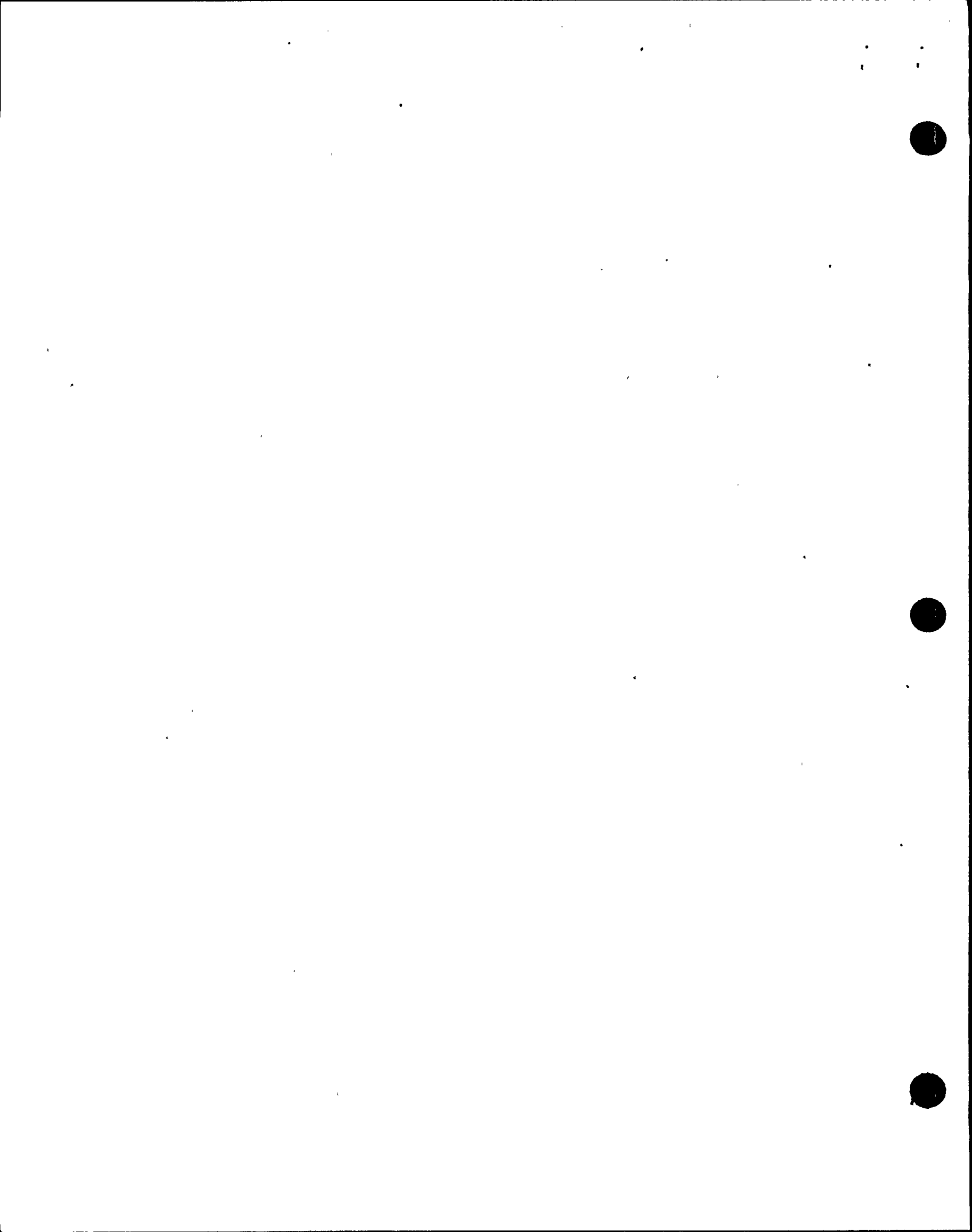
|3

II.

REQUIREMENTS

- A. Site Emergency Plan (Section 8), Current Revision
- B. NTP-4, Emergency Preparedness Training, Current Revision
- C. NUREG 0654, Criteria for Prep. and Eval. of Radiological Emer. Response Plans and Preparedness in Support of Nuclear Power Plants, Rev. 1, 1980
- D. 10CFR50, Appendix E, 1988

EP-ESS-QUA-0-5-0 -1 August 1990



III.

TRAINING MATERIALS

A. Instructor Materials:

1. Copy of lesson plan
2. Nuclear Training Center Training Record
3. Overhead projector
4. Transparencies (See Attachment 1 of this lesson plan)
5. Current copies of procedures listed in Section I.G. of this lesson plan.
6. Oswego County Access Control ID Applications
7. Course Evaluation Forms
8. Frisker
9. Dosimetry
 - a. Dosimeter
 - b. Film Badge
 - c. TLD
10. Motorola Bravo Pager

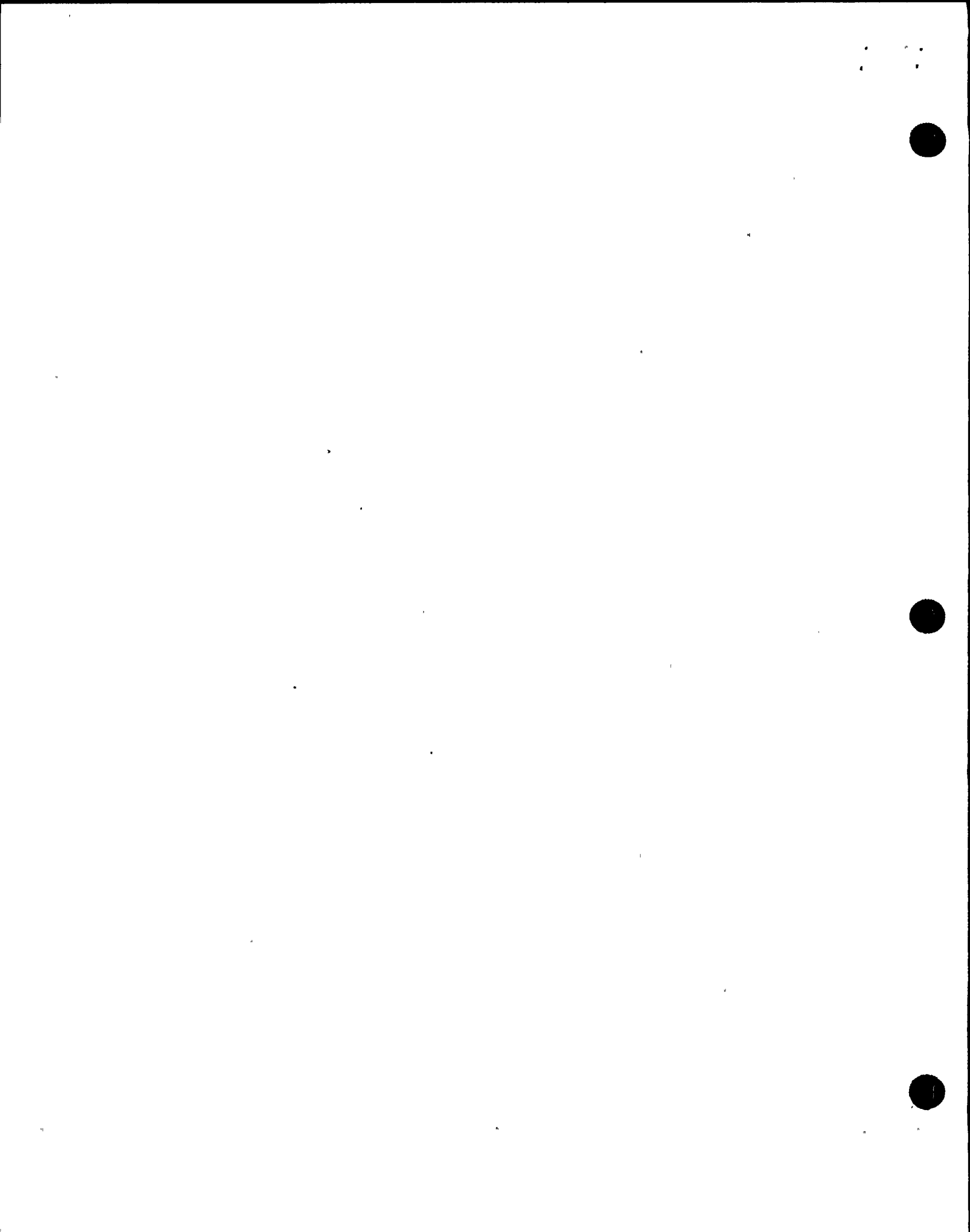
B. Trainee Materials:

1. Handouts (supplied by instructor)
 - a. Functional Group Study Guide
 - b. Map Handouts
2. Course Performance Objectives (supplied by instructor)
3. Pens/pencils (supplied by instructor if necessary)

IV.

EXAM AND MASTER ANSWER KEYS

Examination kept as Attachment 2 of this Lesson Plan.



V.

LEARNING OBJECTIVES

A. Terminal Objective:

TO-ESS-1.0 Upon completion of this training program, all students will have the knowledge necessary to respond to an emergency situation at the Nine Mile Point Nuclear Station in compliance with NMPNS Emergency Preparedness Procedures.

B. Enabling Objectives:

EO-ESS-1.01 Identify the four (4) emergency classification levels.

EO-ESS-1.02 Identify the emergency classification which will require activation of emergency response facilities.

EO-ESS-1.03 Identify the action to be taken if you are contacted by outside sources (media, family) during an emergency situation, and asked to supply information regarding the status of the event.

EO-ESS-1.04* Identify the purpose of the on-call procedure.

EO-ESS-1.05* Identify the responsibilities of an individual who is on-call.

EO-ESS-1.06 Identify the primary and backup means of notifying personnel, during off-hours, of an emergency.

EO-ESS-1.07 Identify the requirements to gain access to facilities within the 10 mile EPZ during emergencies.

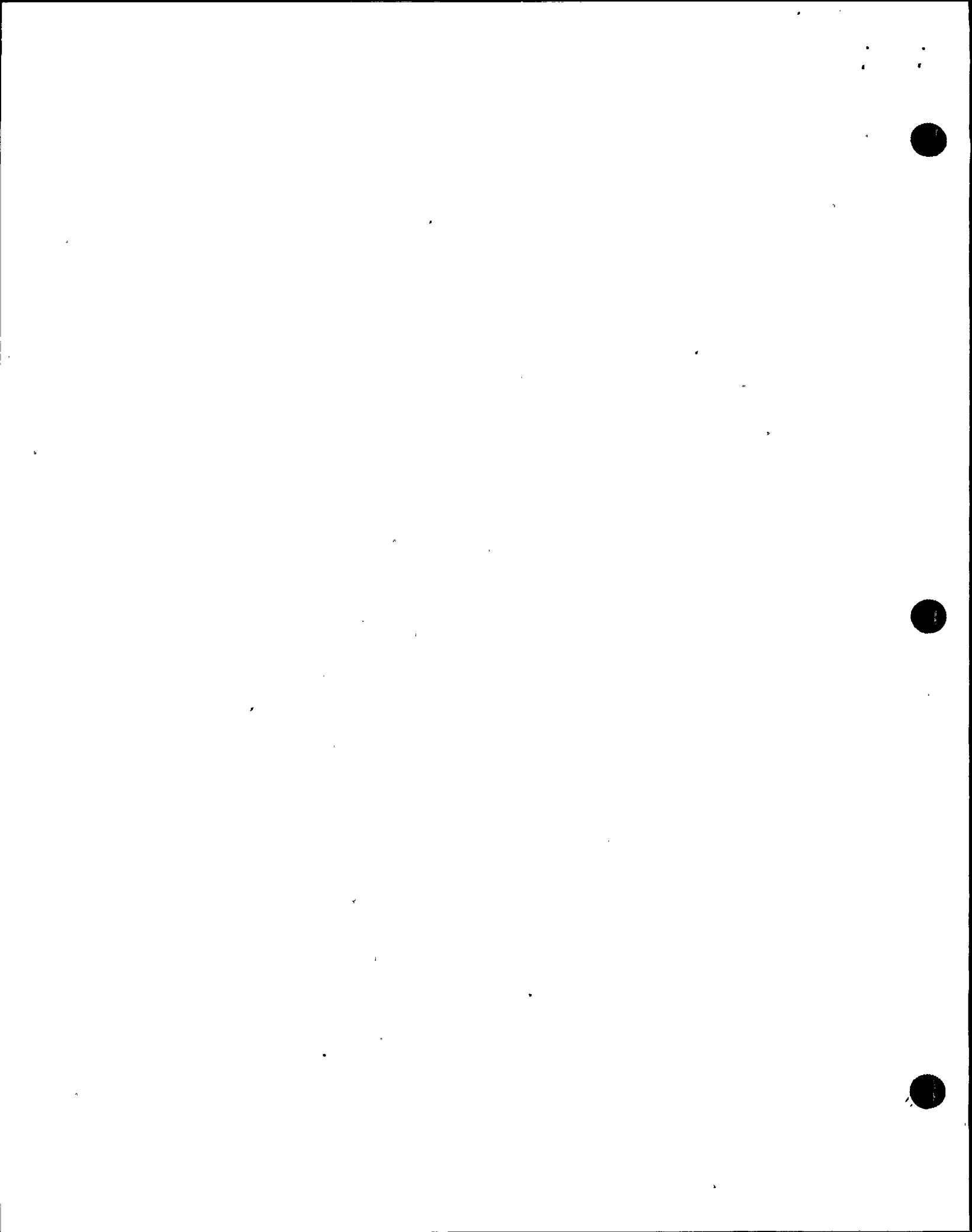
EO-ESS-1.08 Identify actions to be taken to obtain a temporary Oswego County Access Control ID Card.

EO-ESS-1.09 Given a situation which would allow an individual to receive exposure in excess of 10CFR20 limits, identify the corresponding whole body exposure limit.

EO-ESS-1.10 Identify criteria to be met when selecting individuals to receive exposure in excess of 10CFR20 limits.

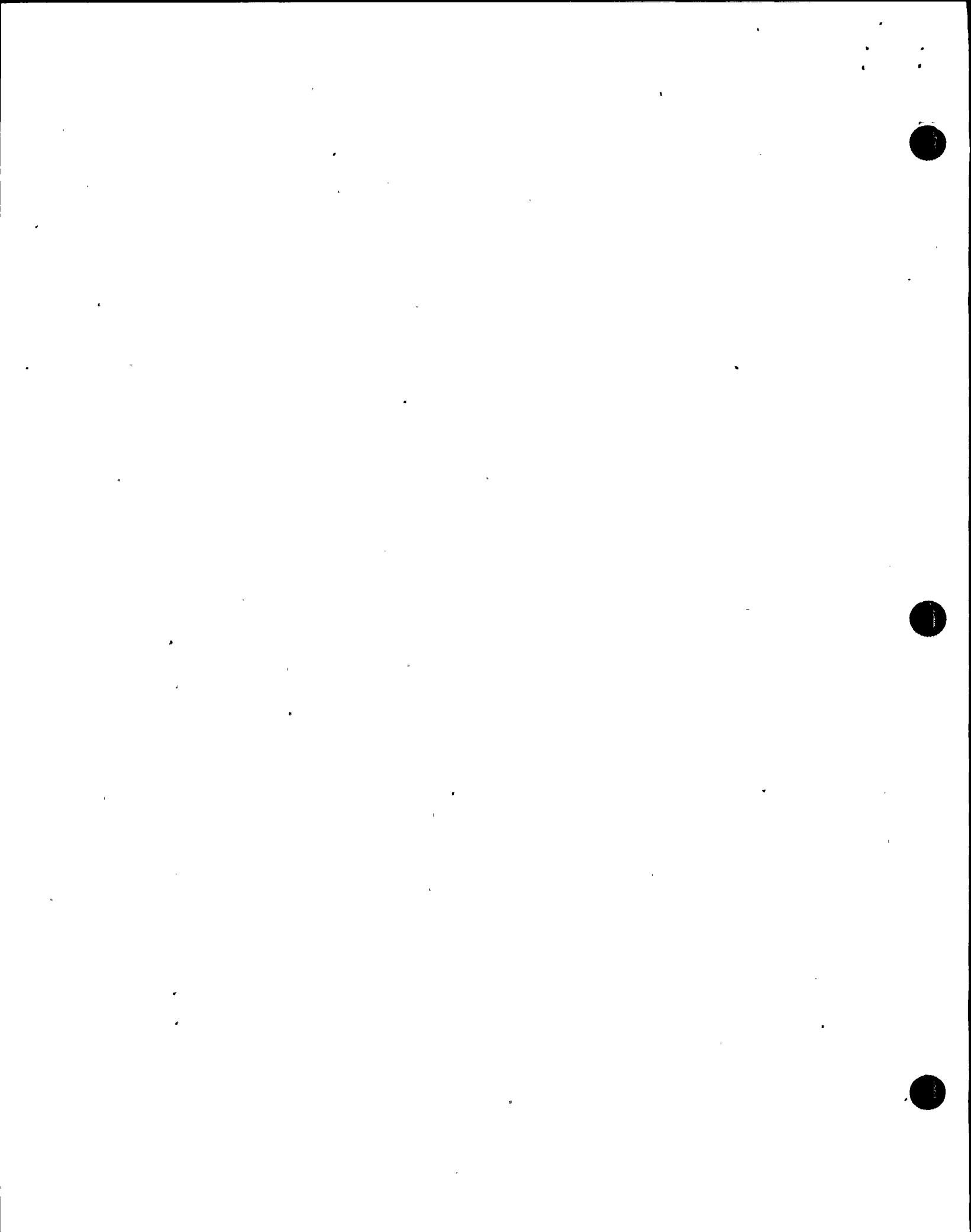
|3

|3



- EO-ESS-1.11 Identify the purpose for using Potassium Iodide.
- EO-ESS-1.12 Identify who should be contacted in the event that personnel, equipment, or area contamination is discovered. |3
- EO-ESS-1.13 Identify the methods used to maintain Emergency Preparedness. |

* Denotes objectives which are applicable to classes which provide training for emergency positions listed in S-EPMP-5, Figure 2, "Emergency Contact List" |



I. INTRODUCTIONS

A. Description of Training

1. This qualification training program provides fundamental information which may apply to any emergency preparedness functional group. Most functional groups will also receive additional training providing information specific to the functional group. There will be a separate set of objectives for each part of the training program. Students must attend all parts of the training.

Students shall attend this lesson as the first part of training for emergency preparedness position.

B. Introduce Self

C. Habitability

Ensure physical comfort of trainees (i.e. lighting, room temperature, etc.)

D. Complete attendance sheet.

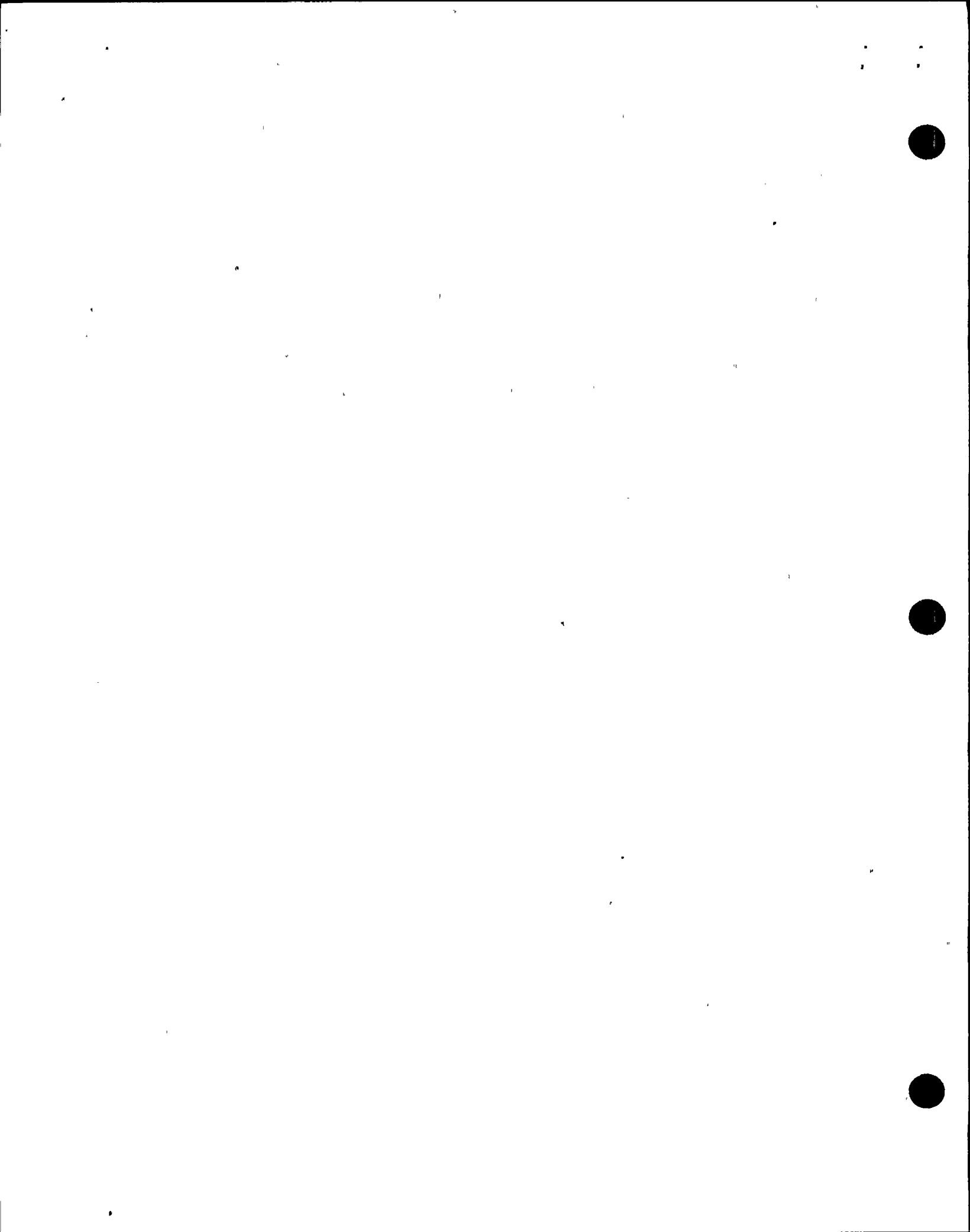
Pass sheet out and emphasize:

- Print all information neatly.
- Place last name first.
- Place department working for and assigned work location in Dept./Location column.
- Place Social Security Number.
- Use black ball point pen.

|3

|3

|3



E. Distribute handouts and objectives.

Ensure Trainees are aware the handout

- Is the property of trainee and can be used to take notes.
- Reference objectives sheet and ensure trainees are aware that performance objectives contain the information which may be tested on.

F. Exam criteria

1. For emergency preparedness classes which require completion of this lesson plan, the exam will be multiple choice requiring a grade of 80% or above.
2. NTP-4 describes the qualification requirements for each functional group.

Written exam requires trainees to attain grade of 80% or above.

Instructor should reference functional group lesson plan (Part II) for details regarding method of exam and requirements for being considered qualified.

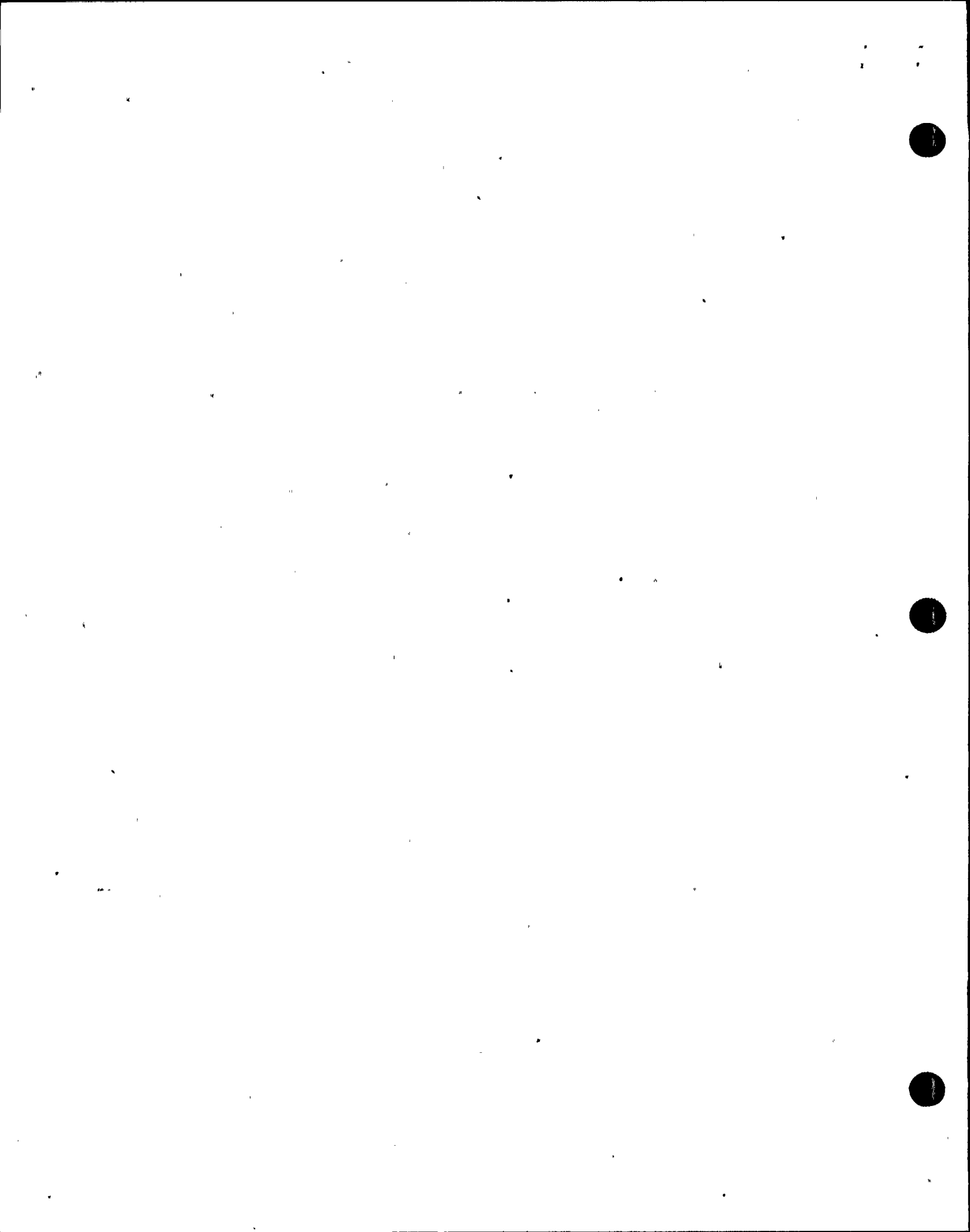
G. Training Requirements

1. Initial qualification training is required by 10CFR50 App. E.
2. To maintain qualification, you must attend requalification training on an annual basis.
3. NRC audits emergency preparedness annually.

Requirements of:

1. 10CFR50 Appendix E
2. NUREG-0654
3. Site Emergency Plan Section 8.1.1
4. U-1 FSAR XIII.B.4.0 Training of personnel
5. U-2 USAR 13.2.7 Emergency Preparedness Training

|3
|
|



II. GENERAL INFORMATION

A. Purpose of the Emergency Plan

1. Total preparedness program set up by the NMPC to assure the capability and readiness for coping with and reducing both on-site and off-site consequences of radiological emergencies.
2. NMPC's Emergency Plan is required to "Provide reasonable assurance that public health and safety is not endangered by operation of the facility concerned" (NMP Units 1 & 2)
3. The Site Emergency Plan provides an overview of how the Niagara Mohawk Power Corporation (NMPC) will deal with radiological emergencies. Specific procedures are contained in:
 - a. Emergency Action Procedures (EAP's)
 - 1) Procedures which provide a detailed list of responsibilities and actions to be implemented by personnel staffing on-site emergency facilities.

Show TP#1

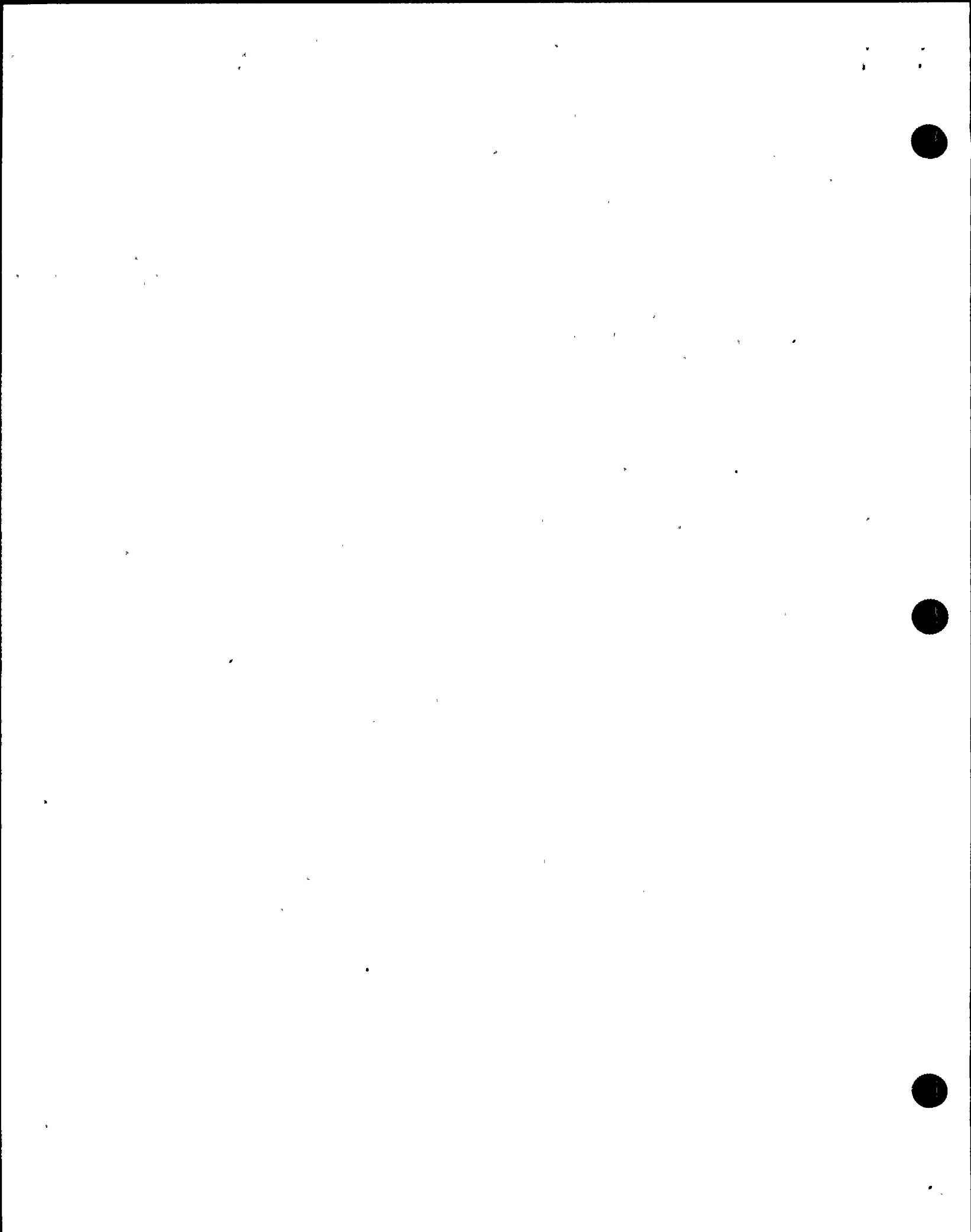
Discuss purpose

- Provide to trainees a brief background of emergency planning.
- Emergency plan intended to "provide direction and guidance to radiological emergency responders."
- Emergency plan requirements came about primarily as a result of the TMI accident. Quote from 10CFR50.47 (c)(1)(iii)

Discuss Emergency Plan Procedures

Show/provide examples of each procedure

|3



LESSON CONTENT

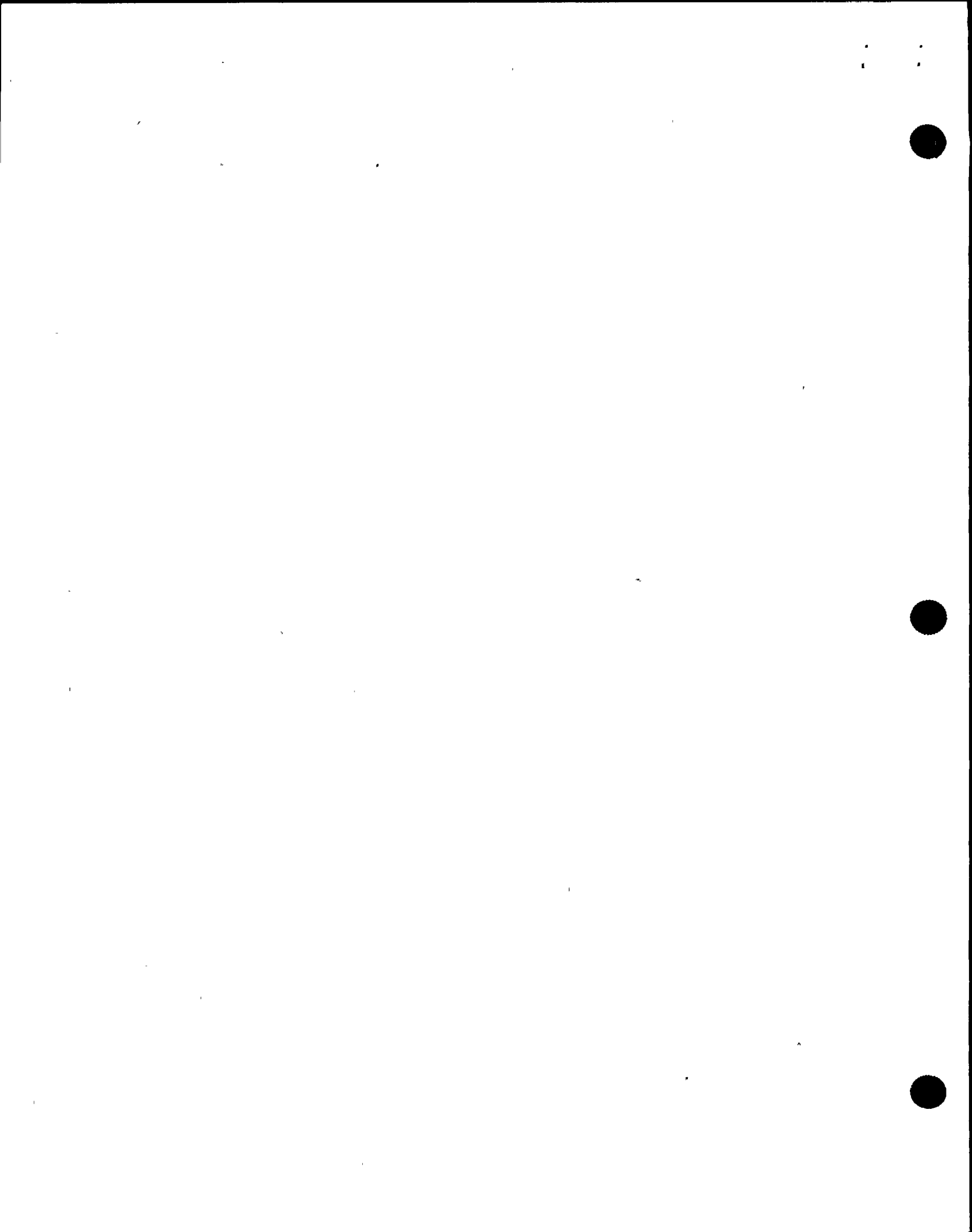
DELIVERY NOTES

- b. Emergency Plan Implementing Procedures (EPP's & CPP's)
 - 1) Procedures which provide detailed instructions, personnel lists, etc. for use by NMPC personnel to implement the NMPNS Site Emergency Plan.
- c. Emergency Plan Maintenance Procedures (EPMP's)
 - 1) Procedures which provide instructions, checklists, and guidance to maintain the emergency preparedness program, equipment, and associated documents.
- B. Company Policy (1.5.21)
 - 1. Purpose - acknowledges NMPC's responsibility to ensure public health and safety should a radiological emergency occur.
 - 2. Policy -
 - a. All expertise and support in NMPC organization shall be provided at request of emergency director.
 - b. SED/CED shall implement emergency plan.
 - c. SED/CED has authority to act on NMPC's behalf in all matters concerning an emergency.

Official acknowledgement of NMPC's commitment to ensure public health and safety.

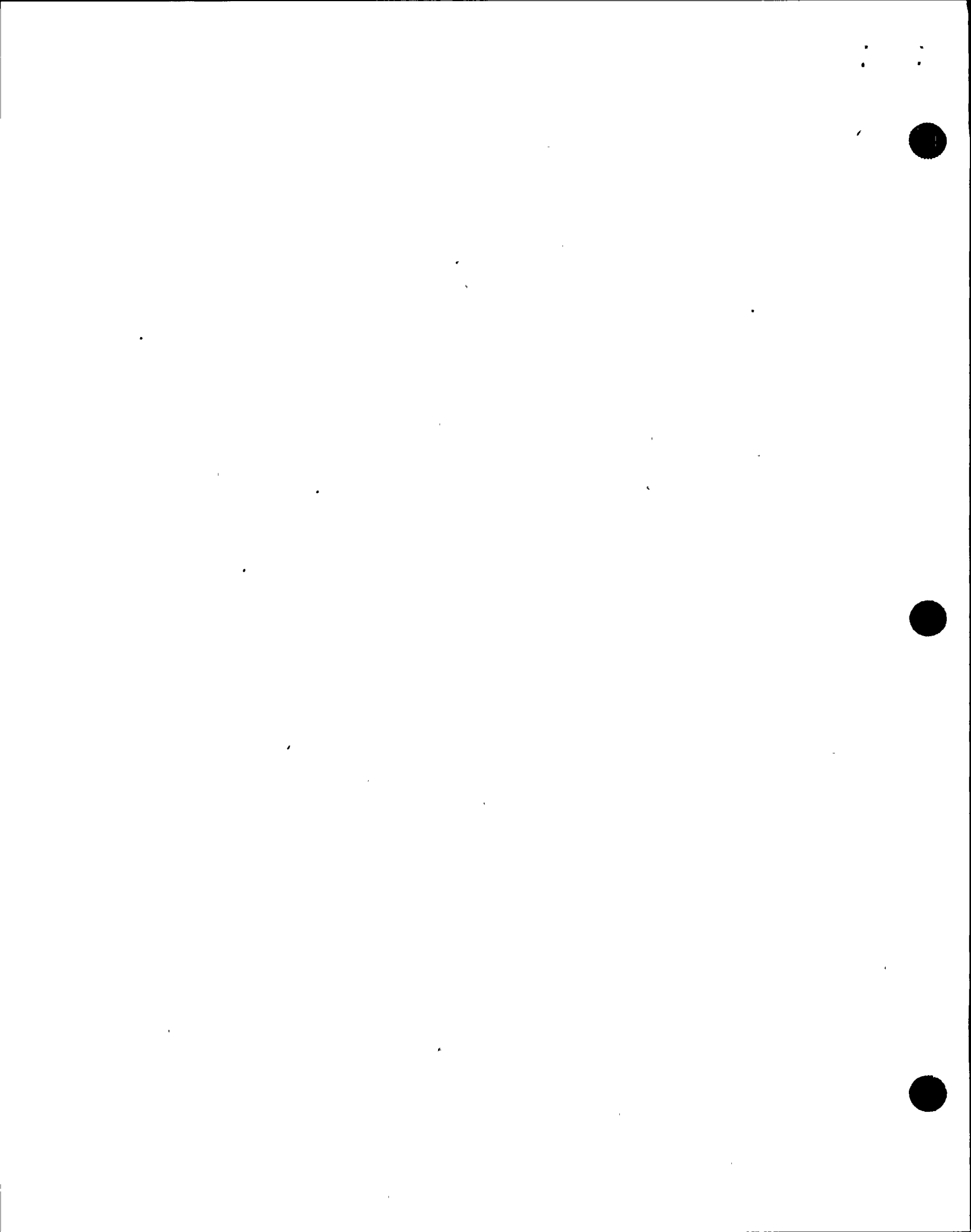
- Even to the point of violating Tech. Specs. if required to mitigate the accident.

|3
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|
|



- d. Each department within NMPC shall commit the personnel and resources necessary to support SED/CED.
- C. Emergency Classifications
1. Provide a graded scale of response for emergency conditions.
 2. Operational event
 - a. Non-emergency class
 - b. Situations restricted to small areas of the station or small number of people.
 - c. Not expected to enter an emergency condition.
 - d. Included in emergency plan to specify personnel action and provide for immediate management review.
 - e. Examples include:
 - Alarming of single ARM
 - Icing of intake structure
 - Initiation of plant shutdown required by Technical Specifications.
 3. Unusual Event
 - a. Situation affecting the station which requires emergency response.
 - b. Small probability for off-site hazard.

EO-ESS-1.01 | 3



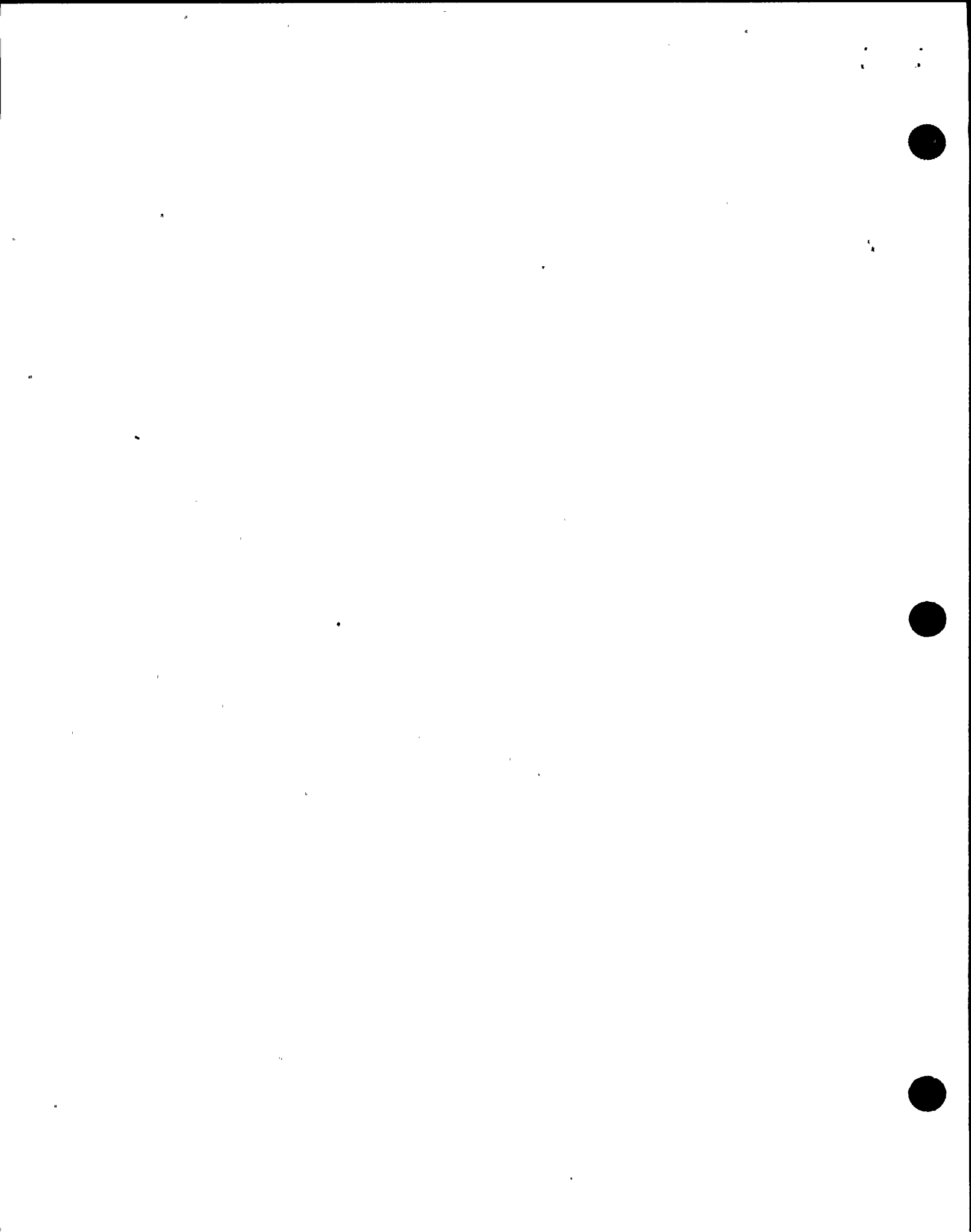
- c. Requires prompt notification to Oswego County, NYS, NMPC management and the NRC.
 - 1) Notification of the State, County and NMPC management must be initiated within 15 minutes.
 - 2) Notification of the NRC should not exceed one (1) hour.
 - d. No radioactive releases are expected.
 - e. Some examples of unusual events are:
 - 1) loss of all off-site power.
 - 2) a fire not under control in 10 minutes.
4. Alert
- a. An alert is an emergency class for events which indicate an actual (or potential) substantial degradation of plant safety.
 - b. The TSC will be activated and staffed by site personnel.
 - c. Corporate response personnel are activated and the EOF staffed.
 - d. No release which would exceed EPA PAG's on or off-site.
 - e. On-site and off-site monitoring is conducted.

- Legal requirement of 10CFR50.

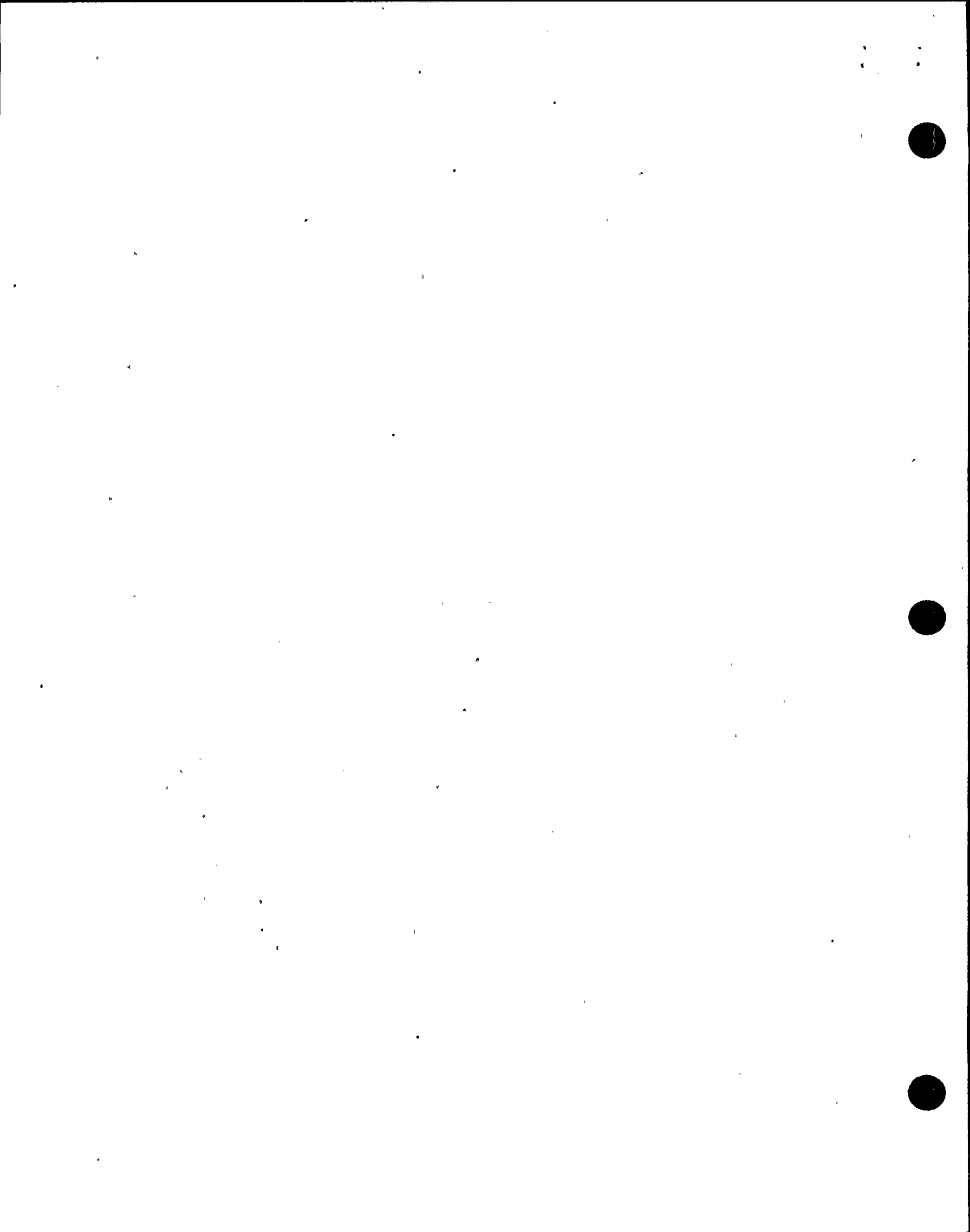
- Stress importance of all personnel performing their duties in a timely manner.

|3

|3



- f. Prompt notification to the County, State and Federal agencies as well as NMPC corporate HQ is initiated within 15 minutes of classification. This, again, provides early notification for minor events which can lead to more serious consequences.
- g. Some examples of an alert are:
- 1) Steam line break outside the drywell (proper MSIV function) Actual degradation
 - 2) Loss of all vital on-site DC power. Potential degradation
 - 3) Reactor System leak rate >50 gpm, unidentified source. Actual degradation
- D. Site Area Emergency
1. A Site Area Emergency is declared when events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public. There may be a radioactive release but levels which exceed PAG limits would be present only on-site.
 2. Notification of off-site agencies results in mobilization of county forces to block access to the site and initiate state and county response networks. O.C., NYS, NRC
Legal requirement of 10CFR50.



LESSON CONTENT

DELIVERY NOTES

3. Personnel Accountability must be completed within 30 minutes of declaring a Site Area Emergency.

Discuss the importance of the need to card in promptly.

4. Some examples of SAEs are:
- a. Main steam line break outside drywell without isolation.
 - b. Loss of coolant accident > make up capacity.

E. General Emergency

1. A general emergency is an emergency class for accidents that have the potential for serious radiological consequences to public health and safety.

Radiological effects off-site may exceed legal action limits (EPA-520) for more than the immediate vicinity of the site.

2. Require early warning of the public and prompt protective actions within the plume exposure planning zone.

PAR is the vehicle for transmitting recommendations for public protection.

III. ACCIDENT RESPONSE PHASES

A. Emergency response phase

1. Initiating conditions

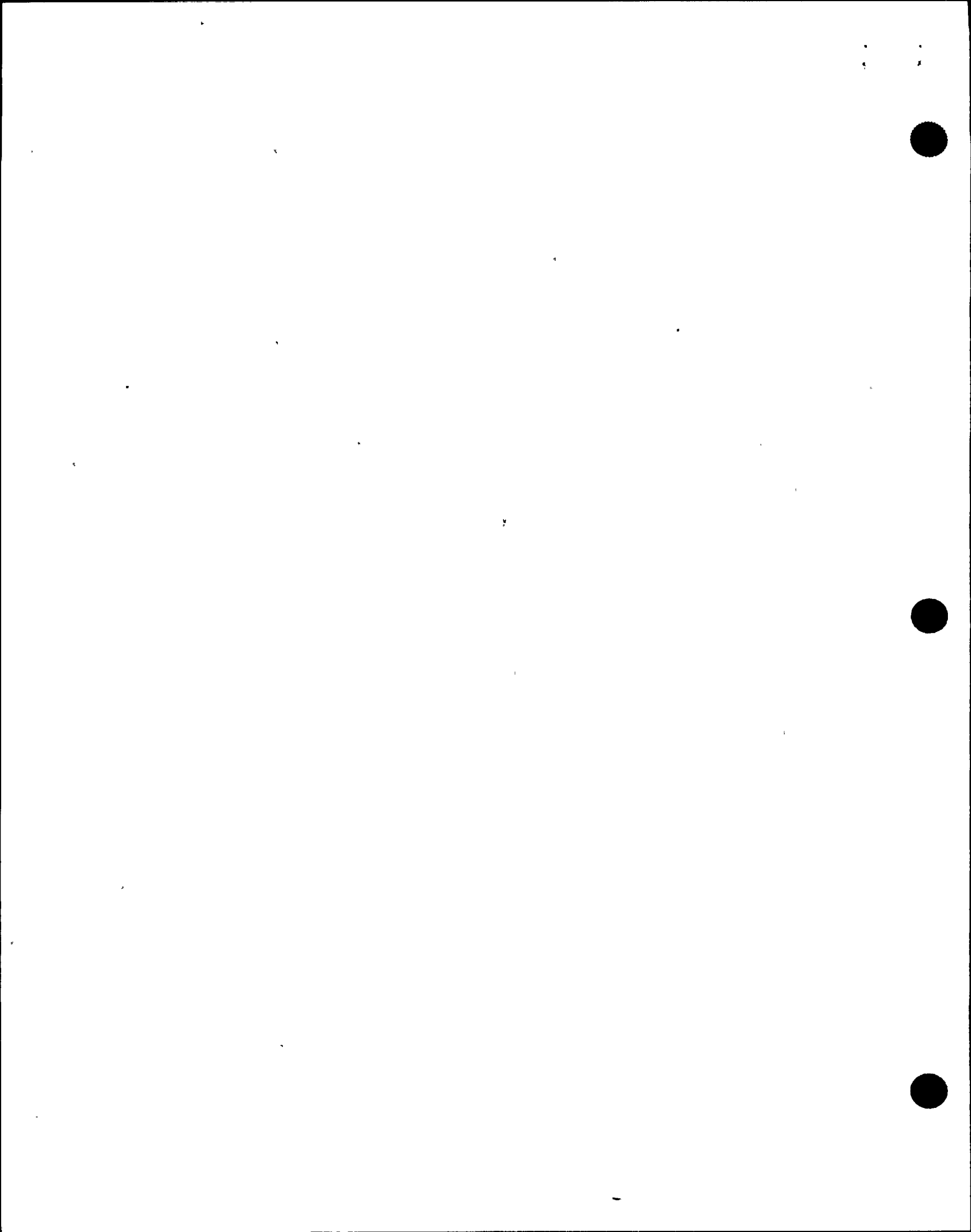
Something occurs out of ordinary, putting plant in emergency situation.

B. Emergency director

1. May be performed by:
- a. Station Shift Supervisor (SSS)
 - b. Station Superintendent (SED)
 - c. General Superintendent - Nuclear (CED)

Q: Why is SSS first?

A: Control Room generally first to know of an emergency and SSS is always here.



2. SED has overall authority for implementation of emergency response until relieved by CED/RM. After being relieved, SED will maintain overall responsibility for operation and control of the station.
 3. CED/RM manages emergency response and recovery phases; public and media concerns; state local and federal government emergency organization interactions.
- C. Functions of Emergency Director
1. Classify emergency
 - a. Notifications
 1. NMPC
 2. State
 3. County
 4. NRC

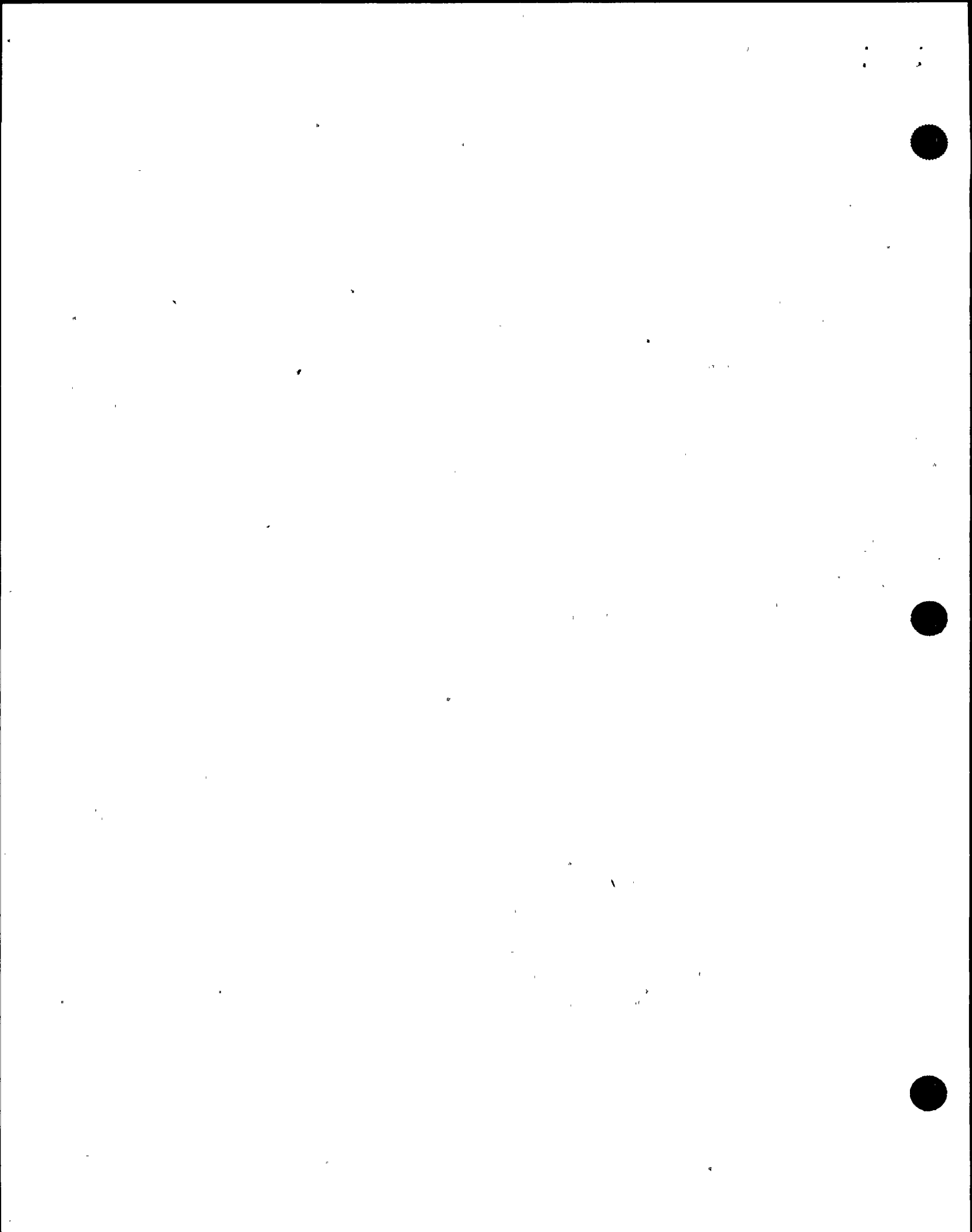
Discuss turnover of authority from SSS to SED and SED to CED/RM.

Instructor should mention:

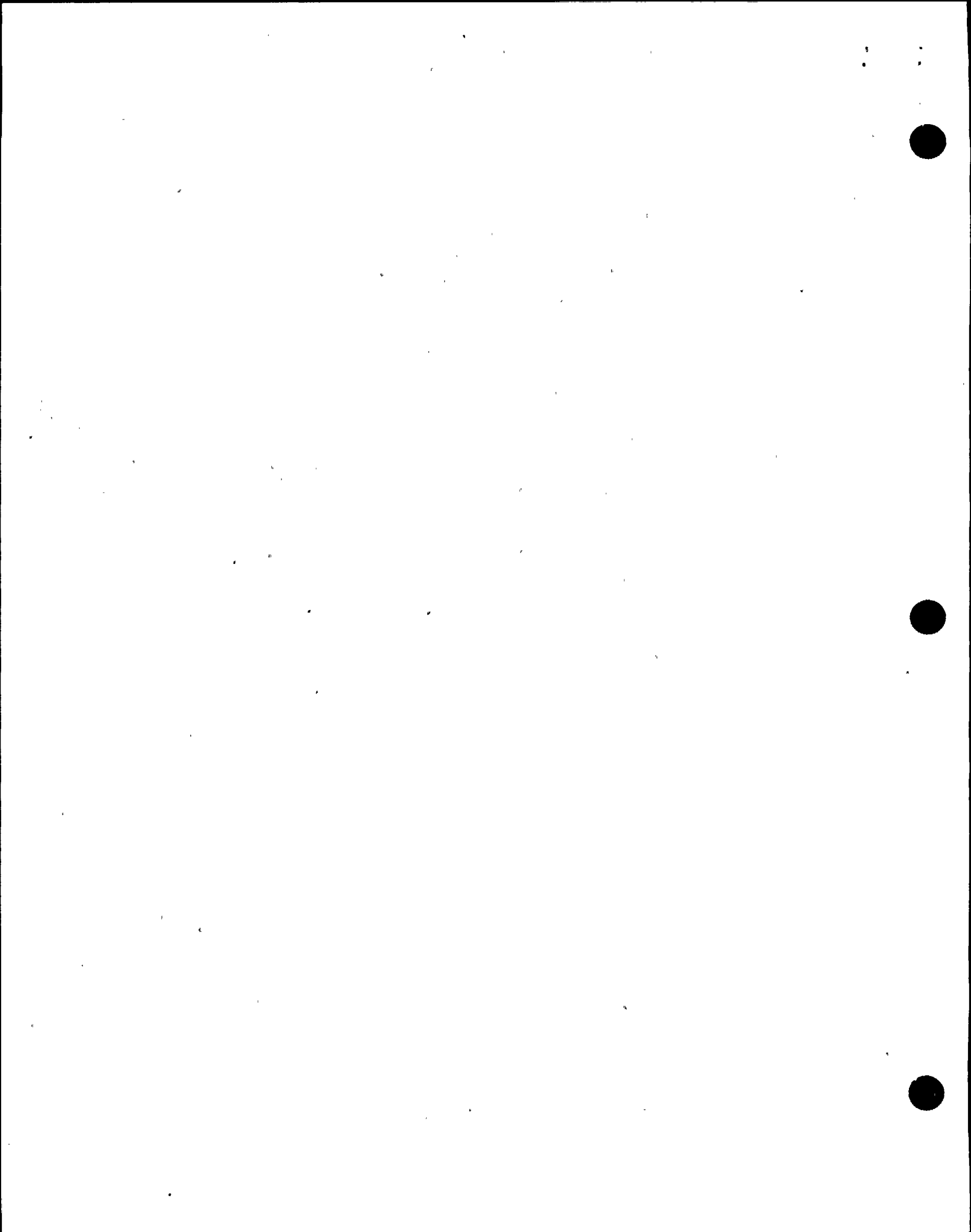
- After being relieved by SED, SSS is concerned with Control Room related matters.

* Each change of emergency classification, or plant condition, requires notifications to be made.

As a minimum:



- | | | |
|--|---|---------------------------------|
| <p>b. Activation of facilities</p> <p>1. Emergency classifications can trigger facility activation.</p> <ul style="list-style-type: none"> • All NMPC facilities will be activated at the Alert or higher classification (if not already activated). <p>2. Implement corrective actions</p> | <p>Q: What is meant by corrective actions?</p> <p>A: Actions necessary to place the plant in a safe condition. (Extinguish a fire, manual closure of stuck valve.)</p> | <p>EO-ESS-1.02 3</p> <p> 3</p> |
| <p>3. Implement protective actions</p> | <p>Q: What is meant by protective actions?</p> <p>A: Actions to prevent or reduce consequences to individuals during or after a radiological incident.</p> <ul style="list-style-type: none"> - Implementation of on-site protective actions are responsibility of SED (Station Evacuation, Site Evacuation). - Implementation of off-site protective actions are responsibility of New York State and Oswego County. (NMPC provides PARs). | |

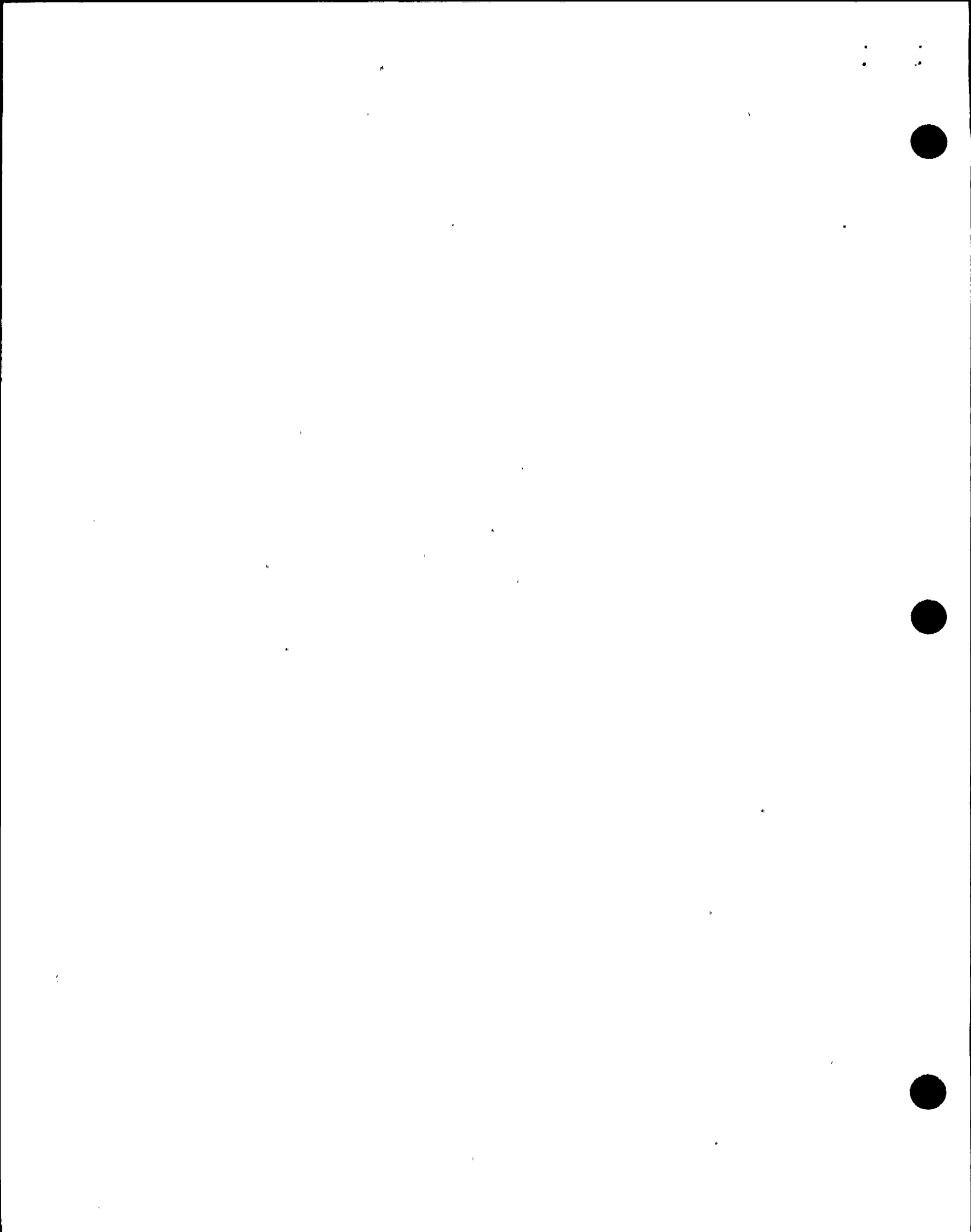


D. Re-entry Phase

1. Period following station evacuation during which access to the station is restricted.
2. Re-entry will be made to perform essential tasks such as:
 - a. Saving human life.
 - b. Controlling radioactive releases.
 - c. Preventing additional damage to plant and equipment.

E. Recovery Phase

1. Longer term actions taken to restore the station, as near as possible to its pre-emergency condition.
2. Recovery activities may include:
 - a. Gathering logs/data.
 - b. Developing plan of attack.
 - c. Obtaining necessary personnel and equipment.
 - d. Recovery procedures development.
 - e. Decontamination
 - f. Damaged equipment repair.



IV. EMERGENCY RESPONSE FACILITIES (S-EPP-13)

A. Control Room

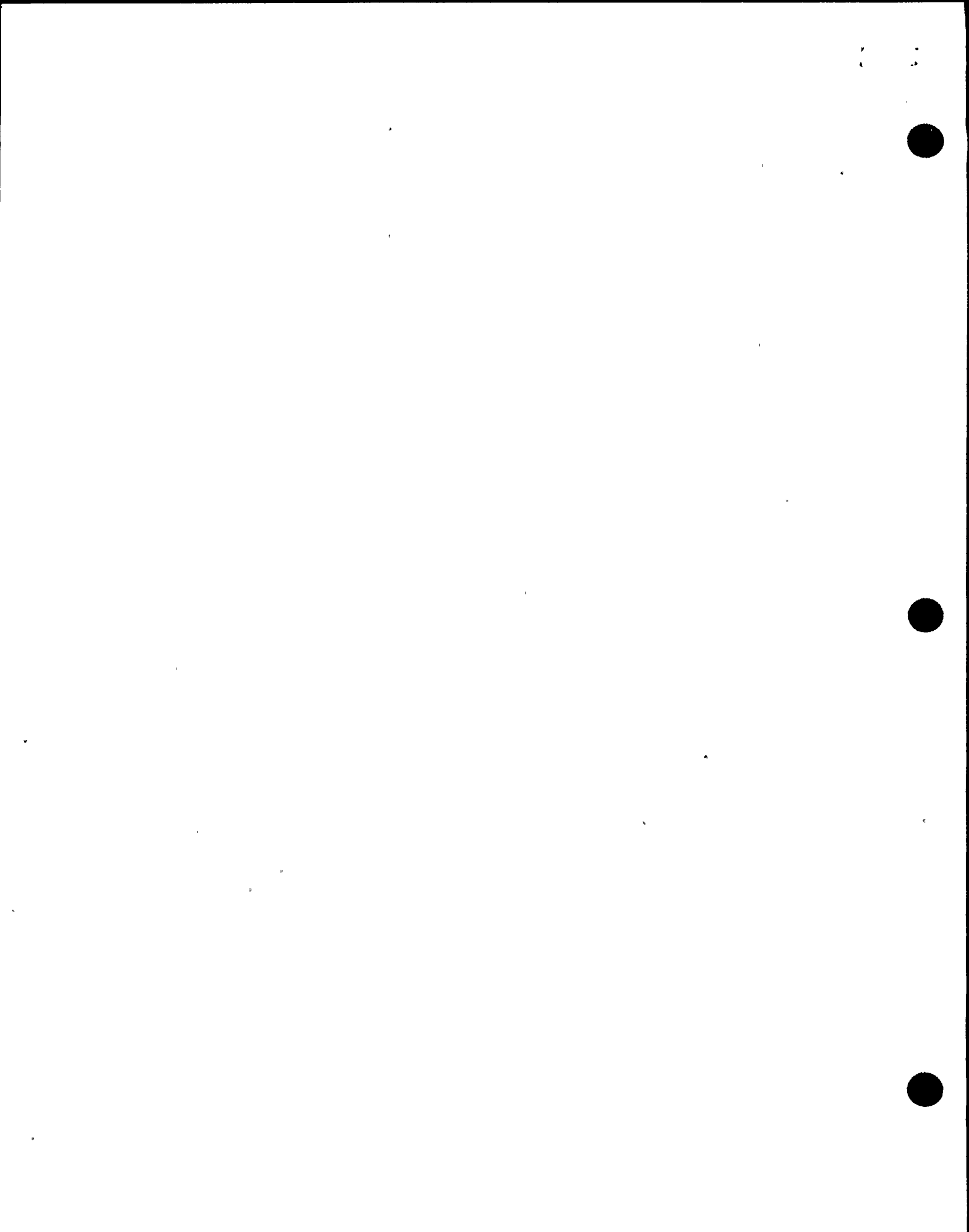
1. Primary location for the assessment and co-ordination of corrective and protective actions during the initial stages of the emergency.
2. Unit 1 Control Room located on floor elevation 277' of the Unit I Turbine Building.
3. Unit 2 Control Room located on floor elevation 306' of the Unit II Control Building.
4. When emergency response facilities are activated, Control Room personnel are supplemented by advisors who report to the Control Room.

Advisors report from the following departments:

- Operations
 - Reactor Analysts
 - I&C
 - Radiation Protection
 - Chemistry
-
- Cuts down on Control Room overcrowding. Briefly discuss Three Mile Island (TMI) lessons learned.
 - Access to drawings and records describing as-built conditions and plant



- | | | |
|--|---|---------------------------------------|
| <p>2. Located in the Unit I Administration Building floor elevation 248' near both Control Rooms.</p> <p>3. Activated during an alert, site area emergency or general emergency or when directed by the site emergency director.</p> <p>4. Also activated in any situation requiring a station evacuation during normal working hours.</p> <p>C. Operations Support Center (OSC)</p> <p>1. Area from which personnel and equipment necessary for the support of emergency operations can be dispatched.</p> <p>2. Located in the Unit I Administration Building and includes the floor elevation 277' and 261' lunchrooms, maintenance and electrical shops, locker rooms, radiation protection office, and the storeroom.</p> <p>3. Activated during an alert, site area emergency or general emergency or when directed by the SED.</p> <p>4. Also activated for any situation requiring a station evacuation during normal working hours.</p> | <p>layout.</p> <p>- Example - James A. FitzPatrick Nuclear Plant orders a station evacuation.</p> <p>Examples:</p> <ul style="list-style-type: none"> - DC teams - Survey teams - Fire/medical/rescue brigades | <p> 3</p> <p> </p> <p> 3</p> <p> </p> |
|--|---|---------------------------------------|



- D. Security Tactical Operations Center (STOC)
1. Location for monitoring, command and control of nuclear security departments on-site activities. - Augments the TSC
 2. Located in the Unit I Nuclear Security Building, top floor.
 3. When required by nuclear security department procedures.
- E. Emergency Operations Facility (EOF)
1. Purpose is to provide continuous co-ordination with local, state and federal agencies and to provide evaluation of potential environmental consequences.
 2. Located in the lower level of the NTC.
 3. Staffed on alert, site area emergency, or general emergency.
- F. Alternate Emergency Operations Facility (AEOF)
1. Purpose is to provide an alternate facility for emergency response personnel in the event that the TSC/EOF are deemed inappropriate for occupancy.
 2. Location is the Niagara Mohawk Service Center on Howard Road in Volney, N.Y. - Reference students to handout maps.
- Show location of AEOF.
- G. Joint News Center (JNC)
1. Provides a single point of contact for disseminating information to the public.

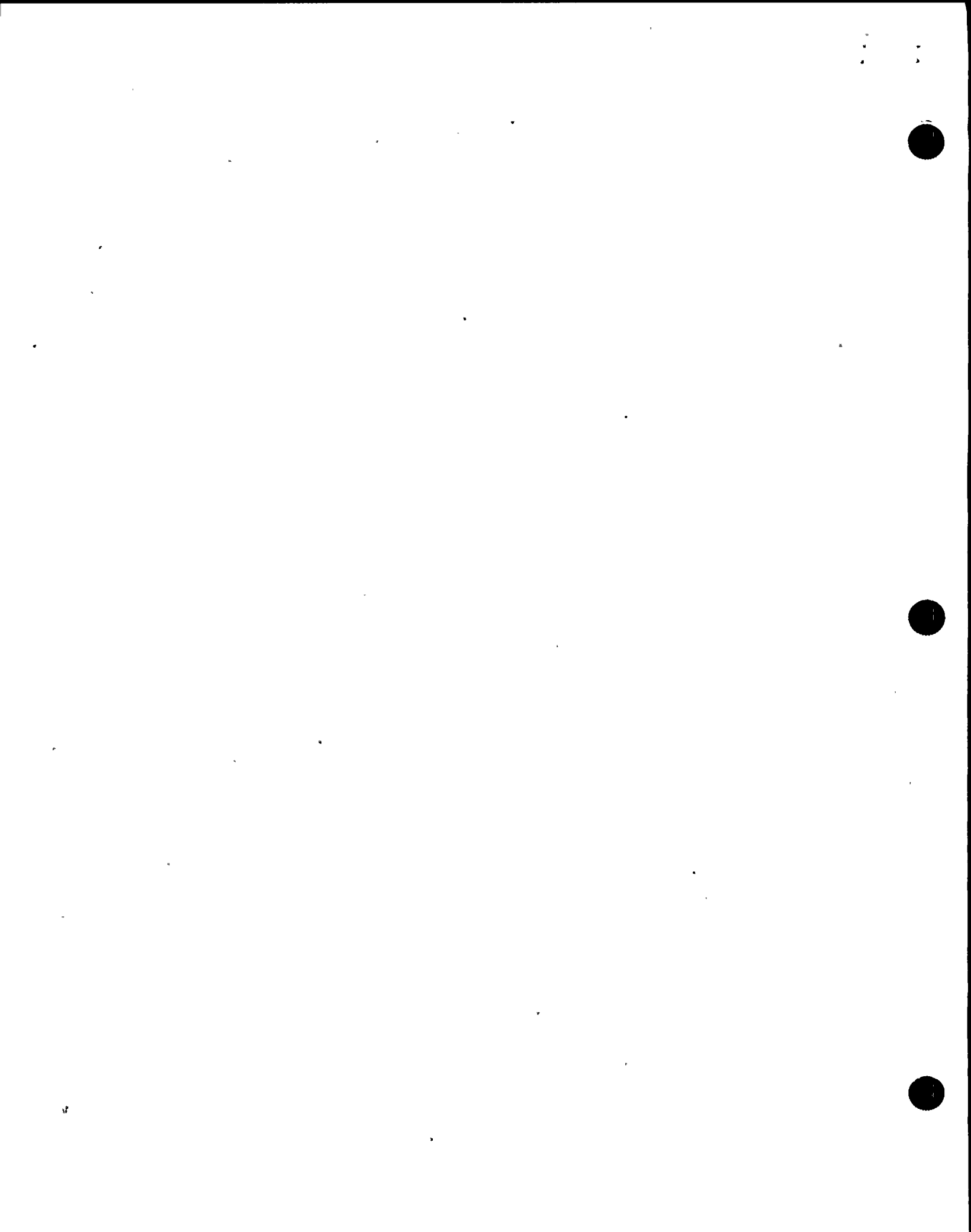


LESSON CONTENT

DELIVERY NOTES

NOTES

- | | | |
|--|--|---------------------------------|
| <p>2. Located in the McCrobie Building at 41 Lake St. in downtown Oswego, N.Y.</p> <p>3. Activated on alert, site area emergency, general emergency or whenever an event causes sufficient media interest to warrant its operation.</p> <p>4. Minimizes the chance of the media getting bad information which could cause public panic.</p> <p>5. If contacted by outside sources requesting information concerning the emergency direct the person calling to the JNC:</p> <p style="margin-left: 20px;">a. 1-800-333-6466</p> <p style="margin-left: 20px;">b. posted number in the EOF and TSC</p> <p style="margin-left: 20px;">c. NMPC operator</p> <p>H. Alternate Joint News Center (AJNC)</p> <p>1. Activated in the event that the JNC is deemed uninhabitable.</p> <p>2. Located at NMPC's headquarters in Syracuse, N.Y..</p> | <p>Reference students to handout maps.</p> <p>- Show location of JNC.</p> <p>Ask students if they are familiar with the problems at TMI or Chernobyl concerning public information.</p> <p>- TMI had instances where one news source would assure the public that the plant was in safe condition and other sources who would claim the plant had potential for a hydrogen explosion.</p> <p>- Chernobyl media exaggerated death toll values to as much as 2000 people dead from accident.</p> | <p>EO-ESS-1.03 3</p> <p> 3</p> |
|--|--|---------------------------------|



I. NMPC's on-site response can be augmented by the following organizations:

1. Oswego County Emergency Operations Center.

2. N.Y.S. Emergency Operations Center

3. General Electric Reactor Division
(BWR Emergency Support Program)

4. US Nuclear Regulatory Commission

5. Other agencies as appropriate

Discuss location

Show location

- Located in Fulton, N.Y.

- Co-ordinates county response efforts
(Public safety)

Located in Albany, N.Y.

- Coordinate state response

BWR Technical Support

Technical support per NUREG-0845

Local medical facilities

Oswego fire control

FEMA

USDOE

JAF, Ginna plants

Institute of Nuclear Power Operations (INPO)

|3

|3

V. ON-CALL PROCEDURE (S-EPMP-5)

A. Purpose - mechanism to ensure that a qualified individual is readily available to fill each of the designated emergency positions.

B. Definitions

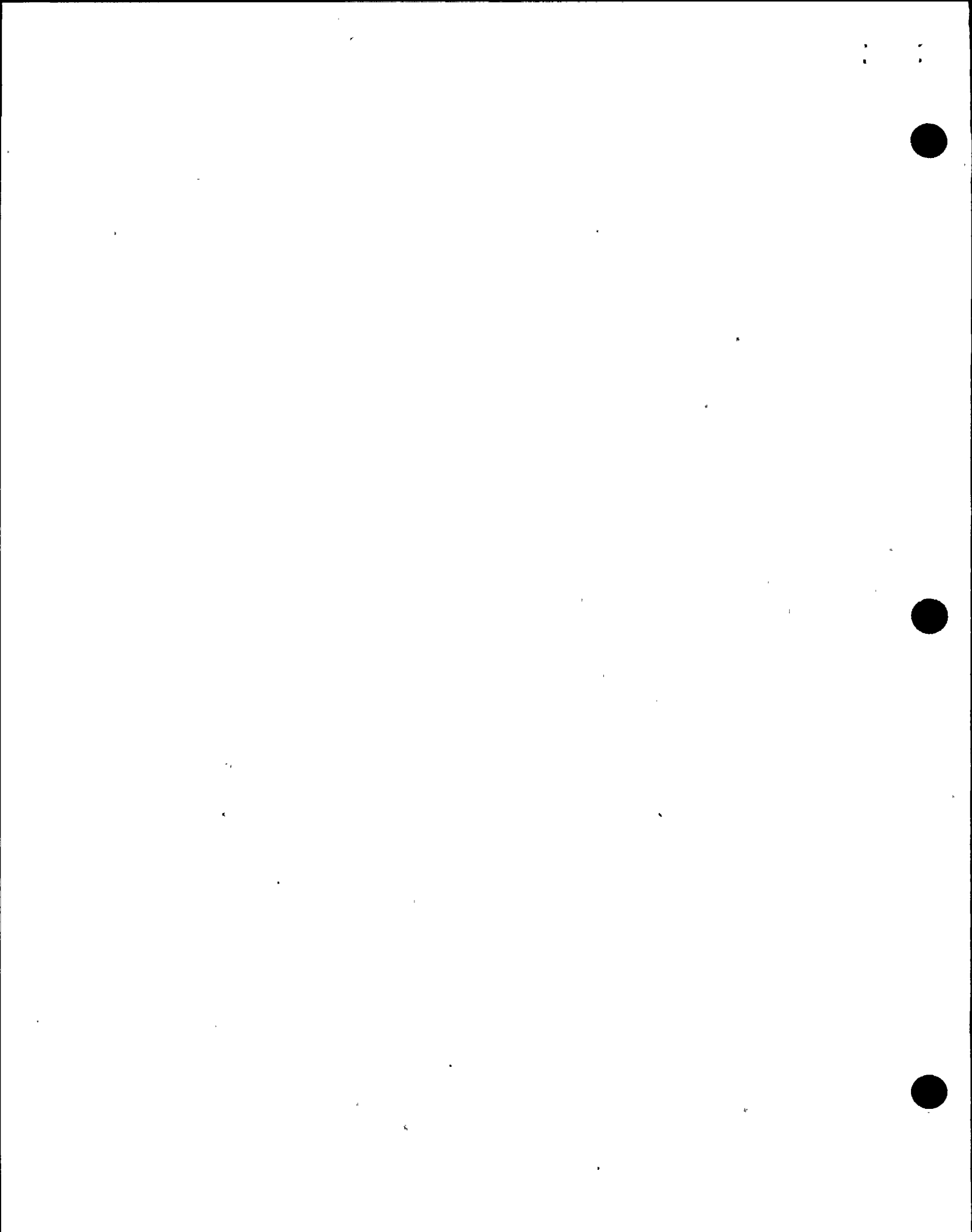
Section V. to be covered only with classes which provide training for emergency positions listed in S-EPMP-5, Fig. 2 "Emergency Contact List"

EO-ESS-1.04*

|3

|3

|3



1. Primary designee - individual who is responsible for ensuring that their respective emergency position is filled.
2. Alternate designee - individual who could be assigned on-call duties by the primary designee to fill an emergency position.
3. Qualified - trained in appropriate emergency preparedness procedures.

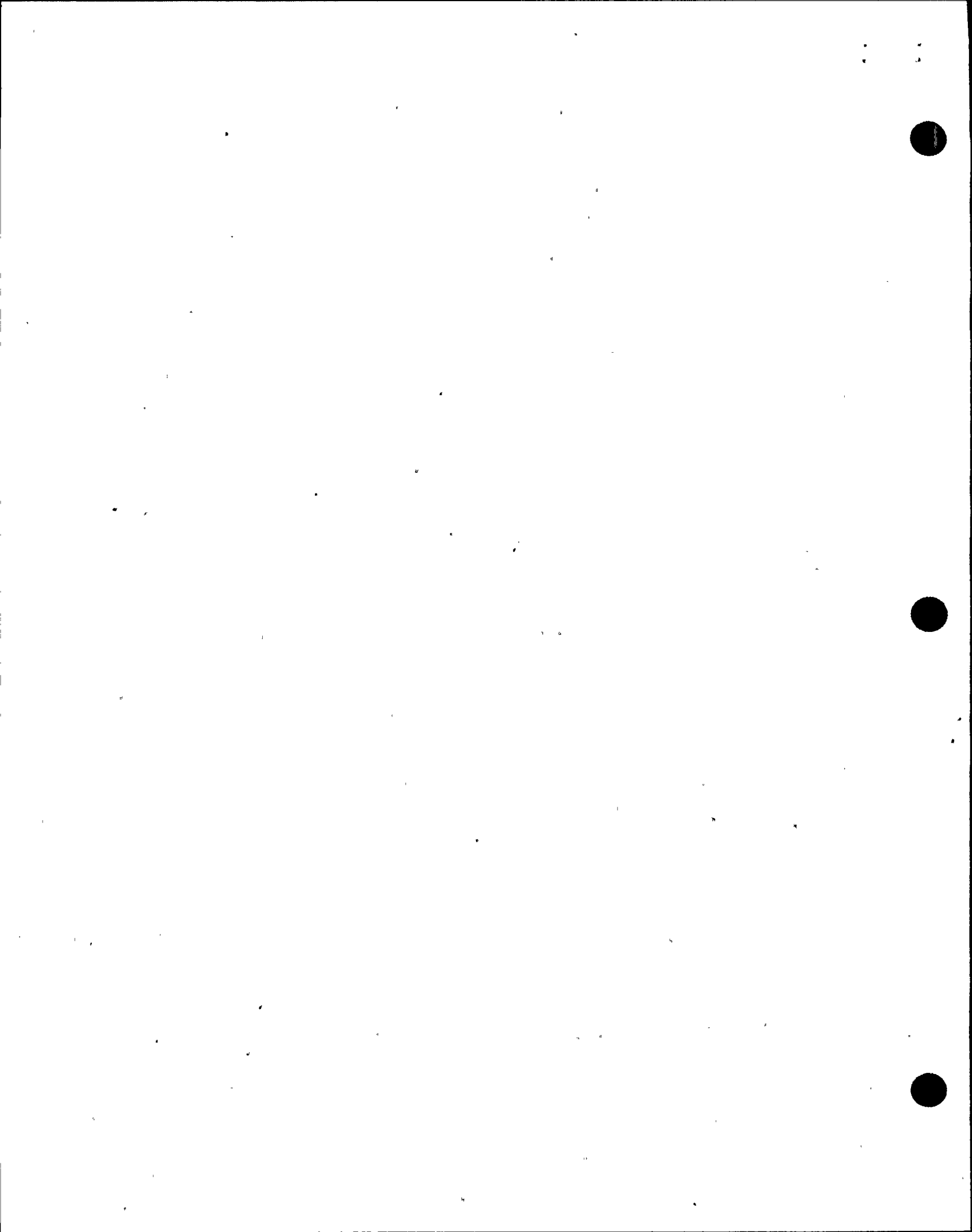
C. On-call Responsibilities.

EO-ESS-1.05* | 3

1. Individual on call
 - a. Fill their assigned positions when notified.
 - b. Maintain fitness for duty in accordance with company policy.
 - c. Be "Qualified" for designated position.
 - d. Carry pager with them and have it turned on.
 - e. Pager should be tested for operability prior to using it for on-call purposes.
 - 1) Test process:
 - * dial your pager# (due to problems with ALLTELL circuits, if using a touch pad phone, you must dial slowly).

Instructor demonstrate pager

Describe test process to class if personnel are unfamiliar with how test is completed.



- * after line is connected,
punch in some numbers after
the tone (series of 3 beeps)
 - * hang phone up
 - * should get paged within 2
minutes
 - * when paged, wait for page to
stop and push gray button
(1). Should see digits
displayed that were pressed
when test message was sent.
- f. If pager becomes inoperable:
- 1) Make sure pager is on
 - 2) Check batteries for proper
installation
 - 3) Stay in close proximity to your
phone since this is the secondary
means of notification.
 - 4) Next business day contact
Emergency Preparedness Facilities
Coordinator to obtain replacement
pager.
 - 5) If call forwarding is available it
may be used.
- g. Reporting Times
- 1) TSC, OSC, CR personnel
 - should be able to report
within 30 minutes

TCO-EP-90-005

Report times exceptions list in S-EPMP-5,
Figure 2 and 3.



- shall be able to report within 60 minutes
- 2) EOF, EOC, JNC personnel
 - should be able to report within 60 minutes
 - shall be able to report within 120 minutes
- 2. The primary designee is responsible to ensure that a qualified individual is on-call to fill the respective emergency position. To accomplish this, he/she may utilize rotating on-call schedule using qualified personnel listed in EPMP-3.
 - a. If an individual is on-call and desires to be relieved of his/her duties, they should ensure appropriate arrangements are made.
- 3. Upon notification, the on-call individual should make notifications to personnel qualified to fill the support related emergency positions that he/she is responsible for.
- D. Method of Notification
 1. Uses Community Alert Network (CAN) which is a computer aided call out system.

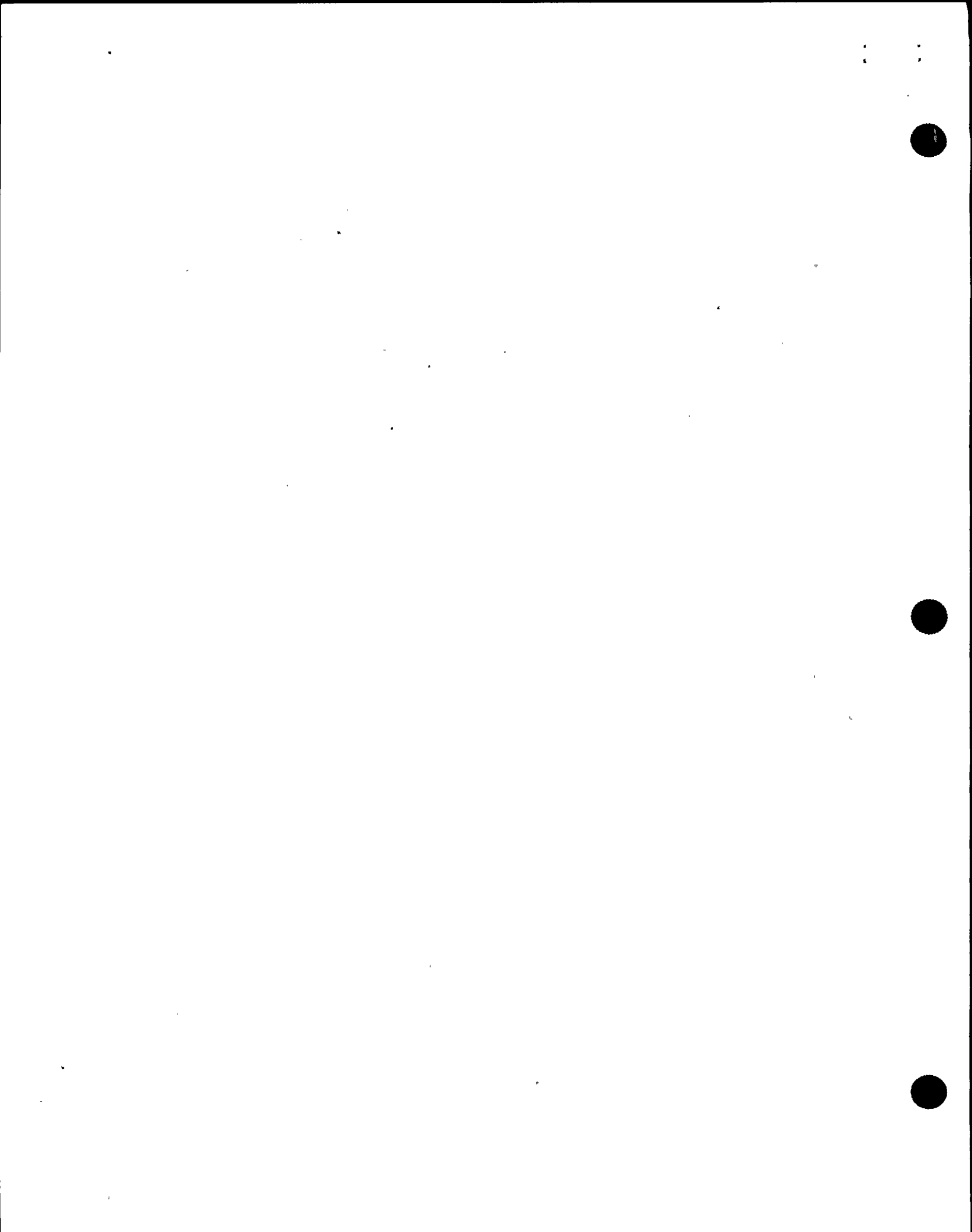
Make S-EPMP-3, Attachment 2 available to trainees.

Explain how functional groups may be found easily (use table of contents).

Show TP#10

Review support groups.

EO-ESS-1.06



2. Can system supplemented by digital type pagers which can be activated individually or all at once.
3. If need for notification arises, all personnel carrying a pager will receive a 3 digit coded message.
 - a. 1st digit indicates if incident is a drill, not a drill or a test.
 - b. 2nd digit indicates which unit(s) is/are involved.
 - c. 3rd digit denotes reporting location.
4. After completing beeper notification, the CAN System will call each individual listed on S-EPMP-5, Figure 2.
 - a. At beginning of message, CAN will request acknowledgement of the message by pressing a specified key.
 - 1) CAN will repeat message 3 times.
5. When CAN has completed all notifications, a list of persons who have acknowledged receipt of the message will be sent to the affected Control Room, TSC and EOF via telecopy.

The pager is considered the primary means of emergency notification.

Show TP#1

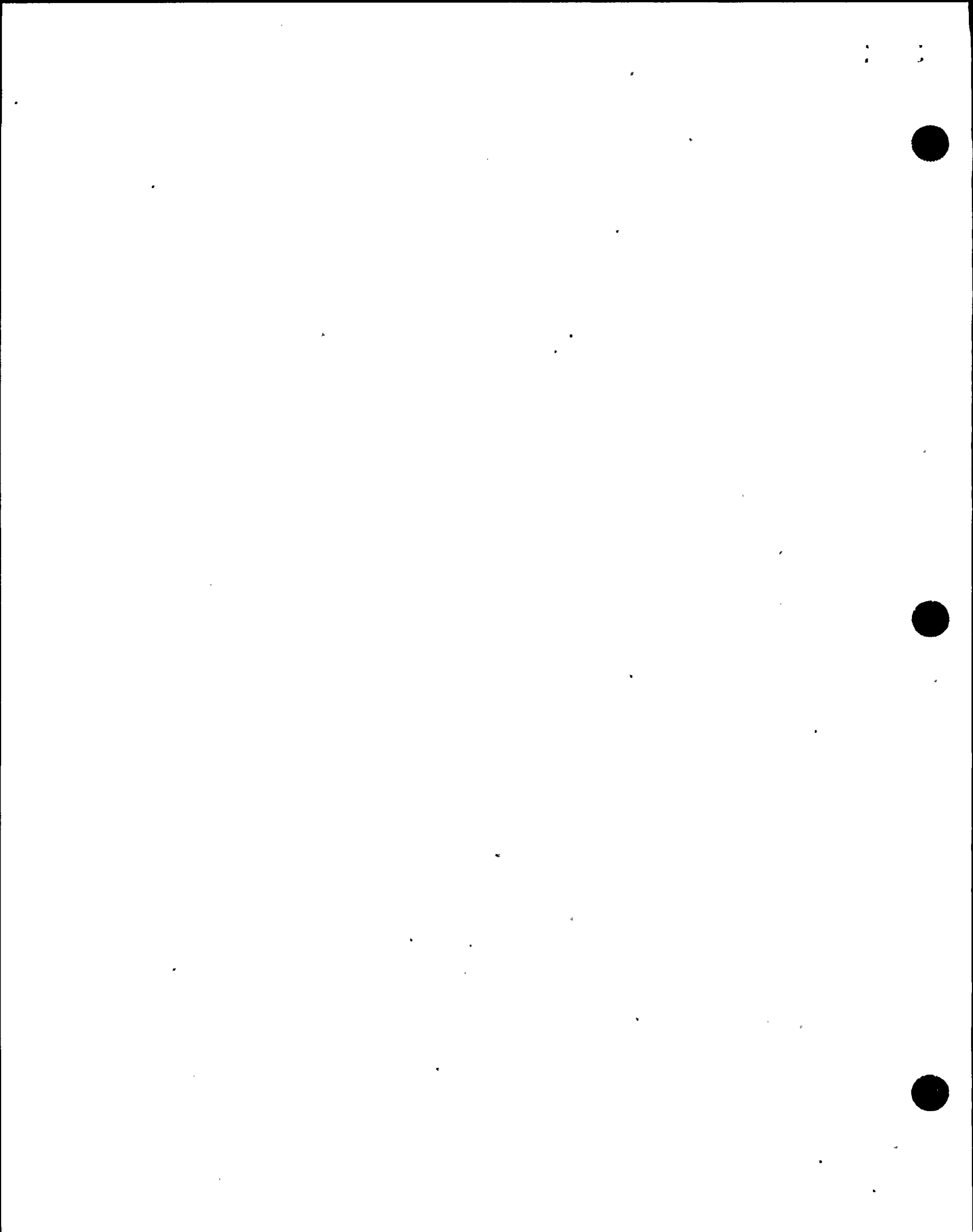
Discuss message interpretation

|3

Only alternates listed on Fig. 2 (S-EPMP-5) will receive phone notification. Alternates not on Fig. 2, who may be holding pager - will receive beeper notification only. If wrong key pressed CAN hangs up. Will try up to 2 more times.

Refer to student handout.

Show students example of CAN report.



6. After the on-call designees have been notified by the CAN System or by verbal notification, it is their responsibility to make secondary notifications necessary to main their associated support groups. This can be done by:
 - a. Utilizing the CAN System
 - b. Individually calling personnel
 - c. Use of a phone tree

TCO-EP-90-56

3

Department Supervisor will determine the method to be used.

VI. EMERGENCY ACCESS CONTROL

A. Off-Hours Notification

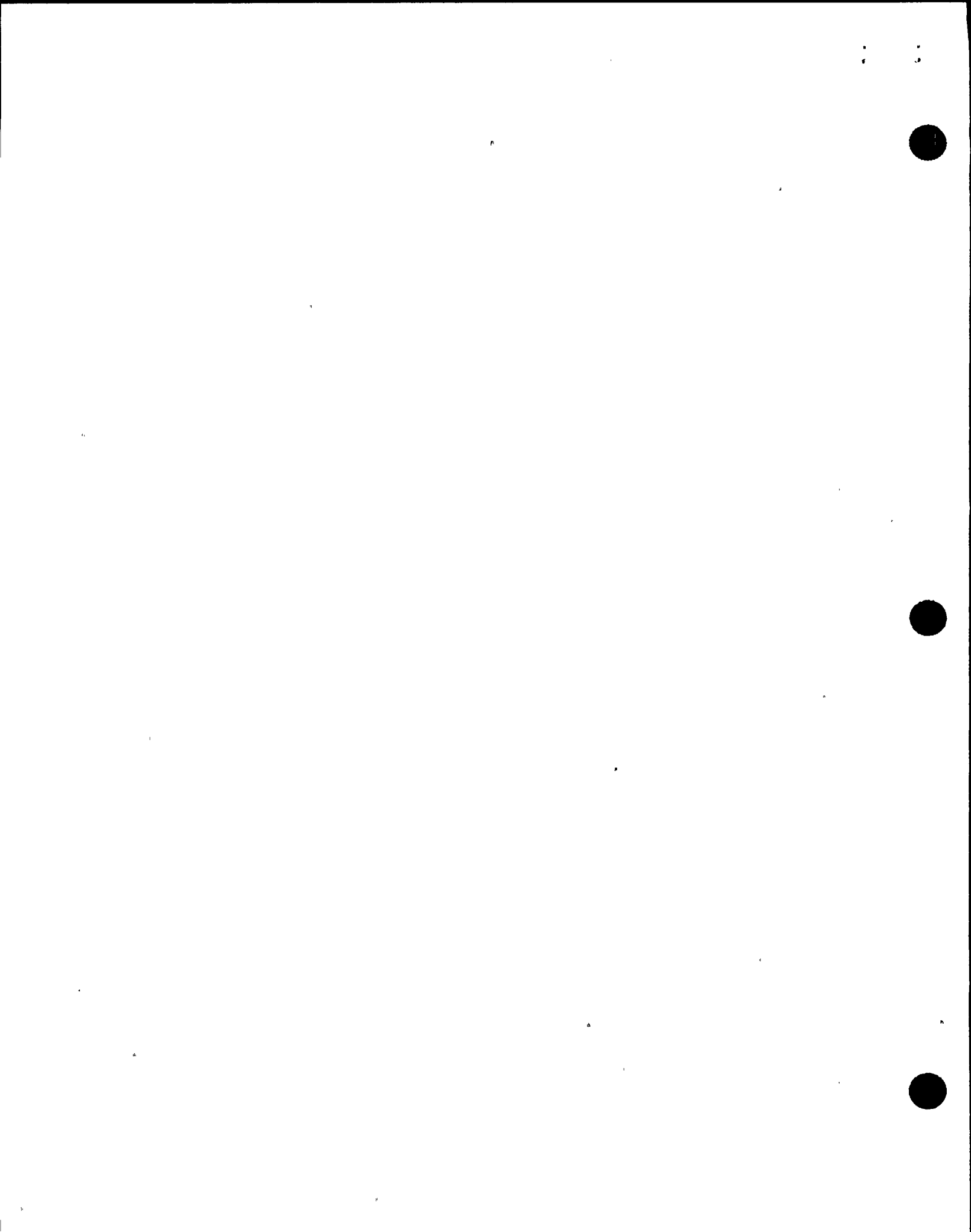
EO-ESS-1.06

1. Primary Method - CAN System
 - a. Individual will receive a pre-recorded message via a telephone call from the CAN System.
 - b. Message will include a site contact name and number to call if there is a problem reporting to site.
 - 1) Green Card is lost
 - 2) Consumed Alcohol within the last five (5) hours (Fitness For Duty Requirement)

- CAN = Community Alert Network

3

- 10CFR26, and AP-12.1 require that all persons called in for unscheduled work shifts, including emergencies, inform the individual who is requesting they report, any alcohol consumption within the previous five (5) hours.



- 2. Back-up Method - Telephone Call From Primary Designee
 - a. Will be your Facility Manager or Coordinator.
 - b. You must report any alcohol consumption within the previous five (5) hours (Fitness For Duty Requirement).

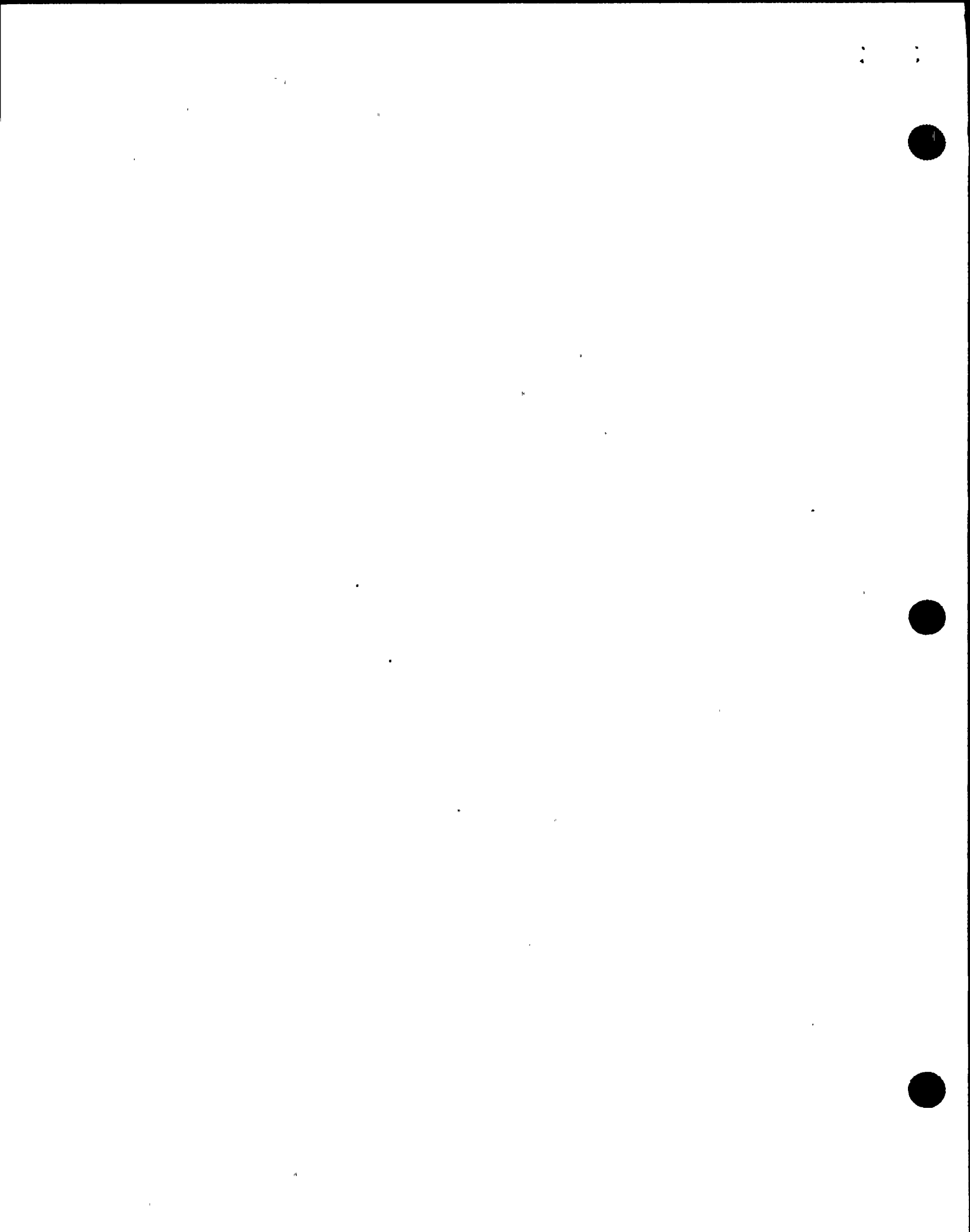
B. Access

EO-ESS-1.07

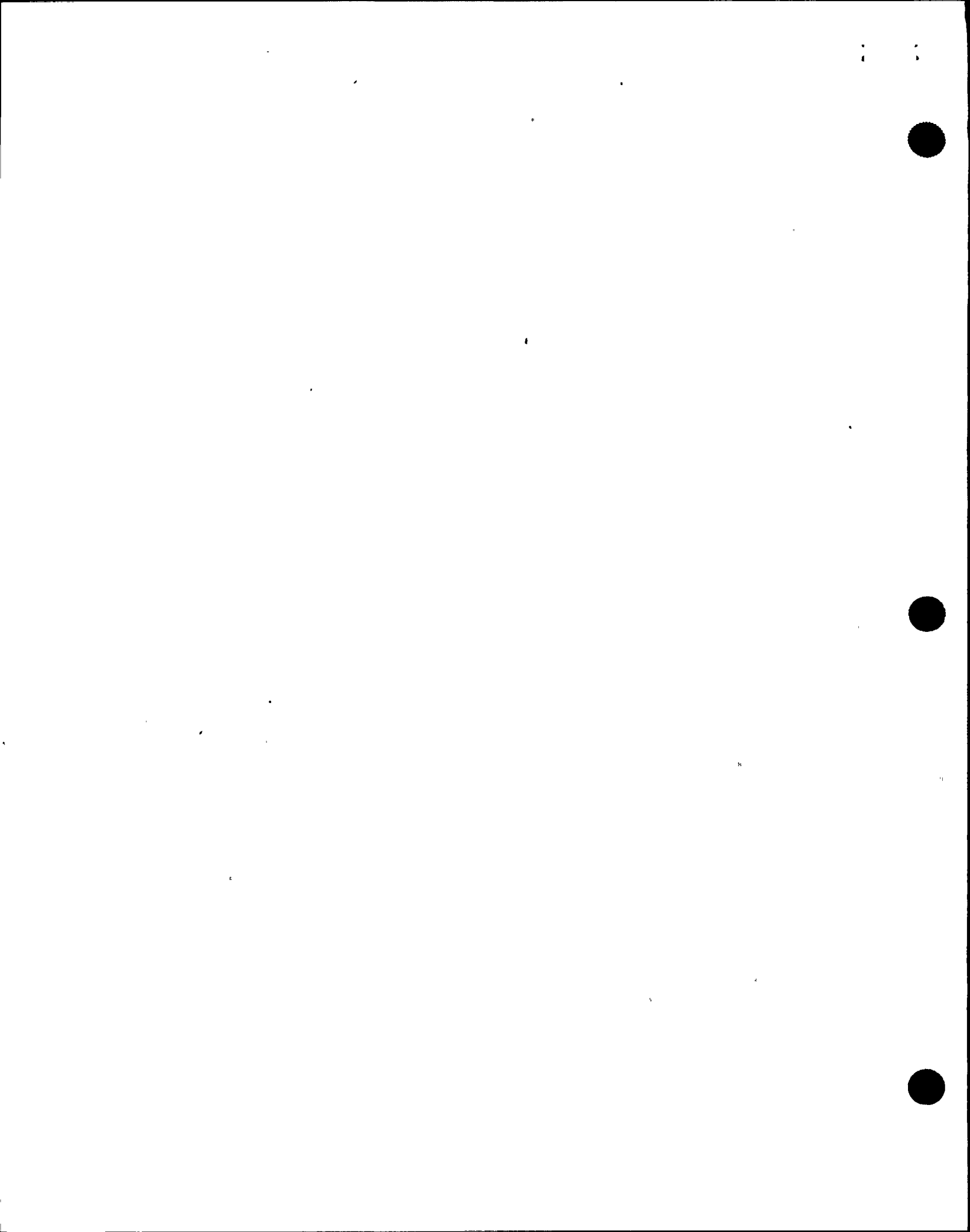
- 1. 10 mile Emergency Planning Zone (EPZ) access
 - a. A designated area of approximately a ten mile radius around the NMPNS used to facilitate off-site emergency planning.
 - b. Emergency Response Planning Areas (ERPA's) divide the 10 mile EPZ into manageable groups to facilitate evacuation and shelter.
 - c. Access during an emergency.
 - 1) The 10 mile EPZ may be secured by roadblocks manned by police or military.

Discuss 10 mile EPZ

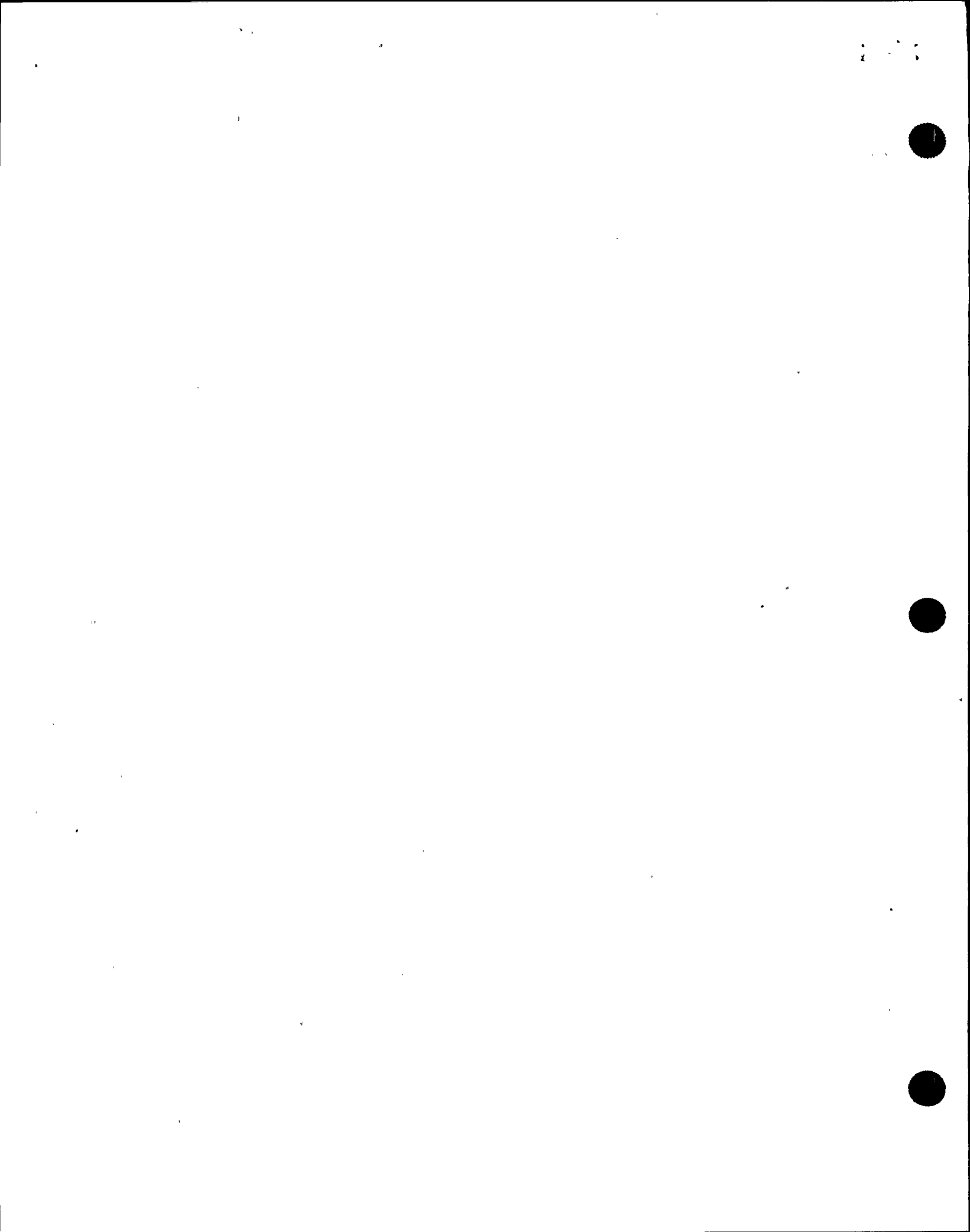
- No direct (whole body) exposure expected beyond the 10 mile EPZ.
- 10 mile EPZ based on whole body (beta, gamma) exposure from the plume (Plume Exposure Emergency Planning Zone)
- 50 mile EPZ based on the ingestion pathway (Ingestion Emergency Planning Zone).
Iodine and Cesium contamination



- | | |
|---|---|
| <ul style="list-style-type: none"> 2) Upon arriving at a roadblock, show your Oswego County Access Control ID card and any other requested ID. 3) Strictly adhere to all instructions (areas to avoid, etc.) | <p>"Green card"</p> <p>Should ask trainees what is meant by other approved ID. These are found in EPP-14, Figure 1.</p> |
| <ul style="list-style-type: none"> 2. NMPNS Access <ul style="list-style-type: none"> a. Upon arriving at site roadblocks, provide the Oswego County Access Control ID card and any other requested ID. b. If an individual does not possess the appropriate I.D, access may be granted by security if there is sufficient cause. c. Adhere to all given instructions. | <ul style="list-style-type: none"> - Site boundary controlled by NMPNS Security and Oswego County Sheriff. <p>Provisions are available for access without appropriate ID in certain areas, however, should have ID for access.</p> |
| <ul style="list-style-type: none"> 3. To gain access to the EOF during an emergency, you must: <ul style="list-style-type: none"> a. Have Oswego County Access Control ID Card b. Present any ID requested by security personnel (EPP-14, Figure 1) c. Sign registration log at front desk | <p>TCO-EP-90-006</p> <p>Individuals without appropriate ID may be allowed access if sufficient reason exists to enter.</p> |
| <ul style="list-style-type: none"> 4. To gain access to the AEOF during an emergency, you must: <ul style="list-style-type: none"> a. Have Oswego County Access Control ID Card | <p>TCO-EP-90-006</p> |



- b. Present any ID requested by security personnel (EPP-14, Figure 1) |3
 - c. Sign registration log at front desk |
 - 5. Protected area access
 - a. Nuclear security will post status boards to notify incoming personnel.
 - b. Provide Oswego County access control ID to security.
 - c. No visitors allowed.
 - 6. To gain access to the JNC during an emergency you must: TCO-EP-90-006 |3
 - a. Have Oswego County Access Control ID Card |
 - b. Present any ID requested by security personnel (EPP-14, Figure 1) |
 - c. Sign registration log at front desk |
- C. Distribution of Oswego County Access Control ID Cards
 - 1. Normal issue
 - a. Trainee completes part I of application.
 - b. Training Department fills out part II.
 - c. Manager of emergency preparedness authorizes issue.
 - d. Trainee receives completed application with instructions for obtaining ID.
 - Hand out "Authorization for issuance of Oswego County access control ID card to all trainees who do not have cards.
 - Show TP#17
 - Discuss temporary issue.



- | | | | |
|--|--|--------------------|-----------------|
| <p>2. Temporary issue</p> <p>a. Supply necessary information to site contact.</p> | <p>Necessary info:</p> <ol style="list-style-type: none"> 1. Name 2. Agency 3. SS# 4. Location needing access to site contact is the designated call out person from EPMP-3. | <p>EO-ESS-1.08</p> | <p> 3</p> |
| <p>b. Report to James A. FitzPatrick Nuclear Power Plant EOF.</p> | <p>Located on Rt. 176 at the Oswego County Airport six tenths of a mile South of Howard Road.</p> | | <p> 3
 </p> |
| <p>c. Site contact relays information for approval. Persons authorized to approve issue are:</p> <ol style="list-style-type: none"> 1) EOF Security Director 2) Security Coordinator 3) Manager, Emergency Preparedness 4) Emergency Preparedness Staff 5) Corporate Emergency Director/
Recovery Manager | <p>This list may be expanded as required during an emergency.</p> | | <p> 3
 </p> |
| <p>d. Required information is relayed to JAFNPP EOF security desk.</p> | <p>Will compare your ID with information received from site.</p> | | |



- e. Upon your arrival at JAFNPP EOF, security will verify information.
- f. If all information corresponds, you will receive temporary ID and ingress route.

Q: Why does route to the site make any difference?

A: Do not want to drive through plume.

- 3. Replacement card issue is the same as normal issue.

VII. HEALTH PHYSICS PROCEDURE (S-EPP-15)

- A. Describes health physics requirements as they relate to the following areas during an emergency:

Show TP#18

- 1. Exposure control
- 2. Dosimetry control
- 3. Respiratory protection
- 4. KI distribution
- 5. Personnel, equipment and area decontamination

Discuss Health Physics Procedures.

- B. The Site Emergency Director (directly or through the RAM) is the only individual authorized to waive or modify existing station health physics procedures.



- | | | |
|---|--|--|
| <p>1. Emergency exposure is defined as: Exposure which exceeds 10CFR20 limits and is received during an emergency.</p> <p>C. Exposure Control</p> <p>1. General Information</p> <p>a. Guidelines apply only to actual emergencies.</p> <p>b. Radiation exposure shall be maintained to the degree possible ALARA.</p> <p>c. Normal administrative methods should remain in force.</p> <p>d. Emergency exposure is considered part of occupational exposure.</p> <p>2. Emergency Exposure Guidelines</p> <p>a. Corrective/protective actions</p> <p> 1) Whole body - 25 Rem</p> <p> 2) Extremities - 100 Rem</p> <p> 3) Thyroid - 125 Rem</p> <p>b. Life saving actions</p> <p> 1) Whole body - 75 Rem</p> | <p>RWP's, ALARA measures, exposure clearances.</p> <p>Operations needed to reduce consequences of emergencies.</p> <p>Assessment</p> <p>Surveillance</p> <p>- Rescue</p> <p>- First aid</p> <p>- Actions immediately needed to save a life</p> | <p> 3</p> <p> </p> <p> </p> <p> 3</p> <p> 3</p> |
|---|--|--|

EO-ESS-1.09



- 2) Extremity - 300 Rem
- 3) Thyroid - no limit

Rational for no limit for thyroid exposure when perform in life saving actions is "complete loss of thyroid is considered an acceptable risk for saving a life".

3. Emergency exposure authorization

EO-ESS-1.10 |3

a. Preexposure evaluations

- 1) Probability of success shall be weighed against risk.
- 2) Personnel shall volunteer
 - Should be >45 years old
 - Shall be briefed on consequences
 - Should only be one exposure in a lifetime
 - Women of child bearing are shall not be allowed emergency exposure
- 3) Personnel shall not enter areas where dose rates are unknown.
- 4) Dosimetry capable of measuring expected types and levels of exposure shall be used.

4. Post-exposure evaluation

- a. Individual receiving the exposure shall be restricted from occupational exposure pending exposure and medical evaluations.



- b. Dose equivalents of 10 Rem whole body, 60 Rem to the skin, or 150 Rem extremity shall be brought to the attention of a physician.
 - c. Dose equivalents of 25 Rem whole body, 150 Rem to the skin, or 375 Rem extremity require examination by a physician.
- D. Emergency Dosimetry Control
- 1. Types of dosimetry/requirements
 - a. Film badge/TLD - sensitive to beta and gamma.
 - b. Dosimeter, sensitive to gamma.
 - c. Worn on front of body, within a 6 inch diameter circle on chest, labels facing outward.
 - 2. Issue
 - a. Until dosimetry issue station is set up, OSC emergency cabinets have a large quantity of dosimeters available to handle immediate needs.
 - b. RAM shall direct the Site Dosimetry Coordinator to set up a dosimetry issue area.

This section only discussed with trainees who are either white badged or not badged.

Show TP#22

Discuss dosimetry

Most likely in the OSC.



E. Emergency Respiratory Protection

1. NMPNS respiratory protection procedures shall apply during emergency conditions.
2. Three exceptions to normal respirator usage during an emergency are:
 - a. Respirator selection will be based on 80 hour/week usage.
 - b. Iodine sorbent canister allowed with full face filter with PF or 50.
 - c. Potassium iodine (KI)

This section should only be reviewed with classes containing respirator qualified personnel.

F. Potassium Iodine (KI) Distribution

1. KI reduces the chance that you will absorb radioactive iodine into your thyroid by filling up your thyroid gland with non-radioactive iodine.
2. Distribution
 - a. One tablet a day for no less than 7 days. (But not to exceed 10 days)
 - b. Maximum efficiency obtained if KI taken before iodine ingestion or within 2 hours after.
 - c. Must be documented.
 - d. Personnel must volunteer to be given KI.
 - e. Follow-up medical surveillance required.

The thyroid can only store a certain amount of iodine. EO-ESS-1.11 |3

KI is of some value up to 12 hours after uptake.



- f. KI should not be administered to people allergic to iodine fever, could cause joint pains or swelling of parts of the face and body.
- G. Personnel, Equipment and Area Decontamination
1. Any instance of personnel, equipment or area contamination should be immediately brought to the attention of a RP Technician. DO NOT ATTEMPT DECONTAMINATION WITHOUT RP GUIDANCE.
- H. Frisking
1. Hand and foot monitor
 - a. Step onto foot monitor.
 - b. Place hands into hand slots.
 - c. When safe light comes back on remove hands from slots.
 - d. If contamination is present, alarm will sound and no light will come on.
 - e. If you pull your hand out early, an alarm will sound and the yellow (recount) light will come on. Place hand back into the slot, to silence alarm, and wait for safe light to come back on.
- This section will be covered in greater detail in lesson plans for classes needing this information. EO-ESS-1.12 |3
- Instructor demonstrate use of Hand and Foot Monitor. |3
- This section covered only with persons assigned to TSC and EOF. EO-ESS-1.12 |3
- Instructions are posted on front of monitor.
 - Green light (safe) should go out and white light (counting) should illuminate.
- If this occurs, frisk using hand held frisker.



- f. If alarm sounds again, notify RP Technician.
 - g. Frisk hand carried items with probe located on side of monitor.
2. Frisking procedure
- a. Frisk hand before touching probe.
 - b. Check other hand.
 - c. Frisk entire body starting at head and face and work down over entire body.
 - d. Frisk should be performed:
 - 1) Hold probe approximate 1/2" away from surface being frisked.
 - 2) Move probe 2-3 inches per second.

This section only needs to be discussed with persons who are not radiation protection qualified.

IX. MAINTAINING EMERGENCY PREPAREDNESS

EO-ESS-1.13 | 3

A. Training

B. Exercises and Drills

1. Definitions:

- a. Exercise-preplanned simulation of accidents, designed and conducted in a manner that the response of the emergency organization closely approximates the response to the actual incident and tests major portions of the SEP.

Emphasize that this is a test for Emergency Response Organization.

- Evaluated by the NRC
- Licensing requirement

| 3
|



- b. Drill-preplanned simulations in which the participants are walked or talked through one or more procedures, or aspects of the SEP.
- 2. Purpose
 - a. Ensure participants are familiar with duties/responsibilities.
 - b. Verify adequacy of SEP.
 - c. Check emergency supplies and equipment.
 - d. Test communications.
 - e. Verify adequacy of interrelationships with off-site agencies.
- C. Reviewing/updating plans and procedures.
 - 1. SEP procedures are reviewed/updated annually.
 - 2. Changes handled by the Manger Emergency Preparedness.
- D. Maintenance/Inventory of Equipment
 - 1. Emergency kits inspected quarterly and after use.
 - 2. Guidelines for inspection provided in EPMP-2.
- E. Public Education/Information
 - 1. Distribute public information manually.

Emphasize that this is training for Emergency Response Organization.



X. CONCLUSION

A. Questions

Ask trainees if they have any questions about material covered.

B. Objectives

Ask trainees if they would like to review any objectives.

C. If this lecture is to be followed by functional group training, proceed to applicable lesson plan.

D. Examination

1. If no other training is required, distribute examination.

Distribute exam to trainees.

Remind them that exam is closed book.

Remind trainees to complete course critique when finished with exam.

