
Document Update Notification

COPYHOLDER NO: **103**

TO: **NRC - WASHINGTON**

ADDRESS: **DOC CNTRL DESK MAIL STOP OP1-17
WASHINGTON DC 20555**

DOCUMENT NO: **OP-1903.030**

TITLE: **EVACUATION**

REVISION NO: **024-00-0**

CHANGE NO: **AP-24**

SUBJECT: **NEW REVISION**



*If this box is checked, please sign, date, and return transmittal
in envelope provided.*

ANO-1 Docket 50-313

ANO-2 Docket 50-368

Signature

Date

A045

**ENTERGY OPERATIONS INCORPORATED
ARKANSAS NUCLEAR ONE**

57 of 68

TITLE: Evacuation SET # <i>103</i>	PROC/WORK PLAN NO. 1903.030	CHANGE NO. 024-00-0
	WORK PLAN EXP. DATE N/A	TC EXP. DATE N/A
	SAFETY-RELATED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IPTE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	TEMP ALT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

When you see the <u>TRAP</u>	use the <u>TOOLS!!</u>
Time Pressure	Self Check
Distraction/Interruption	Peer Check
Multiple Tasks	3-Part Communication
Over Confidence	Pre-Evolution Briefs
Vague or Interpretive Guidance	Knowledge
First Shift/Last Shift	Placekeeping
Peer Pressure	STAR
Change/Off Normal	Procedures
Physical Environment	
Mental Stress (Home or Work)	

VERIFIED BY	DATE	TIME
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

FORM TITLE: VERIFICATION COVER SHEET	FORM NO. 1000.006A	CHANGE NO. 047-04-0
--	------------------------------	-------------------------------

**ENTERGY OPERATIONS INCORPORATED
ARKANSAS NUCLEAR ONE**

59 of 68

TITLE:Evacuation	PROC/WORK PLAN NO. 1903.030	CHANGE NO. 024-00-0
------------------	--------------------------------	------------------------

<input checked="" type="checkbox"/> PROCEDURE	<input type="checkbox"/> WORK PLAN, EXP. DATE <u>N/A</u>	PAGE <u>1</u> OF <u>1</u>
---	--	---------------------------

TYPE OF CHANGE:				
<input type="checkbox"/> NEW	<input checked="" type="checkbox"/> REVISION	<input type="checkbox"/> PC	<input type="checkbox"/> TC	<input type="checkbox"/> DELETION
Procedure or Work Plan	<input type="checkbox"/> EZ	EXP. DATE: <u>N/A</u>		

AFFECTED SECTION: (Include step # if applicable)	DESCRIPTION OF CHANGE: (For each change made, include sufficient detail to describe reason for the change.)
4.11	Changed "Plant Evacuation" to "Declaration of Site Area or General Emergency."
5.3	Changed "Plant Evacuation" to "Declaration of Site Area or General Emergency."
6.1.2.A	Added instructions to proceed to 1903.011.
6.1.2.D	Added statement "except for SAE or GE."
6.2.2	Added statement for declaration of SAE or GE, use 1903.011 forms.
6.3.1.A	Deleted plant evacuation, added SAE or GE.
6.3.1.D	Deleted plant evacuation, added SAE or GE.
6.3.2	Added Maintenance Facility.
1903.030 B	Added Note to section 1 for SAE or GE.
1903.030 B, step 1.1	Added statement to see note. Added "Procedure 1903.011".
1903.030 B	Delete map for section 2. Added chart for step 1.
1903.030 B, section 2	Combined step 3 with step 2. Re-numbered remaining steps.
1903.030 B, section 3	Step 1 – Added "plant areas to avoid" to protective actions.

FORM TITLE: DESCRIPTION OF CHANGE	FORM NO. 1000.006C	CHANGE NO. 047-04-0
---	-----------------------	------------------------

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 1 of 27 CHANGE: 024-00-0
---	--	---

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE NO.</u>
1.0 Purpose	2
2.0 Scope	2
3.0 References	2
4.0 Definitions	3
5.0 Responsibility and Authority	4
6.0 Instructions	5
6.1 Initiating Conditions	5
6.2 Immediate Actions	6
6.3 Accountability	9
6.4 Follow-Up Actions	10
6.5 TSC/OSC Evacuation	10
6.6 EOF Evacuation	15
6.7 Road Blocks	15
7.0 Attachments and Forms	
7.1 Attachments	
7.1.1 Attachment 1 - Technical and Operational Support Center Evacuation Decision Flow Chart	17
7.1.2 Attachment 2 - TSC-OSC Precautionary Evacuation Primary/Secondary Group Assignments	18
7.1.3 Attachment 3 - Directions to Atkins Emergency Work Center	19
7.2 Forms	
7.2.1 Form 1903.030A - Onsite Accountability	20
7.2.2 Form 1903.030B - Plant Evacuation Checklist	21
7.2.3 Form 1903.030C - Localized Evacuation Checklist ..	26

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 2 of 27 CHANGE: 024-00-0
---	--	---

1.0 PURPOSE

The purpose of this procedure is to provide the symptoms for which a Localized Evacuation, Plant Evacuation, Exclusion Area Evacuation, or an Offsite Evacuation should be declared and the subsequent actions to be taken by plant personnel.

2.0 SCOPE

This procedure is applicable to emergency situations involving Unit One and/or Unit Two.

3.0 REFERENCES

3.1 REFERENCES USED IN PROCEDURES PREPARATION:

- 3.1.1 Emergency Plan
- 3.1.2 ANO Security Plan and Procedures
- 3.1.3 E-27 Sheets 1-4, "Schematic Diagram for the Evacuation Warning System"
- 3.1.4 E-427, Sheets 1-7, "Schematic Diagram for the Evacuation Warning System"

3.2 REFERENCES USED IN CONJUNCTION WITH THIS PROCEDURE:

- 3.2.1 1903.010, "Emergency Action Level Classification"
- 3.2.2 1903.011, "Emergency Response/Notifications"
- 3.2.3 1043.034, "Security at ANO and the EOF During an Emergency"
- 3.2.4 1904.XXX, "Offsite Dose Projections Series"
- 3.2.5 1903.064, "Emergency Response Facility - Control Room"
- 3.2.6 1903.065, "Emergency Response Facility - Technical Support Center (TSC)"
- 3.2.7 1903.066, "Emergency Response Facility - Operational Support Center (OSC)"
- 3.2.8 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)"
- 3.2.9 1903.077, "U.S. Army Corps of Engineers"

3.3 RELATED ANO PROCEDURES:

- 3.3.1 1903.023, "Personnel Emergency"
- 3.3.2 1903.034, "Emergency Operations Facility Evacuation"

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 3 of 27 CHANGE: 024-00-0
--	---	---

3.4 REGULATORY CORRESPONDENCE CONTAINING NRC COMMITMENTS WHICH ARE IMPLEMENTED IN THIS PROCEDURE, [**BOLD**] DENOTES COMMITMENTS:

3.4.1 0CAN078609, (P-4405), Step 6.3.2.

3.4.2 0CAN128211, (P10858), Sections 6.5.4 A-L

4.0 DEFINITIONS

4.1 Protected Area: The area encompassed by physical barriers (i.e., the security fence) and to which access is controlled.

4.2 Exclusion Area: That area surrounding ANO within a minimum radius of 0.65 miles of the reactor buildings, but outside the protected area and controlled to the extent necessary by ANO during periods of emergency.

4.3 Localized Evacuation: The orderly withdrawal of all personnel from selected areas within the protected area. The area selected for a localized evacuation should have well defined boundaries and be easily controllable (e.g., Unit 1 and/or Unit 2 Auxiliary Buildings, Radwaste Building, Hydrogen Storage Area, etc.).

4.4 Plant Evacuation: The orderly withdrawal of all personnel from the protected area except for those personnel required to respond to the situation.

4.5 Exclusion Area Evacuation: The orderly withdrawal of personnel from that portion of the Exclusion Area which is affected by an emergency condition as described in Section 6.1.3

4.6 Offsite Evacuation: The orderly withdrawal of personnel from that portion of the area outside of the Arkansas Nuclear One Exclusion Area which is affected by an emergency condition as described in Section 6.1.4.

4.7 Immediate Evacuation: The immediate and orderly withdrawal of all personnel from the affected Emergency Response Facility.

4.8 Precautionary Evacuation: A multi-stage evacuation of personnel located within an Emergency Response Facility.

4.9 Technical Support Center (TSC): The emergency response center located on the third floor of the ANO Administration Building which is equipped with instrumentation, communication systems, and facilities useful in monitoring the course of an accident.

4.10 Operational Support Center (OSC): The emergency response center within the ANO Maintenance Facility where support is coordinated for the following functions:

Onsite Radiological Monitoring
 Maintenance
 Nuclear Chemistry
 Emergency Medical Support
 Fire Fighting Support

The OSC serves as the assembly point and briefing area for repair and damage control teams.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 4 of 27 CHANGE: 024-00-0
---	--	---

- 4.11 Initial Accountability: Measures to account for all individuals remaining onsite after the declaration of a Site Area or General Emergency. The objective is to ascertain the names of missing individuals within 30 minutes following the declaration of a SAE or GE.
- 4.12 Continuous Accountability: Measures to maintain accountability for all individuals remaining onsite following a plant evacuation.
- 4.13 Atkins Emergency Worker Center: Emergency Center located at the Atkins High School. The center will be activated at the declaration of an Alert by the Arkansas Department of Health (ADH). The center is for use by ANO and ADH emergency workers following an evacuation of the plant site.

5.0 RESPONSIBILITY AND AUTHORITY

- 5.1 The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) is responsible for declaring a Localized, Plant, or Exclusion Area Evacuation when any of the symptoms contained in Sections 6.1.1, 6.1.2, or 6.1.3 are detected.
- The TSC Director and/or Radiation Protection and Radwaste Manager should ensure that evacuated personnel are monitored (i.e., via portal monitors or manual frisking) prior to their release from the site.
- 5.2 Arkansas Department of Health (ADH) personnel are responsible for implementing an Offsite Evacuation. This shall be accomplished in accordance with the Protective Action Guidelines contained in the State of Arkansas Emergency Operations Plan, Annex V, "Arkansas Nuclear One Radiological Incident Response Plan". The individual responsible for Emergency Direction and Control (i.e., the Shift Superintendent, TSC Director, or Emergency Operations Facility Director) is responsible for recommending an Offsite Evacuation in accordance with Procedure 1903.011, "Emergency Response/Notifications", Attachment 6.
- 5.3 The Security Shift Commander is responsible to provide initial accountability information to the TSC Support Superintendent. This information should be available within 30 minutes following a declaration of a Site Area or General Emergency.
- 5.4 The TSC Support Superintendent is responsible to ensure that continuous accountability stations are established (control rooms, Maintenance Facility, and Admin. building) and results reported to the TSC Director.
- 5.5 Emergency Response Organization (ERO) Personnel who remain onsite following a plant evacuation are responsible to carry out instructions for initial and continuous accountability as described in section 6.3 of this procedure.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 5 of 27 CHANGE: 024-00-0
---------------------------------	--	-----------------------------------

6.0 INSTRUCTIONS

6.1 INITIATING CONDITIONS

NOTE

If releases of radioactivity are in progress or suspected, the 1904.XXX, "Offsite Dose Projections Series" procedures should be utilized to assess the potential doses. Once the doses have been assessed, a determination can be made as to whether or not the conditions warrant the declaration of an emergency class and the subsequent recommendation of protective actions for onsite and offsite personnel.

6.1.1 Localized Evacuation

- A. A localized evacuation will be initiated if any condition exists which in the opinion of the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may pose a threat to the health and safety of plant workers. The area selected for evacuation should have well defined boundaries and be easily controllable.
- B. If the threat extends beyond a localized area, then consideration should be given for a Plant, Exclusion Area and/or Offsite Evacuation.

6.1.2 Plant Evacuation

The principal consideration when contemplating a Plant Evacuation is the safety of plant personnel.

A plant evacuation shall be considered in response to the following conditions:

- A. Declaration of a Site Area Emergency or General Emergency. Go to procedure 1903.011. Use Forms 1903.011 P, Q, R, S, T or U.
- B. HP survey results indicate that general area radiation levels outside of a Radiologically Controlled Area exceed 2.5 mRem/hr, which is attributed to a loss of control of radioactive material and the hazard is not confined to a well-defined area.
- C. HP air sample results indicate that unevaluated airborne radioactivity exceeds 9E-10 uCi/cc, which is attributed to a loss of control of radioactive material and the hazard is not confined to a well-defined area.
- D. An uncontrolled toxic gas leak exists (originating either on-site or off-site) and the hazard is not confined to a well-defined area.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 6 of 27 CHANGE: 024-00-0
---	--	---

The decision to evacuate non-essential personnel or retain them on-site should be based on the course of action which presents the minimum risk to employees (except for SAE or GE). Examples of extenuating conditions that may result in deciding against a plant evacuation are:

- An ongoing security threat within the protected area (consult with the Security Shift Commander to aid in determining the safest course of action).
- Inclement weather (e.g., Tornado, high winds, hazardous road conditions may preclude a safe evacuation of plant personnel).
- Radiological hazards exist. (Determine which action would result in lower dose to nonessential personnel).

6.1.3 Exclusion Area Evacuation

- A. An exclusion area evacuation shall be initiated if HP survey results indicate that general area radiation levels exceed 2.5 mREM/hr within the Exclusion Area.
- B. An exclusion area evacuation shall be initiated if personnel within the Exclusion Area could receive an exposure to a toxic gas (e.g., transportation accident involving truck, rail, or barge).

6.1.4 Offsite Evacuation

An Offsite Evacuation shall be recommended in accordance with Procedure 1903.011, "Emergency Response/Notifications", Attachment 6.

6.1.5 EOF Evacuation

See Procedure 1903.034, "Emergency Operations Facility Evacuation".

6.2 IMMEDIATE ACTIONS

6.2.1 Localized Evacuation

- A. If the conditions listed in section 6.1.1 are observed, then a localized evacuation of the affected area(s) should be considered.

Use Form 1903.030C, "Localized Evacuation Checklist", to perform a localized evaluation.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 7 of 27 CHANGE: 024-00-0
---	--	---

B. A brief description of the control room handswitch settings for the Evacuation Alarm System is outlined below:

1. Unit 1 - Three (3) position handswitch
 - a. REAC. BLD. - Activates the Unit 1 Reactor Building Alarm System only
 - b. OFF - Deactivates the Evacuation Alarm System
 - c. PHY. PLT. - Activates the Evacuation Alarm System for the entire physical plant including surrounding buildings located within the protected area.
2. Unit 2 - Four (4) position handswitch
 - a. OFF - Deactivates the Evacuation Alarm System
 - b. CTMT - Activates the Unit 2 Reactor Building Alarm system only
 - c. CTMT AUX - Activates only the Unit 2 Reactor Building and Unit 2 portion of the Auxiliary Building Alarm System
 - d. PLANT - Activates the Evacuation Alarm System for the entire physical plant including surrounding buildings located within the protected area.

6.2.2 Plant Evacuation

- A. Use Form 1903.030B, "Plant Evacuation Checklist", to determine if a plant evacuation is advisable. For a plant evacuation based on a declaration of a SAE or GE, use forms 1903.011 P, Q, R, S, T, or U.
- B. Shift Operations personnel on duty should report to the Control Room. Shift Operations personnel not on duty (training/support) should report to the OSC Assembly Area (located in the Maintenance Facility) and report to the OSC Director.
- C. The following groups should immediately report to their designated emergency work location and notify their immediate supervisor of their location for accountability purposes.
 1. Emergency Response Organization (ERO) personnel (EOF, TSC and OSC staff).

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 8 of 27 CHANGE: 024-00-0
--	---	---

2. All other shift personnel (affected unit Maintenance personnel, Nuclear Chemistry personnel, Health Physics personnel, etc.) should report to the OSC Assembly Area (located in the Maintenance Facility).
- D. Maintenance personnel from the unaffected unit who are neither a part of the OSC staff or are not assigned a position or task in the Emergency Response Organization, should report to the EOF and standby for instructions (See Procedure 1903.067, "Emergency Response Facility - Emergency Operation Facility (EOF)", for assembly location.)
- E. **IF** the hazard extends beyond the protected area, **THEN** consider initiating an Exclusion Area Evacuation and/or recommending an evacuation (and/or sheltering) of offsite areas.

6.2.3 Exclusion Area Evacuation

- A. **IF** either of the conditions listed in section 6.1.3 are detected, **THEN** an exclusion area evacuation should be initiated.
- B. Coordinate with Security Personnel for the evacuation and control of the affected area(s) within the exclusion area (including the Generation Support Building).
- C. Contact the U.S. Army Corps of Engineers to request that boat access to the portions of Lake Dardanelle within the exclusion area be controlled.
- D. Make the following announcement over the plant (dial 197) and EOF (dial 199 and pause approx. 15 sec.) PA system.

 "Attention all personnel. Attention all personnel. Due to (state reason) security will be restricting access to (state area). All personnel avoid this (these) area(s) until further notice.
- E. **IF** the hazard extends beyond the exclusion area, **THEN** consideration should be given for recommending an evacuation (and/or sheltering) of offsite areas.

6.2.4 Offsite Evacuation

Refer to Procedure 1903.011, "Emergency Response/ Notifications", Attachment 6, to determine the appropriate offsite Protective Action Recommendation (PAR).

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 9 of 27 CHANGE: 024-00-0
--	---	---

6.3 ACCOUNTABILITY

6.3.1 Initial Accountability

- A. The objective of Initial Accountability is to ascertain the names of missing individuals within 30 minutes following the declaration of a Site Area or General Emergency.
- B. Plant evacuees are accounted for as they exit the plant and are logged offsite by the security computer.
- C. Emergency response personnel who remain onsite are required to log in at the nearest security card reader using the special accountability code 0000.
- D. A list of missing individuals will be generated by the security computer based upon information acquired through steps 6.3.1.B and 6.3.1.C above. This list shall be available no later than 30 minutes following the declaration of a Site Area or General Emergency.
- E. The TSC Director shall initiate search and rescue efforts to locate missing personnel identified by the security computer.

[6.3.2 Continuous Accountability

- A. Personnel who remain onsite following a plant evacuation are to be accounted for on a continuous basis throughout an emergency.
- B. Continuous Accountability control points shall be established at entry/exit points to the Administration Building, Maintenance Facility and Control Rooms.
- C. Personnel entering or leaving the Administration Building, Maintenance Facility, or Control Rooms are responsible to record their relocation on Form 1903.030A, "Onsite Continuous Accountability Log".
- D. Accountability information for onsite personnel who are not assembled in the Administration Building, Maintenance Facility or Control Rooms can be obtained from the ERO member responsible for that particular task as described in section B of the Emergency Plan and the Emergency Response Facility Procedures - 1903.064, 1903.065, 1903.066 and 1903.067 (e.g., information on Nuclear Chemistry personnel can be obtained from the Nuclear Chemistry Manager.)

Additional information for onsite personnel, including their department and the individual responsible for them while onsite, can be obtained through the Support Manager.]

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 10 of 27 CHANGE: 024-00-0
--	---	--

6.4 FOLLOW-UP ACTIONS

- 6.4.1 Determine if any Emergency Action Level criteria have been exceeded. (Refer to 1903.010, "Emergency Action Level Classification")
- 6.4.2 Personnel (other than emergency response personnel) in the Controlled Access Areas should proceed to the Controlled Access exit points and monitor themselves, if possible, or follow HP instructions at the Controlled Access exit points prior to exiting.
- 6.4.3 Personnel other than the on-site emergency response personnel should:
 - A. Proceed to the nearest guard station, or the guard station designated in the plant evacuation announcement,
 - B. Log out of the plant and retain both their security badge and TLD, and
 - C. Proceed to the Atkins Emergency Worker Center (see Attachment 3).
- 6.4.4 Security personnel should implement evacuation and personnel accountability measures per Procedure 1043.034, "Security at ANO and the EOF During an Emergency".
- 6.4.5 If there are personnel unaccounted for following a plant evacuation, the Shift Superintendent/TSC Director shall initiate a search for personnel who are unaccounted for.
- 6.4.6 When conditions have been determined to no longer require evacuation, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may terminate the localized, exclusion area and/or plant evacuation. Termination of evacuations involving offsite areas must be coordinated with ADH personnel.

6.5 TSC/OSC EVACUATION

The Technical Support Center (TSC) and the Operational Support Center (OSC) are normally not evacuated in the event of a Plant Evacuation. The Onsite Radiological Monitoring Section of the Emergency Radiation Team shall monitor radiation levels while the centers remain occupied. However, if the following symptoms are observed in the TSC or OSC, actions should be taken in accordance with Sections 6.5.2 and 6.5.3.

6.5.1 Symptoms

- A. Area radiation levels above 2.5 mRem/hr.
- B. Unevaluated airborne radioactivity $>9E^{-10}$ μ Ci/cc.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 11 of 27 CHANGE: 024-00-0
---------------------------------	--	------------------------------------

6.5.2 Immediate Action

- A. Notify the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) of the above condition(s).
- B. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) should determine if the condition warrants further protective actions in accordance with Section 6.5.3. Attachment 1 is provided for action guidance.

6.5.3 Follow-Up Actions

- A. The Onsite Radiological Monitoring Section of the Emergency Radiation Team should increase surveillance of airborne radioactivity to once per hour.
- B. The Onsite Radiological Monitoring Section of the Emergency Radiation Team should determine the dose rates in the area approximately every 15 minutes. Projected personnel accumulated doses should be evaluated and appropriate stay times should be established.

NOTE

If necessary, additional respiratory protection equipment should be obtained from the Onsite Radiological Monitoring Section of the Emergency Radiation Team.

- C. If the iodine concentration exceeds $2.7E^{-9}$ $\mu\text{Ci/cc}$, an occupancy log must be kept to record DAC hours. If the iodine concentration exceeds 4 DAC ($8.0E^{-8}$ $\mu\text{Ci/cc}$), respiratory protection or evacuation is required.
- D. If the radiation level is greater than 100 mRem/hr but less than 1 Rem/hr:
 - 1. 30 minutes may be allowed to determine if the condition is temporary or long-term.
 - 2. If it is determined that the condition is temporary, evaluate the projected personnel accumulated dose.
 - 3. If it is determined that the condition is long-term, a precautionary evacuation of the TSC and/or OSC is required.
- E. If radiation levels reach 1 Rem/hr, immediate evacuation of the TSC and/or OSC is required.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 12 of 27 CHANGE: 024-00-0
--	---	--

- F. If the TSC and/or OSC is/are evacuated, personnel should relocate to the EOF (use west end, ground floor entrance).

NOTE

After relocation to the Secondary TSC or OSC, Emergency Team Leaders are responsible for reporting accountability of team personnel to their supervisors. Each TSC or OSC staff person is responsible for reporting to his or her supervisor. Each manager shall report accountability information to the TSC Support Superintendent.

- G. If the TSC or OSC is evacuated, security personnel should implement evacuation and personnel accountability measures per Procedure 1043.034. "Security at ANO and the EOF During an Emergency".
- H. Accountability results of emergency personnel should be reported to the TSC Director at the EOF, or to the Shift Superintendent if the TSC Director cannot be readily contacted.

NOTE

INFORMATION CONTAINED WITHIN THE SYMBOLS (*) IS PROPRIETARY OR PRIVATE INFORMATION

- I. *The Security Shift Commander, except for Control Room personnel, should be the last to exit the plant to assure security and accountability actions have been completed. They should advise the Shift Superintendent of the affected unit upon their exit of the plant.*
- J. When a TSC or OSC evacuation is declared, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) should consider the need for an Exclusion Area Evacuation per Section 6.1.3 if not already declared.

[6.5.4 Immediate Evacuation of TSC/OSC

- A. The TSC Director should verify the need for and declare an immediate evacuation of the TSC or OSC when symptoms occur which require such action per Section 6.5.3.E.
- B. The TSC Director should contact the Main Guard Station and the Shift Superintendent to advise that an immediate evacuation has been declared.
- C. The TSC Director should ensure that an evacuation announcement is made over the Public Address System, and the plant evacuation alarm is sounded. The TSC Director should determine, at his discretion, the affected personnel to whom the announcement applies.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 13 of 27 CHANGE: 024-00-0
---------------------------------	--	------------------------------------

NOTE

The evacuation announcement should state: "An immediate evacuation of Technical Support Center (and/or Operational Support Center) personnel has been declared. (Affected personnel) implement evacuation procedures. (Affected personnel) relocate to the EOF via (designated evacuation route)." (This announcement and the evacuation alarm should be repeated two times).

- D. All TSC or OSC personnel should gather essential materials (e.g. log books, status sheets, drawings in-use, etc.) and equipment (e.g. SCBA's, survey meters, protective clothing, etc.) and evacuate their respective areas without delay.
- E. Prior to his relocation to the Secondary TSC, the TSC Director may, at his discretion, transfer his duties to the following individual who will function as interim TSC Director:
 - 1. If the Emergency Operations Facility is not activated, the Shift Superintendent of the affected unit may temporarily assume the TSC Director duties; or
 - 2. If the Emergency Operations Facility is operational, then a turnover of emergency functions to the EOF Director shall be performed in accordance with procedure 1903.065.
- F. After transferring these duties to the appropriate individual, the TSC Director should evacuate in accordance with Section 6.5.3.I.
- G. Upon arrival at the Secondary TSC, the TSC Director should establish communications with the interim TSC Director to receive a status update and to reassume TSC Director duties.
- H. Emergency response personnel should report to their preassigned work areas in the EOF, unless directed otherwise, (see Procedure 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)", for room assignments).
- I. The TSC Director should ensure that the NRC and State authorities are advised of the relocation to and operational status of the Secondary TSC and/or OSC.
- J. The TSC Director should advise the Shift Superintendent when the Secondary TSC is operational.
- K. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) must approve reentry into the plant until the evacuation is terminated.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 14 of 27 CHANGE: 024-00-0
--	---	--

- L. When the plant is determined to have returned to a condition where the TSC or OSC evacuation is no longer required, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may terminate the TSC or OSC evacuation.]

6.5.5 Precautionary Evacuation of TSC/OSC

- A. The TSC Director should verify the need for and declare a precautionary evacuation of the TSC and/or OSC when symptoms occur which require such action per Section 6.5.3.C and/or 6.5.3.D.
- B. The TSC Director should contact the Main Guard Station and Shift Superintendent and advise them that a precautionary evacuation has been declared.
- C. The TSC Director should ensure that an evacuation announcement is made over the Public Address System, and the plant evacuation alarm is sounded. The TSC Director should determine, at his discretion, the affected personnel to whom the announcement applies.

NOTE

The evacuation announcement should state: "A Precautionary Evacuation of Technical Support Center (and/or Operational Support Center) personnel has been declared. (Affected personnel) implement evacuation procedures. (Affected personnel) relocate to the EOF via (designated evacuation route)." (This announcement and the evacuation alarm should be repeated two times.)

- D. All TSC and/or OSC personnel shall gather necessary materials (e.g. log books, status sheets, drawings in-use, etc.) and equipment (e.g. SCBA's, survey meters, protective clothing, etc.) and evacuate their respective areas as instructed by the TSC Director per Section 6.5.5.E.
- E. A precautionary evacuation of the TSC or OSC should be accomplished by relocating a primary and a secondary group of emergency response personnel as identified in Attachment 2, or as otherwise designated by the TSC Director. The secondary TSC or OSC group should evacuate first; the primary group should evacuate upon the direction of the TSC Director, if practical after the secondary group is in place at the EOF. *Security personnel will normally evacuate with the primary group*.
- F. Prior to his relocation to the Secondary TSC, the TSC Director may, at his discretion, transfer his duties to the following individual who will function as interim TSC Director:

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 15 of 27 CHANGE: 024-00-0
---	--	--

1. Shift Superintendent, as deemed necessary if the TSC Director is in a situation such that he could not perform TSC Director duties during the TSC to Secondary TSC transition, and if the EOF is not activated; or
 2. EOF Director, if EOF is activated.
- G. After transferring these duties to the appropriate individual, the TSC Director and the primary TSC group should evacuate in accordance with Section 6.5.3.I.
 - H. Upon arrival at the Secondary TSC, the TSC Director should establish communications with the interim TSC Director to receive a status update and to reassume TSC Director duties.
 - I. Emergency response personnel should report to their preassigned work areas in the EOF, unless directed otherwise. (See procedure 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)" for room assignments.)
 - J. The TSC Director should ensure that the NRC and State Emergency Operation Centers are advised of the relocation to and operational status of the Secondary Technical/Operational Support Center(s).
 - K. The TSC Director should advise the Shift Superintendent when the Secondary TSC is operational.
 - L. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) must approve reentry into the plant until the evacuation is terminated.
 - M. When the plant is determined to have returned to a condition where the plant evacuation is no longer required, the TSC Director may terminate the plant evacuation.

6.6 EOF EVACUATION

See Procedure 1903.034, "Emergency Operations Facility Evacuation"

6.7 ROAD BLOCKS

Road blocks restricting access to ANO should be manned by at least one ANO Security Officer. The ANO Security Officer should be capable of making radio contact with the Security Shift Commander. The Security Shift Commander shall obtain verbal approval from the Shift Superintendent/TSC Director or the EOF Director before allowing passage of individual(s) who are not part of the response organization.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 16 of 27 CHANGE: 024-00-0
---------------------------------	--	------------------------------------

7.0 ATTACHMENTS AND FORMS

7.1 ATTACHMENTS

- 7.1.1 Attachment 1 - Technical and Operational Support Center Evacuation Decision Flow Chart
- 7.1.2 Attachment 2 - TSC-OSC Precautionary Evacuation Primary/Secondary Group Assignments
- 7.1.3 Attachment 3 - Directions to Atkins Emergency Worker Center

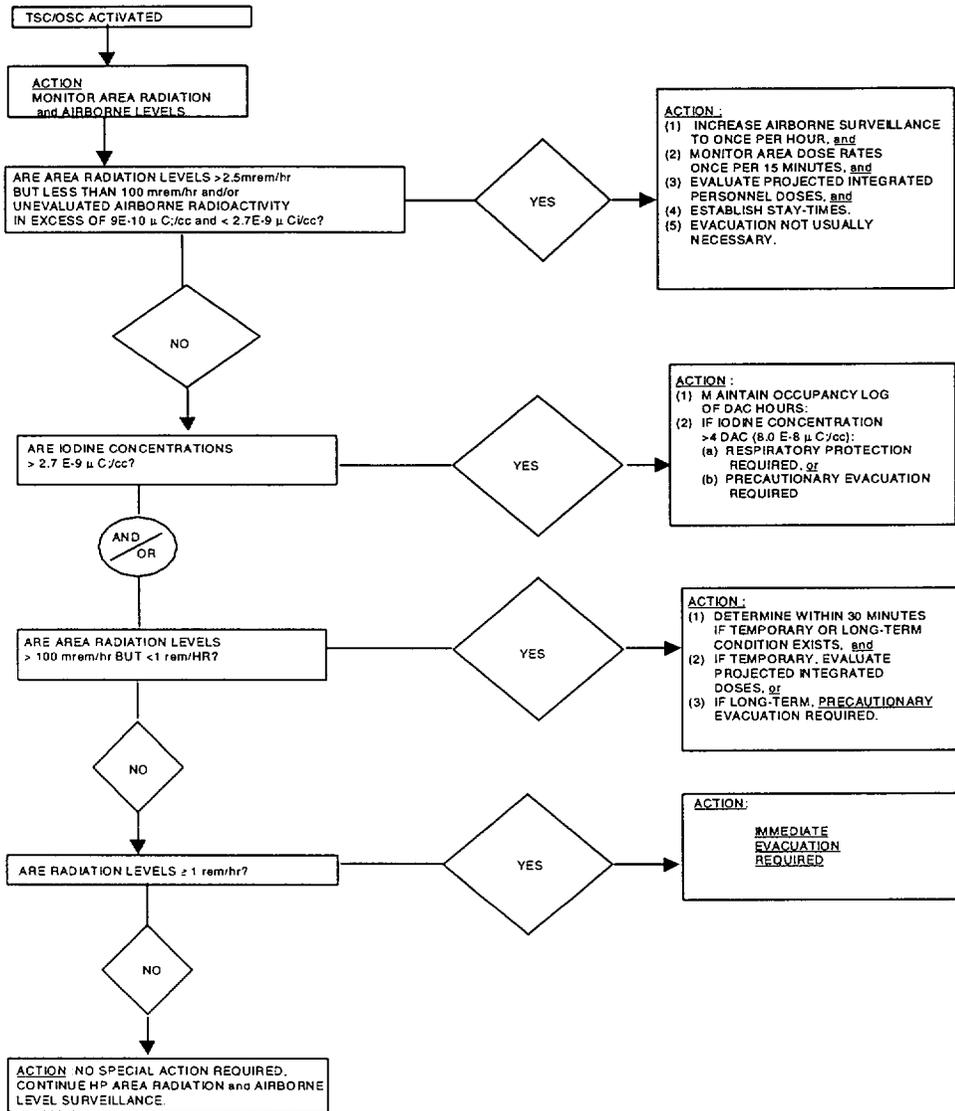
7.2 FORMS

- 7.2.1 Form 1903.030A - Onsite Accountability
- 7.2.2 Form 1903.030B - Plant Evacuation Checklist
- 7.2.3 Form 1903.030C - Localized Evacuation Checklist

ATTACHMENT 1

Technical and Operational Support Center

Evacuation Decision Flow Chart



PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 18 of 27 CHANGE: 024-00-0
---	--	--

ATTACHMENT 2

TSC/OSC Precautionary Evacuation
Primary/Secondary Group Assignments

(Note: TSC Director may alter assignments as he deems necessary)

Technical Support Center:

Primary

TSC Director
Engineering Manager

Secondary

Operations Manager
Maintenance Manager
Radiation Protection and Radwaste Manager
TSC Support Superintendent
Assistants/Communicators
USNRC Personnel

Operational Support Center:

Primary

As determined by the TSC Director

Secondary

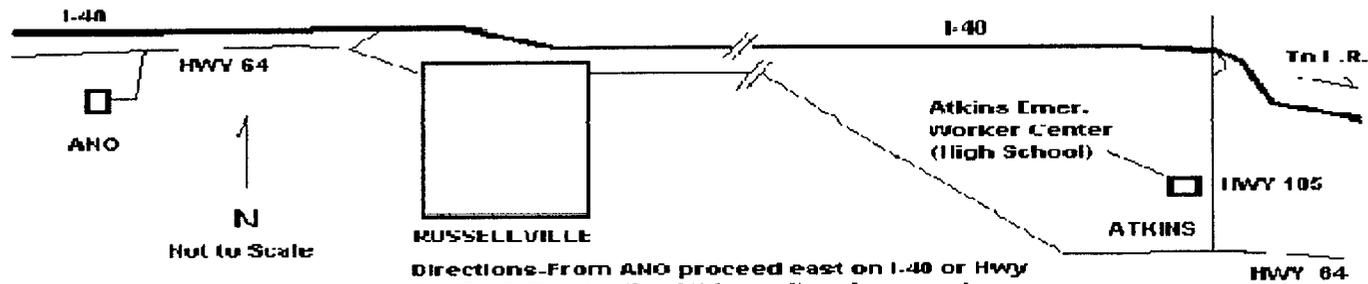
All OSC personnel not designated by the TSC Director to remain onsite.

1. Minimal staffing for a recovery team, considering on-going or short term repair requirements, and to include at least one HP and one medical team member.
2. Minimal security personnel as recommended by the Security Shift Supervisor/ Security Coordinator.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 19 of 27 CHANGE: 024-00-0
--	---	--

ATTACHMENT 3

Directions to Atkins Emergency Worker Center



Directions-From ANO proceed east on I-40 or Hwy 64. For I-40, take the Atkins exit and proceed south on Hwy 105 to the High School. For Hwy 64, turn north on Hwy 105 to the High School at Atkins. Distance from ANO is approx. 19 miles. The center is activated at an Alert Emer. Class.

NOTE

This checklist contains three (3) sections.

NOTE

Plant Evacuation due to a declared SAE or GE is addressed in 1903.011, Forms 1903.011 P, Q, R, S, T, or U.

SHIFT SUPERINTENDENT IMPLEMENTATION OF CHECKLIST

- **IF** you have Emergency Direction and Control, and a SAE or higher GE has not been declared, **THEN** complete Sections 1, 2 and 3 of this checklist.
- **IF** the TSC Director or EOF Director has Emergency Direction and Control, **THEN** complete Section 3 only, **as instructed by the TSC Director,**.

TSC DIRECTOR IMPLEMENTATION OF CHECKLIST

- **IF** you or the EOF Director have Emergency Direction and Control, and a SAE or higher GE has not been declared, **THEN** complete Sections 1 and 2.
- **IF** you decide to evacuate the plant, **THEN** direct the Shift Superintendent to complete Section 3.

SECTION 1 - EVACUATION DETERMINATION

1. Determine if any Initiating Condition is present:

- | | |
|---|---|
| 1.1 Site Area Emergency or General Emergency declared (see note above). | <input type="checkbox"/> Yes (GO TO Procedure 1903.011)
<input type="checkbox"/> No (GO TO step 1.2) |
| 1.2 HP survey results indicate that general area radiation levels outside of a Radiologically Controlled Area exceed 2.5 mRem/hr? | <input type="checkbox"/> Yes (GO TO step 2)
<input type="checkbox"/> No (GO TO step 1.3) |
| 1.3 HP air sample results indicate unevaluated airborne radioactivity exceeds 9E-10 μ Ci/cc? | <input type="checkbox"/> Yes (GO TO step 2)
<input type="checkbox"/> No (GO TO step 1.4) |
| 1.4 An uncontrolled toxic gas leak (originating either on-site or off-site) exists? | <input type="checkbox"/> Yes (GO TO step 2)
<input type="checkbox"/> No (EXIT this checklist) |

2. Determine if any Extenuating Conditions exist which might subject evacuees to a higher risk to personnel safety:

- | | |
|---|---|
| 2.1 An ongoing security threat within the protected area? | <input type="checkbox"/> Yes
<input type="checkbox"/> No |
| 2.2 Inclement weather exists? | <input type="checkbox"/> Yes
<input type="checkbox"/> No |
| 2.3 Radiological or Hazardous Materials conditions exist? | <input type="checkbox"/> Yes
<input type="checkbox"/> No |

3. **IF** NONE of the extenuating conditions in Step 2 are present, **GO TO** Section 2.

FORM TITLE: PLANT EVACUATION CHECKLIST	FORM NO. 1903.030B	REV. 024-00-0
--	------------------------------	-------------------------

4. **COMPARE** the risks involved from the initiating conditions in Step 1 and the extenuating conditions in Step 2.

Will a plant evacuation present a higher risk to personnel than having them remain onsite?

- Yes (**GO TO** step 5)
 No (**GO TO** Section 2)

5. Periodically monitor and re-evaluate the conditions which prompted the potential evacuation.

END OF SECTION 1

FORM TITLE: PLANT EVACUATION CHECKLIST	FORM NO. 1903.030B	REV. 024-00-0
--	------------------------------	-------------------------

SECTION 2 - EVACUATION PREPARATION

This section is used to prepare for a plant evacuation.

1. Determine the appropriate evacuation routes based on symptoms and wind direction utilizing the chart below:

<u>IF</u> wind direction is From:	<u>Then</u> use Evacuation Routes
1 to 45 degrees	<input type="checkbox"/> 1, 2, and 3
46 to 90 degrees	<input type="checkbox"/> 1 and 2
91 to 225	<input type="checkbox"/> 1 and 3
226 to 360	<input type="checkbox"/> 2 and 3

Check the appropriate routes in the plant announcement, step 1 of section 3.

2. Determine any areas of the plant to avoid during evacuation. (This may include either guard station), and any special protective measures to be taken by plant evacuees. Include this information in the evacuation announcement (section 3, step 1).

Plant areas to avoid/protective measures (or none): _____

3. Direct Security to perform the following:
 - 3.1 If necessary, open and man the secondary guard station (if radiological conditions allow).
 - 3.2 Perform initial accountability.
4. Contact Health Physics:
 - 4.1 Request HP coverage at the plant exit portal monitors.
 - 4.2 Instruct HP personnel at the controlled access exit point to relax decontamination and radiation protection measures as necessary in order to expedite evacuation of the controlled access area.
5. IF you are the **SHIFT SUPERINTENDENT**,
GO TO Section 3.
6. IF you are the **TSC DIRECTOR**,
THEN perform the following:
 - 6.1 Direct the Shift Superintendent of the affected control room to refer to Section 3 of this checklist to coordinate making the evacuation announcement and sounding the evacuation alarm.
 - 6.2 Tell the Shift Superintendent the evacuation route(s) and any special protective actions to be taken by plant evacuees.
7. Direct the ERO staff to log in at a security card reader using "0000".

FORM TITLE: <b style="text-align: center;">PLANT EVACUATION CHECKLIST	FORM NO. <b style="text-align: center;">1903.030B	REV. <b style="text-align: center;">024-00-0
--	--	---

8. **IF** the incident extends into an Exclusion Area Evacuation,
THEN perform the following:

- 8.1 Request that the U.S. Army Corps of Engineers (Emergency Telephone Directory, Section 6) control boat access to the portions of Lake Dardanelle within the exclusion area.
- 8.2 Direct Security to evacuate the Generation Support Building (GSB) and all buildings outside the security fence but within the exclusion area.

Performed by: _____
 Shift Supt. TSC Director

Date: _____

END OF SECTION 2

FORM TITLE: PLANT EVACUATION CHECKLIST	FORM NO. 1903.030B	REV. 024-00-0
--	------------------------------	-------------------------

SECTION 3 - EVACUATION ANNOUNCEMENT

This section contains tasks that should be completed from the Control Room.

1. Make the following announcement using the plant paging system (dial 197):
"Attention all personnel. Attention all personnel. A plant evacuation has been declared. All emergency response and emergency standby personnel report to your assembly areas immediately. All other personnel evacuate the plant using evacuation routes _____ and proceed to Atkins Emergency Worker Center."

If necessary, include in the announcement any plant areas to avoid, or special protective actions to be taken by plant evacuees:

3. Sound the plant evacuation alarm for approximately 10 seconds.
4. Repeat the announcement at least 2 times, alternating the announcement with the plant evacuation alarm.
5. Instruct control room personnel from both units to log in to the designated security card reader using "0000".
6. **IF** the TSC Director or EOF Director has Emergency Direction and Control, **THEN** skip steps 7 and 8.
7. Direct the ERO staff to log in at a security card reader using "0000".
8. **IF** the incident extends into an Exclusion Area Evacuation, **THEN** perform the following:
 - 8.1 Request that the U.S. Army Corps of Engineers (Emergency Telephone Directory, Section 6) control boat access to the portions of Lake Dardanelle within the exclusion area.
 - 8.2 Direct Security to evacuate the Generation Support Building (GSB) and all buildings outside the security fence but within the exclusion area.

Performed by: _____

Date: _____

END OF SECTION 3

FORM TITLE: PLANT EVACUATION CHECKLIST	FORM NO. 1903.030B	REV. 024-00-0
--	------------------------------	-------------------------

NOTE

This checklist contains two (2) sections.

SHIFT SUPERINTENDENT IMPLEMENTATION OF CHECKLIST

- **IF** you have Emergency Direction and Control, **THEN** complete Sections 1 and 2 of this checklist.
- **IF** the TSC Director or EOF Director has Emergency Direction and Control, **THEN** complete Section 2 only, **as instructed by the TSC Director,**.

TSC DIRECTOR IMPLEMENTATION OF CHECKLIST

- **IF** you or the EOF Director have Emergency Direction and Control, **THEN** complete Section 1.
- **IF** you decide a localized evacuation is necessary, **THEN** direct the Shift Superintendent to complete Section 2.

SECTION 1 - EVACUATION DETERMINATION

1. Does any condition exist which, in your opinion, presents a threat to the health and safety of plant personnel?
- Yes (**GO TO** step 2)
 No (**EXIT** this checklist)

NOTE

The area selected for evacuation should have well-defined boundaries and be easily controllable.

2. Determine the area of the plant to be evacuated.
Area to be evacuated: _____
3. Determine any area(s) of the plant to avoid during the localized evacuation.
Area(s) to be avoided (or none): _____
4. Determine any special protective measures which should be taken by evacuees.
Special protective measures (or none): _____
5. **IF** you are the **SHIFT SUPERINTENDENT**, **GO TO** Section 2.
6. **IF** you are the **TSC DIRECTOR**, **THEN** perform the following:
- 6.1 Direct the Shift Superintendent of the affected unit to refer to Section 2 of this checklist to coordinate the evacuation announcement and alarm.
- 6.2 Tell the Shift Superintendent the area to be evacuated and any special protective actions to be taken by evacuees.

Performed by: _____

Date: _____

Shift Supt. TSC Director

END OF SECTION 1

FORM TITLE: LOCALIZED EVACUATION CHECKLIST	FORM NO. 1903.030C	REV. 024-00-0
--	------------------------------	-------------------------

