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January 2, 2001
NOC-AE-00000984
STI: 31216782
FILE NO: Z18
ER 20000166
10CFR50.4(b)(5)
10CFR50 App E

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

STP NUCLEAR OPERATING COMPANY
Units 1 and 2
Docket Nos. STN 50-498; STN 50-499
Changes to Emergency Plan Implementing Procedure

In accordance with 10CFR50.4(b)(5) and 10CFR50, Appendix E, Section V, the STP Nuclear Operating Company hereby submits the attached revision of the STPEGS Emergency Plan, one (1) Emergency Plan Implementing Procedure, and one (1) Plant General Procedure.

If there are any questions regarding this matter, please contact me at (361) 972-8697.

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Supervisor, Emergency Response

FJP/mk
Enclosure: Letter of Receipt
Summary of Changes Table
STPEGS Emergency Plan, Rev. ICN 19-1
0ERP01-ZV-TP02, Offsite Field Teams, Rev. 9
0PGP05-ZV-0002, Emergency Response Activities Schedule, Rev. 10

A045

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Summary of Changes for
STPEGS Emergency Plan
Revision ICN 19-1

This Interim Change Notice 19-1 of the STPEGS Emergency Plan does not reduce its effectiveness nor change the intent.

The changes made are as follows:

NO.	CHANGE TO REV. 19	REASON
1	Section E, Page 10 of 11, Figure E-1, revised Siren Locations Map dated 5/28/98 with map dated 07/31/00.	Added Siren CCF #32 and moved location of siren ABE #13.
2	Section I, Page 2 of 7, Step I.5, removed "mailing and by" from 2nd paragraph.	Public information material is no longer mailed to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.
3	Section I, Page 4 of 7, Figure I-1, revised 10 Mile Emergency Planning Zone Map dated 5/28/98 with map dated 07/31/00.	County issued road number designators along with road names as part of 911 emergency response coverage, addresses CR 00-2180-44.
4	Section K, Page 1 of 6, Step K.1.2.a, removed the phrase "Mailouts".	Public information material is no longer mailed by the station to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.
5	Section K, Page 2 of 6, Step K.1.3.h, replaced calendar with public information material.	The emergency response calendar has been replaced with telephone book public information material, addresses CR 00-2180-37.
6	Section K, Page 2 of 6, Step K.2, removed the phrase "by mail".	Public information material is no longer mailed to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.

Summary of Changes for
STPEGS Emergency Plan
Revision ICN 19-1

NO.	CHANGE TO REV. 19	REASON
7	Section K, Page 2 of 6, Step K.2, removed the computerized listing of residents within the Emergency Planning Zone.	This computer data base is no longer used for calendar mail-outs of Public information material to Emergency Planning Zone Residents annually, the telephone book contains this information now.
8	Section K, Page 1 of 1, Figure K-1, revised Typical Joint Information Center Layout.	Joint Information Center layout has been modified.
9	Section M, Page 2 of 4, Step M.2.3, clarification on position re-qualification.	Editorial clarification, addresses CR 00-5103-5.
10	Attachment 2, changed procedure 0ERP01-ZV-EF22 title from Owners Liaison to Emergency Operations Facility Liaison.	Procedure title changed to more adequately describe it's purpose, addresses CR 00-2180-36.
11	Attachment 2, moved applicable steps from 0ERP01-ZV-EF23, INPO/Industry Liaison, to procedure 0ERP01-ZV-EF22, Emergency Operations Facility Liaison, and deleted procedure 0ERP01-ZV-EF23.	Combined duties into one position, addresses CR 00-2180-36.

- END -

Summary of Changes for
Offsite Field Teams
0ERP01-ZV-TP02 Rev 9

This revision does not reduce the effectiveness nor change the intent of this procedure.

The changes made are as follows:

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

- Data Sheet 1, Page 18, Step A.2, last bullet, and Page 21, Step 11, removed reference to various Thermoluminescent Dosimeter Packets for local industry. This responsibility was transferred to the County Emergency Operations Center.

- Addendum 2, page 10, Step 1.B.7, removed reference to Beta Correction Factor (BCF) located on survey meter. BCF's are not located on survey meters any longer.

- END -

Summary of Changes
Emergency Response Activities Schedule
0PGP05-ZV-0002 Rev 10

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

- Addressed CR 00-2180-27, Separate procedure 0PGP05-ZV-0002, Emergency Response Activities Schedule into two procedures, the new procedure 0PGP05-ZV-0014, Emergency Response Activities will contain the forms and is not a PORC Procedure.

The changes are noted in the following table:

Change No.	Change to Revision 9	Reason
1.	Global Change, Delete all references to "calendar" mail out.	STP will not utilize the calendar as a method of informing the public of emergency preparedness information.
2.	Global, Add reference to 0PGP05-ZV-0012, Emergency Facility Inventories where 0PGP05-ZV-0009, Emergency Facility Inventories and Inspections is noted.	New procedure added (non PORC procedure) containing forms previously identified in 0PGP05-ZV-0009.
3.	Step 2.1.5, Removed the Unusual Event Notification List.	Use of the Unusual Event Notification List will be discontinued when the new Emergency Notification & Response System is in place by December. Procedure effective date will be held till then.
4.	Step 3.3.4, Change at current baselined version to functionally tested.	To properly address method used to test computer equipment in ER Facilities.
5.	Section 4.0, Procedure, All steps moved to procedure 0PGP05-ZV-0014, Emergency Response Activities.	To support division of this procedure, limitations and responsibilities in this procedure and instructions and forms in 0PGP05-ZV-0014, Emergency Response Activities.
6.	Step 4.1, added to direct responsible personnel to procedure 0PGP05-ZV-0014, Emergency Response Activities.	To support division of this procedure, limitations and responsibilities in this procedure and instructions and forms in 0PGP05-ZV-0014, Emergency Response Activities.
7.	Step 5.5, Added 0PGP05-ZV-0014, Emergency Response Activities.	To identify additional reference.

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1.0 Purpose and Scope

1.1 This procedure provides guidance and instructions in scheduling and performing the recurring activities of the Emergency Response Program.

1.2 The scope of this procedure covers the recurring activities of the Emergency Response Program and is limited to those activities only.

2.0 Limitations

2.1 As a minimum, the following shall be part of any Emergency Response activities schedule:

2.1.1 Quarterly inventories of emergency equipment and supplies;

2.1.2 Public Information support;

2.1.3 Annual STPEGS Emergency Plan review/revision;

2.1.4 Issuance of the Annual Training Schedule;

2.1.5 Quarterly review of the Emergency Response Organization (ERO) Roster, Call-Out List, and Dialogics Call-Out List;

2.1.6 Annual Emergency Response procedures review/revision;

2.1.7 Annual review/revision of the Letters of Agreement;

2.1.8 Monthly/Quarterly/Semi-Annual/Annual communications tests;

2.1.9 Annual review/revision of the Six-Year Exercise Master Plan;

2.1.10 Quarterly Emergency Communications Directory/Emergency Response Procedures telephone number verification;

2.1.11 Annual Emergency Response Offsite Training review;

2.1.12 Annual Emergency Response Training review;

2.1.13 Prompt Notification System (Siren Subsystem) Testing/ Documentation;

2.1.14 Annual Letter of Certification to the Division of Emergency Management (DEM), Texas Department of Public Safety;

2.1.15 State of Texas and Matagorda County review of Emergency Action Levels (EALs);

2.1.16 Emergency Response Training for Local News Media Agencies;

2.1.17 Quarterly Computer Functional Testing

2.1.18 Auto Dialer Tests

3.0 Responsibilities

3.1 The Supervisor, Emergency Response or designee, shall:

3.1.1 Ensure all recurring Emergency Response activities are scheduled.

3.1.2 Periodically, review the schedule to ensure all activities are being performed in accordance with the instructions contained in this procedure.

3.1.3 Ensure visible postings and public emergency information brochure verifications are performed in accordance with Section 4.0.

3.1.4 Ensure the annual Emergency Information mailing is performed in accordance with Section 4.0.

3.1.5 Ensure Alert Radio distribution is verified in accordance with Section 4.0.

3.2 The Manager, Operations or designee, shall ensure inventories of Control Room emergency equipment/supplies are performed in accordance with 0PGP05-ZV-0009, Emergency Facility Inventories and Inspections and 0PGP05-ZV-0012, Emergency Facility Inventories.

3.3 The Manager, Information Technology Infrastructure or designee shall:

3.3.1 Ensure Prompt Notification System siren testing and documentation is performed in accordance with 0PGP05-ZV-0007, Prompt Notification System.

3.3.2 Ensure Emergency Communications Directory and Emergency Response Procedure telephone numbers are verified in accordance with Section 4.0.

3.3.3 Ensure communication tests are conducted in accordance with Section 4.0.

3.3.4 Ensure computer equipment is functionally tested in all Emergency Response Facilities in accordance with Section 4.0.

3.4 The Manager, Health Physics or designee and Manager, Metrology Laboratory or designee, shall ensure inventories of radiological control equipment and supplies are performed in accordance with 0PGP05-ZV-0009, Emergency Facility Inventories and Inspections and 0PGP05-ZV-0012, Emergency Facility Inventories.

4.0 Procedure

4.1 Implement appropriate responsibilities using procedure 0PGP05-ZV-0014, Emergency Response Activities, Section 4.0, Procedure.

4.2 The Managers or designee having responsibility to ensure completion of Forms located in 0PGP05-ZV-0014, Emergency Response Activities, are required to forward the completed ORIGINAL form to the Supervisor, Emergency Response or designee for review and signature. The approved form will be forwarded to Records Management System as a quality record by the Supervisor, Emergency Response or Designee.

5.0 References

5.1 STPEGS Emergency Plan

5.2 0PGP05-ZV-0007, Prompt Notification System

5.3 0PGP05-ZV-0009, Emergency Facility Inventories and Inspections

5.4 0PGP05-ZV-0012, Emergency Facility Inventories

5.5 0PGP05-ZV-0014, Emergency Response Activities

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1.0 Purpose and Scope

1.1 This procedure describes the radiological monitoring and analysis techniques to be used by Offsite Field Teams during a declared emergency.

1.2 This procedure does not describe the radiological environmental monitoring and analysis activities to be implemented during the Recovery phase of a declared emergency. Recovery phase monitoring will be performed in accordance with Radiological Laboratory procedures.

2.0 Responsibilities

2.1 The Radiological Director is responsible for overall coordination of STPEGS Offsite Field Team operations.

2.2 The Offsite Field Team Supervisor is responsible for:

2.2.1 Forming, briefing, and directing the activities of the Offsite Field Teams.

2.2.2 Coordinating Offsite Field Team activities with State and Federal agencies.

2.2.3 Evaluating dose projection calculations to determine monitoring locations and transit routes.

2.2.4 Tracking Offsite Field Team radiological exposures.

2.2.5 Advising Offsite Field Teams of changes in meteorology, source terms, and plant conditions which could impact downwind doses.

2.2.6 Functioning as the primary technical interface with the NRC Environmental Dose Assessment Coordinator.

2.3 The Offsite Field Teams are responsible for obtaining and field analyzing environmental samples, performing environmental radiation surveys, adhering to prescribed safety rules and radiological protection requirements, and completing assigned tasks.

3.0 References

3.1 STPEGS Emergency Plan

3.2 0ERP01-ZV-EF10, Offsite Field Team Supervisor

3.3 0PRP10-ZU-0001, REMP Sample Collection

3.4 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide

3.5 Bureau of Radiation Control, Procedure 10, Monitoring and Sampling Airborne Gamma Releases.

3.6 STPNOC Correspondence with the Bureau of Radiation Control ER20000094.

3.7 ST-HS-HS-033948, reference for the 100,000 dpm/mR/hr factor.

4.0 Procedure

4.1 At an Alert or higher emergency classification, Offsite Field Team personnel shall:

4.1.1 Respond to the EOF and sign in on the EOF Staffing Board.

4.1.2 Report to the Offsite Field Team Supervisor and receive a briefing on plant status and current environmental monitoring activities.

4.1.3 Receive Offsite Field Team assignments from the Offsite Field Team Supervisor and perform required actions in Data Sheet 1, Offsite Field Team Leader Checklist.

4.1.4 Perform radiological surveys and environmental sampling and analysis per guidance in Addendum 1 through 6.

5.0 Support Documents

5.1 Addendum 1 - Monitoring Techniques

5.2 Addendum 2 - Sample Preparation and Analysis

5.3 Addendum 3 - Particulate Concentration

5.4 Addendum 4 - Iodine Concentration

5.5 Addendum 5 - Plume Location Guidance

5.6 Addendum 6 - Sample Area Map

5.7 Form 1 - Offsite Monitoring Data Form

5.8 Form 2 - Sample Analysis Calculation Form

5.9 Data Sheet 1 - Offsite Field Team Leader Checklist

A. Plume Locating and Tracking

1. Record all data on Form 1, Offsite Monitoring Data Form.

2. While in route to the affected area, one member of the Offsite Field Team should continuously observe the meter scale of the monitoring instrument or keep the instrument speaker turned on in order to identify the plume boundaries and to detect changes in dose rates within the affected area. Readings above background indicate that the plume is in close proximity. Peak readings indicate approximate plume centerline.

   a. Readings while in motion should be taken with the detector of the instrument held inside the vehicle and above the lap of the team member.

   b. Readings taken in motion should not be interpreted as actual measurements of dose rate at any given location due to the time lag between detection and meter response. These readings should only be used as indicators of trends in dose rate changes, initial plume detection, and an early warning of areas in which exposure rates may exceed guidelines for Offsite Field Team activities.

   c. Plume edges are identified by instrument readings three (3) times normal background readings.

3. Upon initial detection of the plume, the vehicle should be stopped and dose rate measurements performed outside the vehicle by obtaining open and closed window dose rate readings at three feet (3') and six inches (6") above the ground. Record results and report them to the Offsite Field Team Supervisor.

   a. Survey measurements which are to be recorded and transmitted should be selected, where possible, for ease in communicating the measurement location (i.e., pre-selected monitoring points, road intersections, landmarks, etc.). Sector designations or approximate compass direction from the plant and estimated distance should be recorded.

4. Using Addendum 5, Plume Location Guidance, assess possible location of the plume and inform the Offsite Field Team Supervisor.

5. Coordinate with the Offsite Field Team Supervisor and drive from monitoring point to monitoring point in the affected area searching for the plume boundaries, centerline, and leading edge.

   a. Plume edge boundaries may be located by driving along roadways running perpendicular to the path of the plume.

   b. Plume centerline may be located by traversing the plume while observing instrument reading and looking for the highest reading.

   c. The leading edge of the plume may be located by driving downwind along roadways parallel to the path of the plume. Whenever possible the leading edge should be approached from a downwind direction in advance of the plume.

6. Traverse the plume at a speed slow enough to ensure adequate meter response time but not so slow as to unnecessarily expose personnel to radiation.

7. Assess plume deposition and location by taking open and closed window dose rate readings at three feet (3') and six inches (6") above the ground. Record results. Refer to Addendum 5 to assess plume location and whether contamination is present.

8. If air samples are <u>not</u> needed after completing plume tracking activities, then move to a low background area, assess personnel and vehicle contamination levels, personnel exposures, and await instructions from the Offsite Field Team Supervisor.

B. <u>Air Sample Collection</u>

1. Air sample collection should not take place in areas where the exposure rate from the plume exceeds 100 mrem/hr. Air samples should be collected in areas where the exposure rate is < 10 mrem/hr.

2. If precipitation is occurring, then take precautions to shield the air sampling equipment and survey instruments from moisture (i.e., place air sampler in the vehicle or under hood).

3. Record all data on Form 1, Offsite Monitoring Data Form.

4. Grab Sampling

a. Place a particulate filter (fuzzy side out) in the front chamber of the sampling head, centering the filter in the recessed area just ahead of the metal screen. Screw the filter holder cap down carefully and examine assembly to ensure the filter disc remains centered.

b. Place a silver zeolite cartridge in the rear chamber of the sampling head with the arrow on the cartridge pointing in the direction of the air flow and reassemble the sampling head.

c. Screw the sampling head into the air sampler.

d. Place the air sampler in the desired location for sampling. The air sampler should be positioned upwind from the vehicles exhaust.

e. Connect the negative (BLACK) cable to a grounded portion of the vehicle.

f. Connect the positive (RED) cable to the positive (+, larger) battery post.

g. Place the 12V/24V switch to 24V.

h. Set the timer for the desired time (flow rate with a standard particulate filter and Silver Zeolite cartridge will be approximately 2.2 cfm). A 10 ft^3 sample can be obtained in approximately 5 minutes.

NOTE

The air sampler may be operated without vehicle battery assist for up to 2 hours on a fully charged battery by placing the 12V/24V switch to 12V and setting the timer for the desired time (flow rate with standard particulate filter and Silver Zeolite cartridge will be approximately 0.8 cfm). A 10 ft^3 sample can be obtained in approximately 13 minutes.

i. If not already running, then start the vehicle's engine. The engine should remain running during the entire sampling period.

j. Press the START button to begin sampling.

k. Record the start time and initial flow rate.

l. Check the air sampler head periodically during the sampling period for surface dose rate readings. The volume of air sampled may be varied depending on dose rates at the location but should not exceed 10 ft^3, nor be less than 1 cubic foot.

m. The air sampler will shut off when the set time has expired, or can be manually stopped by pressing the STOP button.

n. Just prior to the air sampler being shut off, note the final flow rate.

o. When the air sampler has stopped, record stop time and record time and final flow rate. If final flow rate is different than the initial flow rate, then record the average of the start and stop flow rates.

p. When the air sampler has stopped, then disconnect the cables from the battery.

q. Place the entire air sampler, including air sample head, into a plastic bag. If the air sample head is reading greater than 10 mrem/hr, then place the air sampler in the far rear of the vehicle and proceed to a low background area (i.e., less than 300 cpm on a frisker) for sample preparation and analysis, Addendum 2.

C. Smear Collection

1. Record all data on Form 1, Offsite Monitoring Data Form.

2. Allowing only one side of the smear to come in contact, wipe a 100 cm^2 area of a smooth, flat, exposed, horizontal surface.

3. Being careful not to contaminate other smears or to shake collected material off of the smear, carefully fold the smear cover over the smear and store in a secure place until the smear can be analyzed.

4. Obtain a contact dose rate of the smear. If dose rate is > 10 mrem/hr, then place smear in rear of vehicle.

5. Record the time the smear was taken and the location.

D. Environmental Sampling

1. If environmental sampling is directed, then implement the appropriate sampling procedure.

   a. When assisting the State Bureau of Radiation Control, implement appropriate sections of Procedure 10, Monitoring and Sampling Airborne Gamma Releases.

   b. When sampling for the station, implement the appropriate sections of 0PRP10-ZU-0001, REMP Sample Collection.

1. Field Evaluations

A. Air Samples

1. Record all data on Form 2, Sample Analysis Calculation Form.

2. Obtain a background reading. Record counting instrument number, model, and background reading.

3. Remove air sampler from the vehicle. Remove the air sampler from the plastic bag. Run the air sampler for 30 to 60 seconds to purge the filter of residual noble gas.

4. Gently remove the particulate filter from the air sample head. Measure the count rate on the collection side of the filter at 1/2 inch from the filter. Subtract the background reading and record ccpm reading.

5. Place particulate filter into a clean, labeled plastic bag or petri dish for further analysis.

6. Remove the cartridge from the air sampler head and place it into a clean, labeled plastic bag. Measure the count rate through the plastic bag by direct contact frisk on the collection side of the cartridge. Subtract the background reading and record ccpm reading.

7. Use Addendum 3, Particulate Concentration and Addendum 4, Iodine Concentration, to convert the ccpm readings to a μCi/cc concentration. Record the μCi/cc concentration and report air sample results to the Offsite Field Team Supervisor.

8. If necessary, then calculate μCi/cc concentration using Form 2, Sample Analysis Calculation Form and record results. Report air sample results to the Offsite Field Team Supervisor.

9. Record air sample analysis data in the appropriate spot on Form 1, Offsite Monitoring Data Form as necessary.

10. Save both the particulate filter and the cartridge for further analysis. Ensure samples are properly labeled and packaged to prevent cross contamination. A completed Form 2, Sample Analysis Calculation Form, should accompany each sample.

B. Smears

1. Record all data on Form 1, Offsite Monitoring Data Form.

2. Analyze the smear in a low background area (<300 CPM) and obtain a background reading.

3. Open the smear cover being careful not to dislodge any material from the smear.

4. Place the smear directly under the frisker probe at a distance of approximately 1/2".

5. Measure the count rate on the smear.

6. Subtract the background reading from the gross counts to obtain smear ccpm. Divide ccpm by count rate meter efficiency to obtain DPM. Record smear DPM and save all smears, ensuring that they are properly labeled and packaged.

7. If the smear activity is beyond the range of the count rate meter, obtain a "contact" open window reading of the smear using an RO2-type ion chamber instrument. Multiply the open window reading in mR/hr by 100,000 and record the results on Form 1, Smear dpm column.

C. Lapel Air Samples

1. Record all data on Form 2, Sample Analysis Calculation Form.

2. Analyze the sample in a low background area (<300 CPM) and obtain a background reading.

3. Carefully remove the lapel sample particulate filter from the sample head.

4. Place the filter directly under the frisker probe at a distance of approximately 1/2".

5. Measure the count rate on the filter.

6. Subtract the background reading from the gross counts to obtain filter ccpm and record.

7. Calculate and record the particulate concentration using the Lapel Particulate Filter calculation.

8. Place the filter in a clean, labeled bag and save in a secure place for future analysis.

9. Carefully remove the sample cartridge from the sample head and place into a clean, labeled bag.

10. Place the cartridge directly under and in direct contact with the frisker probe.

11. Measure the count rate on the cartridge.

12. Subtract the background reading from the gross counts to obtain cartridge ccpm and record.

13. Calculate and record the iodine DAC-hours using the Lapel Iodine Cartridge calculation.

14. Place the filter, cartridge, and Form 2, as necessary, in a secure place and save for future analysis.

15. Inform the Offsite Field Team Supervisor of lapel air sample field analysis results.

Airborne particulate concentration should be estimated using the following table:

CCPM	10 ft³ µCi/cc	5 ft³ µCi/cc	2 ft³ µCi/cc	1 ft³ µCi/cc
100	1.6E - 9	3.2E - 9	8.0E - 9	1.6E - 8
200	3.2E - 9	6.4E - 9	1.6E - 8	3.2E - 8
300	4.8E - 9	9.6E - 9	2.4E - 8	4.8E - 8
400	6.4E - 9	1.3E - 8	3.2E - 8	6.4E - 8
500	8.0E - 9	1.6E - 8	4.0E - 8	8.0E - 8
600	9.6E - 9	1.9E - 8	4.8E - 8	9.6E - 8
700	1.1E - 8	2.3E - 8	5.6E - 8	1.1E - 7
800	1.3E - 8	2.6E - 8	6.4E - 8	1.3E - 7
900	1.4E - 8	2.9E - 8	7.2E - 8	1.4E - 7
1,000	1.6E - 8	3.2E - 8	8.0E - 8	1.6E - 7
2,000	3.2E - 8	6.4E - 8	1.6E - 7	3.2E - 7
3,000	4.8E - 8	9.6E - 8	2.4E - 7	4.8E - 7
4,000	6.4E - 8	1.3E - 7	3.2E - 7	6.4E - 7
5,000	8.0E - 8	1.6E - 7	4.0E - 7	8.0E - 7
6,000	9.6E - 8	1.9E - 7	4.8E - 7	9.6E - 7
7,000	1.1E - 7	2.3E - 7	5.6E - 7	1.1E - 6
8,000	1.3E - 7	2.6E - 7	6.4E - 7	1.3E - 6
9,000	1.4E - 7	2.9E - 7	7.2E - 7	1.4E - 6
10,000	1.6E - 7	3.2E - 7	8.0E - 7	1.6E - 6
20,000	3.2E - 7	6.4E - 7	1.6E - 6	3.2E - 6
30,000	4.8E - 7	9.6E - 7	2.4E - 6	4.8E - 6
40,000	6.4E - 7	1.3E - 6	3.2E - 6	6.4E - 6
50,000	8.0E - 7	1.6E - 6	4.0E - 6	8.0E - 6
60,000	9.6E - 7	1.9E - 6	4.8E - 6	9.6E - 6
70,000	1.1E - 6	2.3E - 6	5.6E - 6	1.1E - 5
80,000	1.3E - 6	2.6E - 6	6.4E - 6	1.3E - 5
90,000	1.4E - 6	2.9E - 6	7.2E - 6	1.4E - 5
100,000	1.6E - 6	3.2E - 6	8.0E - 6	1.5E - 5
200,000	3.2E - 6	6.4E - 6	1.6E - 5	3.2E - 5
300,000	4.8E - 6	9.6E - 6	2.4E - 5	4.8E - 5
400,000	6.4E - 6	1.3E - 5	3.2E - 5	6.4E - 5
500,000	8.0E - 6	1.6E - 5	4.0E - 5	8.0E - 5

1. Check air sample filter by direct frisk 1/2" from filter.

2. Determine the corrected counts per minute (CCPM) by subtracting the background counts per minute (cpm).

3. Run down CCPM column to the most accurate number (i.e., for 7,600 CCPM, use 8,000 CCPM, for 7,200 CCPM use 7,000 CCPM).

4. Read across to the column with the appropriate sample volume and record the corresponding µCi/cc reading.

5. If a sample indicates 900 CCPM and its volume is 10 ft³, read down to 900 and across to 10 ft³. Record 1.4E-8 µCi/cc.

   Assumptions: These numbers are based on 100% collection efficiency for particulate filters and friskers efficiency of at least 10% for unknown particulate.

6. 1 DAC for unknown particulate equals 3.0E – 9 µCi/cc for radiation workers (based on the most limiting isotope anticipated during an accident situation).

Airborne Iodine concentration should be estimated using the following table:

CCPM	10 ft³ µCi/cc	5 ft³ µCi/cc	2 ft³ µCi/cc	1 ft³ µCi/cc
100	3.2E - 8	6.5E - 8	1.6E - 7	3.2E - 7
200	6.5E - 8	1.3E - 7	3.2E - 7	6.5E - 7
300	9.7E - 8	1.9E - 7	4.8E - 7	9.7E - 7
400	1.3E - 7	2.6E - 7	6.5E - 7	1.3E - 6
500	1.6E - 7	3.2E - 7	8.1E - 7	1.6E - 6
600	1.9E - 7	3.9E - 7	9.7E - 7	1.9E - 6
700	2.3E - 7	4.5E - 7	1.1E - 6	2.3E - 6
800	2.6E - 7	5.2E - 7	1.3E - 6	2.6E - 6
900	2.9E - 7	5.8E - 7	1.5E - 6	2.9E - 6
1,000	3.2E - 7	6.5E - 7	1.6E - 6	3.2E - 6
2,000	6.5E - 7	1.3E - 6	3.2E - 6	6.5E - 6
3,000	9.7E - 7	1.9E - 6	4.8E - 6	9.7E - 6
4,000	1.3E - 6	2.6E - 6	6.5E - 6	1.3E - 5
5,000	1.6E - 6	3.2E - 6	8.1E - 6	1.6E - 5
6,000	1.9E - 6	3.9E - 6	9.7E - 6	1.9E - 5
7,000	2.3E - 6	4.5E - 6	1.1E - 5	2.3E - 5
8,000	2.6E - 6	5.2E - 6	1.3E - 5	2.6E - 5
9,000	2.9E - 6	5.8E - 6	1.5E - 5	2.9E - 5
10,000	3.2E - 6	6.5E - 6	1.6E - 5	3.2E - 5
20,000	6.5E - 6	1.3E - 5	3.2E - 5	6.5E - 5
30,000	9.7E - 6	1.9E - 5	4.8E - 5	9.7E - 5
40,000	1.3E - 5	2.6E - 5	6.5E - 5	1.3E - 4
50,000	1.6E - 5	3.2E - 5	8.1E - 5	1.6E - 4
60,000	1.9E - 5	3.9E - 5	9.7E - 5	1.9E - 4
70,000	2.3E - 5	4.5E - 5	1.1E - 4	2.3E - 4
80,000	2.6E - 5	5.2E - 5	1.3E - 4	2.6E - 4
90,000	2.9E - 5	5.8E - 5	1.6E - 4	2.9E - 4
100,000	3.2E - 5	6.5E - 5	1.3E - 4	3.2E - 4
200,000	6.5E - 5	1.3E - 4	4.8E - 4	6.4E - 4
300,000	9.7E - 5	1.9E - 4	6.5E - 4	9.7E - 4
400,000	1.3E - 4	2.6E - 4	8.1E - 4	1.3E - 3
500,000	1.6E - 4	3.2E - 4	9.7E - 4	1.6E - 3

1. Through the plastic bag, check the iodine cartridge by direct contact frisk on the collection side of the cartridge.

2. Determine the corrected counts per minute (CCPM) by subtracting the background counts per minute (cpm).

3. Run down CCPM column to the most accurate number (i.e., for 7,600 CCPM, use 8,000 CCPM, for 7,200 CCPM use 7,000 CCPM).

4. Read across to the column with the appropriate sample volume and record the corresponding µCi/cc reading.

5. If a sample indicates 900 CCPM and its volume is 10 ft³, read down to 900 and across to 10 ft³. Record 2.9E-7 µCi/cc.

   Assumptions: These numbers are based on 100% collection efficiency for silver zeolite cartridge and frisker efficiency of 0.49% for I-131.

6. 1 DAC for I-131 equals 2E-8 µCi/cc for radiation workers.

1. PLUME HAS PASSED AND CONTAMINATION DEPOSITED

- 6 inch open window reading is significantly higher than 3 foot open window reading.

AND

- 6 inch open window reading is significantly higher than 6 inch closed window reading.

2. IN THE PLUME

- 6 inch open window reading is approximately the same as 3 foot open window reading

AND

- 3 foot open window reading is significantly higher than 3 foot closed window reading.

AND

- Instrument readings three (3) times normal background readings indicate the edges of the plume.

3. PLUME ABOVE OR OFF TO SIDE

- 3 foot open window reading is approximately the same as 3 foot closed window reading

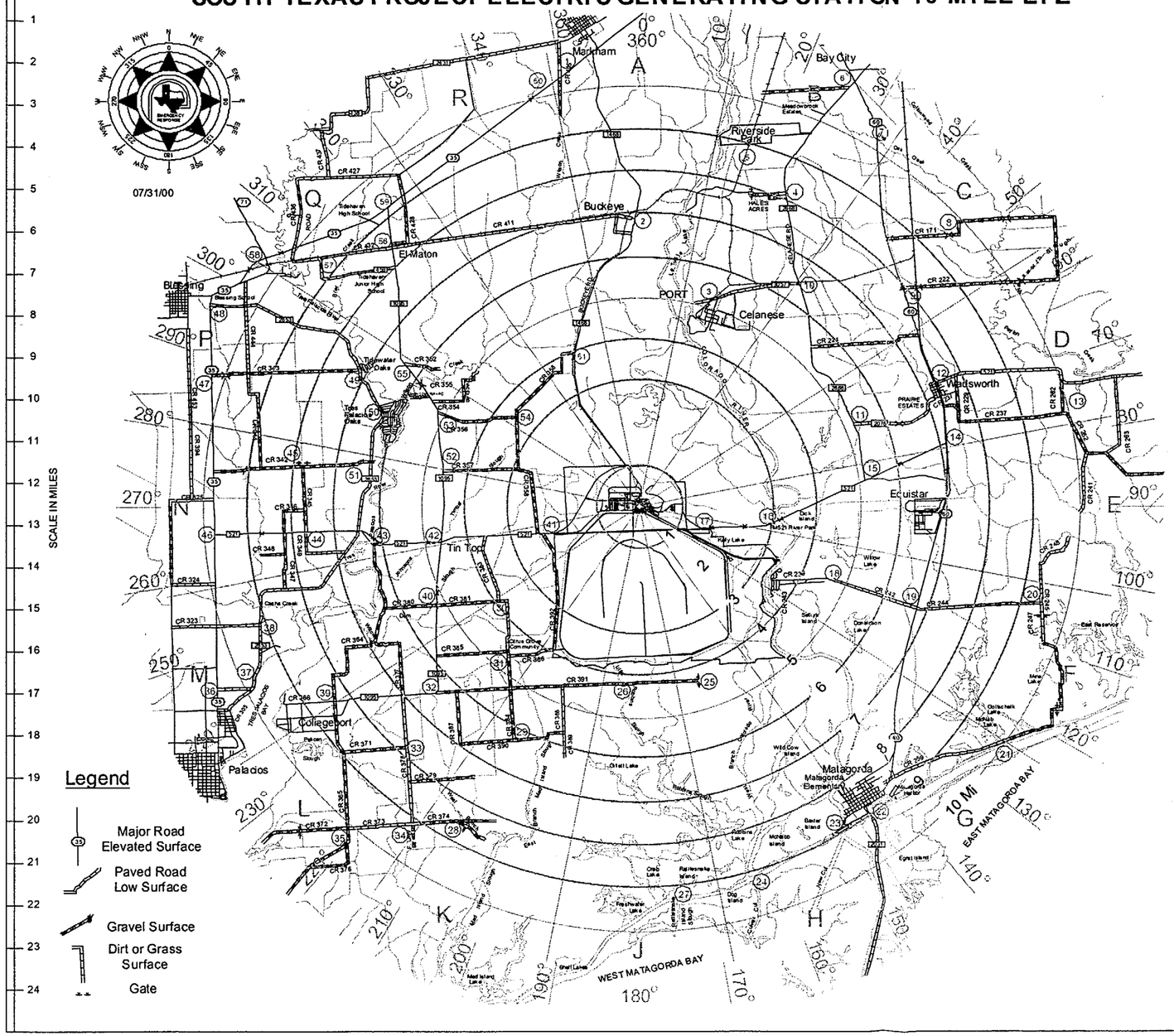
AND

- 6 inch open window reading is approximately the same as 6 inch closed window reading.

AND

- Instrument readings three (3) times normal background readings indicate the edges of the plume.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION 10-MILE EPZ



PRE-SELECTED MONITORING POINTS

Monitoring Point	Map Sector	Coordinates	Location
1	A	N28.57.14 W96.03.73	Intersection of SH35 and FM1468 (On STP Directional Sign to N of SH35)
2	A	N28.53.68 W96.02.90	Intersection of FM1468 & CR 411
3	B	N28.51.93 W96.01.26	Intersection of Celanese Avenue A and FM3057
4	B	N28.54.13 W95.59.49	Intersection of FM2668 and entrance of Hale's Acres Subdivision
5	B	N28.56.28 W95.57.98	Riverside Park at Railroad Tracks
6	B	N28.56.40 W95.57.86	Intersection of FM2668 and SH60
7	B	N28.54.46 W95.57.35	SH60 at Live Oak Creek
8	C	N28.53.37 W95.55.54	Second 90 degree bend on Sims Lane (CR 177), east of SH60
9	C	N28.52.11 W95.56.85	Intersection of SH60 and CR 222
10	C	N28.52.25 W95.59.23	Intersection of FM3057 and FM2668
11	D	N28.49.32 W95.58.08	Intersection of FM2078 and FM2668
12	D	N28.50.12 W95.56.18	Intersection of FM521 and SH60 in Wadsworth
13	D	N28.49.41 W95.53.33	Intersection of CR 237 and CR 262
14	D	N28.48.87 W95.55.96	Intersection of FM521 and SH60 south of Wadsworth
15	E	N28.48.12 W95.57.85	Intersection of FM521 and FM2668
16	E	N28.47.30 W95.59.95	FM521 and Colorado River
17	F	N28.47.21 W96.01.39	FM521 at Kolly Lake
18	F	N28.46.12 W95.58.79	CR 239 and CR 242
19	F	N28.45.44 W95.56.72	Intersection of SH60 and CR 244
20	F	N28.45.48 W95.53.92	Intersection of CR 244 and CR 245
21	G	N28.42.65 W95.54.85	Bridge on CR 259, 2.6 miles east of SH60
22	G	N28.41.45 W95.58.09	Junction of SH60 and FM2031 in Matagorda
23	H	N28.41.03 W95.58.53	Intersection of Intracoastal Waterway and Colorado River at the barge traffic signal
24	H	N28.39.14 W96.01.50	Intracoastal Waterway and Old Colorado River at sunken barge
25	H	N28.44.06 W96.01.72	East end of CR 391
26	J	N28.44.04 W96.03.40	CR 391 at Bridge over Robbins Slough
27	J	N28.38.86 W96.02.50	Intracoastal Waterway at Rattlesnake Island Slough
28	K	N28.41.30 W96.07.18	CR 374 at Mad Island Hunting Lodge gate
29	K	N28.42.93 W96.05.95	Intersection of CR 390 and CR 384
30	L	N28.45.81 W96.02.20	Intersection of CR 383 and CR 381
31	L	N28.44.76 W96.06.03	Intersection of CR 384 and CR 385
32	L	N28.43.95 W96.07.65	Intersection of FM1095 and CR 391
33	L	N28.42.83 W96.08.36	Intersection of CR 371 and CR 378
34	L	N28.41.26 W96.08.26	Intersection of CR 378 and CR 374
35	L	N28.41.21 W96.09.74	Intersection of CR 372 and CR 365
36	M	N28.44.57 W96.12.59	Intersection of SH35 and FM2853 north of Palacios
37	M	N28.44.69 W96.11.63	90 degree bend in FM2853 and CR 305
38	M	N28.45.44 W96.11.63	Intersection of FM2853 and CR 323
39	M	N28.43.83 W96.09.98	Intersection of CR 366 and CR 364
40	M	N28.45.76 W96.07.61	Intersection of FM1095 and CR 380
41	M	N28.47.20 W96.05.17	Intersection of FM521 and CR 358
42	N	N28.47.08 W96.07.47	Intersection of FM521 and FM1095 at Tin Top
43	N	N28.47.06 W96.08.79	Intersection of FM521 and CR 364
44	N	N28.47.35 W96.10.54	Intersection of FM521 and CR 349
45	N	N28.48.70 W96.10.56	Intersection of CR 342 and CR 345
46	N	N28.47.34 W96.12.57	Intersection of SH35 and FM 521
47	P	N28.50.64 W96.12.58	Intersection of SH35 and CR 343
48	P	N28.52.12 W96.12.57	Intersection of SH35 and FM2853 at Blessing
49	P	N28.50.80 W96.09.27	Intersection of FM2853 and Tidewater Oaks Subdivision North of Harbor
50	P	N28.49.74 W96.08.70	FM2853 at Tres Palacios Oaks Subdivision at the Fire Station
51	N	N28.48.77 W96.09.01	Intersection of FM2853 and CR 342
52	P	N28.48.55 W96.07.36	Intersection of FM1095 and CR 357
53	P	N28.49.76 W96.07.46	Intersection of FM1095 and CR 356
54	Q	N28.49.61 W96.05.69	Intersection of CR 358 and CR 356
55	P	N28.50.78 W96.08.17	Intersection of FM1095 and CR 352
56	Q	N28.53.21 W96.08.40	Intersection of FM1095 and CR 411
57	Q	N28.53.04 W96.10.08	Intersection of FM459 and CR 432
58	Q	N28.53.06 W96.11.30	Intersection of SH71 and SH35
59	Q	N28.54.05 W96.08.48	Intersection of SH35 and FM1095
60	R	N28.56.22 W96.05.17	SH35 NE of Wilson Creek Bridge
61	R	N28.50.92 W96.04.36	Intersection of FM1468 and CR 358

Offsite Field Teams

Form 1 | Offsite Monitoring Data Form | Page 1 of 1

Team No.: _____ Date: ___/___/___

Event: _____

Team	Time	Distance	Location/Sample No.	Meter Reading MR/HR				Ground Contamination		Airborne µCi/cc		Field Team Total Dose MR
				Open Window		Closed Window		Direct CPM	Smear DPM	Particulate	Iodine	
				6"	3'	6"	3'					

Complete and attach to air sample as necessary.

_____ _____ _____
Model No. ID No. Bkgd CPM

Particulate Filter:

_____ ÷ (_____ × _____ × **6.3E^{+10}** (C)) = _____
CCPM Volume ft^3 Efficiency*A µCi/cc

Iodine Cartridge:

_____ ÷ (_____ × _____ × **6.3E^{+10}** (C)) = _____
CCPM Volume ft^3 Efficiency*B µCi/cc

Lapel Particulate Filter:

_____ ÷ (**2000** × _____ × **0.4** (D) × _____) = _____
CCPM *F Efficiency*A *PF DAC-hr

Lapel Iodine Cartridge:

_____ ÷ (**2000** × _____ × **2.7** (E) × _____) = _____
CCPM *F Efficiency*B *PF DAC-hr

*Notes:

A = Efficiency for a frisker system is assumed to be 10% for particulate filters with Unknown activities.

B = Efficiency for a frisker system is assumed to be .49% for Silver Zeolite cartridges with I-131 activity.

C = 6.3E^{+10} cc-dpm/ft^3-µCi = 2.83E^{+4} cc/ft^3 × 2.22E^{+6} dpm/µCi.

D = 0.4 dpm-min/cc-DAC-hr = 2.22E^{+6} dpm/µCi × 3E^{-9} µCi/cc/DAC × 60 min/hr.

E = 2.7 dpm-min/cc-DAC-hr = 2.22E^{+6} dpm/µCi × 2E^{-8} µCi/cc/DAC × 60 min/hr.

F = Lapel sampler default flow rate 2,000 cc/min = 2 LPM.

PF = Respirator protection factor, If none worn, use default value of 1.

Analyzed by: _____ _____
(Name) (Date/Time)

_____ _____ _____
(Name) (Date) (Unit)

Action Time

A. Team Preparations

1. Obtain keys to the Emergency Response Site Vehicle (ERSV) from the key box located in the EOF. _____

2. Obtain the following from the EOF:

- 1 - Offsite Field Team Kit (each kit consists of 2 boxes) _____
- 1 - battery powered air sampler _____
- 1 - lapel air sampler _____
- 1 - portable radio _____
- 1 - spare radio battery _____
- 1 - portable cellular telephone _____

3. Check the Offsite Field Team Kit by performing the following actions:

a. Compare the contents of the kit against the inventory list that is inside of the kit. This step does not have to be performed if the seals on the kits are intact. Notify the Offsite Field Team Supervisor of any discrepancies. _____

b. Verify operability of the radiation survey instrumentation by checking the calibration dates, battery response levels, and functional checks. Notify the Offsite Field Team Supervisor of any inoperable equipment. _____

c. Verify operability of the dosimeter charger and calculator. Notify the Offsite Field Team Supervisor if either is inoperable. _____

Action Time

d. Perform a pre-operational check of the battery powered air sampler by performing the following actions:

1) Verify that the calibration due date on the calibration sticker has not been exceeded. _____

2) With the unit not plugged into an AC power supply, place the 12V/24V switch to 12V, set Timer to 01, CAL/NORM switch to NORM and press the START button. _____

3) If the motor starts, then press the STOP button. _____

4) If the motor does not operate, then notify the Offsite Field Team Supervisor. _____

e. Wrap the RO-2 (or equivalent) radiation survey instrument in a plastic bag to minimize intrusion of noble gases into the ionization chamber. _____

4. Assign each member of the Offsite Field Team a TLD, 0-200 mrem SRD, and a 0-5 rem SRD. Notify the Offsite Field Team Supervisor of TLDs issued, the TLD numbers, to whom the TLDs were issued, and the initial readings of the SRDs. _____

5. Perform a communications check between the ERSV and the Offsite Field Team Supervisor. Radio settings will be in accordance with 0PGP07-ZA-0011, Addendum 1. _____

a. Use MODE A, CHANNEL 9 on the ERSV.

b. Use Channel 9 with toggle switch on A for repeater or B for direct communications on the hand-held radios.

Action	Time
c. Set up the portable cellular telephone by performing the following:	
1) Plug power cord into the cigarette lighter.	
2) Pull antenna out to the vertical position.	
3) Refer to operation summary card located in the base of the telephone pack for activating and operating the phone.	
d. If radios fail in the field, use the portable cellular telephone to contact the Offsite Field Team Supervisor. Telephone numbers for Emergency Response Facilities are in the Emergency Communications Directory or ERO Facility Telephone List.	
6. When directed by the Offsite Field Team Supervisor to initiate offsite monitoring, then obtain a briefing from the Offsite Field Team Supervisor.	_____
7. Ensure each member of the Offsite Field Team dons protective clothing/equipment as directed by the Offsite Field Team Supervisor. One team member shall don a lapel air sampler (this should be the member performing the surveys).	_____
8. When dispatched, use guidance in Addendum 1 through 6 for performing radiological surveys, obtaining samples, performing analysis, and evaluating results.	N/A
9. Ensure all survey and sample information obtained by the Offsite Field Teams is documented properly on Form 1, Offsite Monitoring Data Form, and Form 2, Sample Analysis Calculation Form.	N/A
10. When directed by the Offsite Field Team Supervisor, deliver required Emergency response equipment to the Staging Area.	_____
• Inform the Offsite Field Team Supervisor when delivery is complete.	_____

Action	Time
11. Maintain communication with the Offsite Field Team Supervisor. Inform him/her of all monitoring activities, analysis results, and personnel exposures.	_____

STI# 31216233 Z 1808

Attached for your review and approval is Revision/Interim Change Notice 19-1 of the STPEGS Emergency Plan.

PORC Meeting No. 00 - 043

Review & Concurrence: _____ / 11/29/00
Plant General Manager Date

Approved: _____ / 11/29/00
Vice President, Business Services Date

Effective Date: 12/19/00

When completed, this form shall serve as certification that Revision/Interim Change Notice 19-1 is the current revision of the STPEGS Emergency Plan.

When completed, a copy of this form shall become the cover page of the revision for controlled distribution.

This Page when completed, shall be retained as per the Document Type List (DTL)

Summary of Changes for STPEGS Emergency Plan Revision ICN 19-1

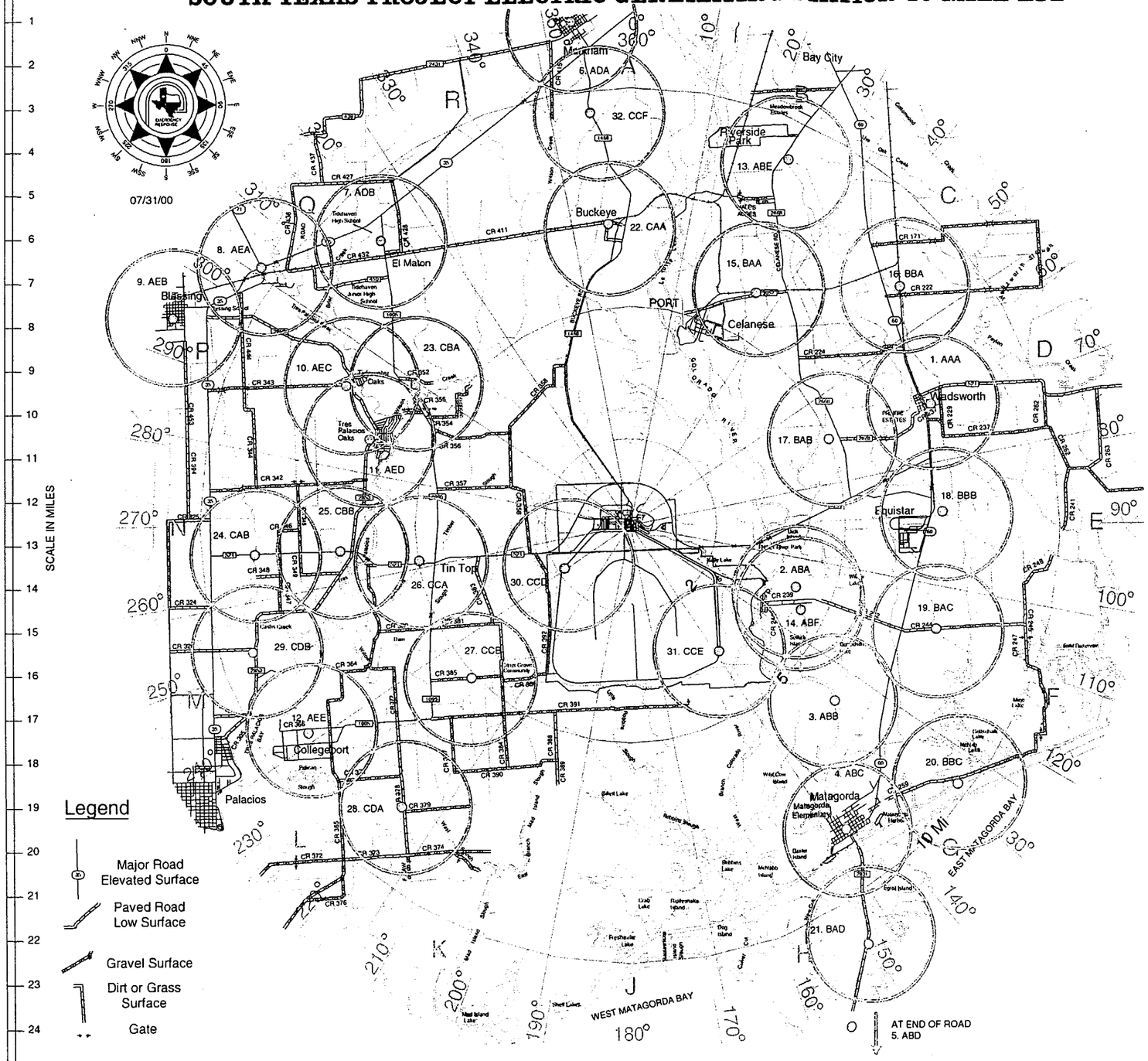
This Interim Change Notice 19-1 of the STPEGS Emergency Plan does not reduce its effectiveness nor change the intent.

NO.	CHANGE TO REV. 19	REASON
1	Section E, Page 10 of 11, Figure E-1, revised Siren Locations Map dated 5/28/98 with map dated 07/31/00.	Added Siren CCF #32 and moved location of siren ABE #13.
2	Section I, Page 2 of 7, Step I.5, removed "mailing and by" from 2nd paragraph.	Public information material is no longer mailed to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.
3	Section I, Page 4 of 7, Figure I-1, revised 10 Mile Emergency Planning Zone Map dated 5/28/98 with map dated 07/31/00.	County issued road number designators along with road names as part of 911 emergency response coverage, addresses CR 00-2180-44.
4	Section K, Page 1 of 6, Step K.1.2.a, removed the phrase "Mailouts".	Public information material is no longer mailed by the station to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.
5	Section K, Page 2 of 6, Step K.1.3.h, replaced calendar with public information material.	The emergency response calendar has been replaced with telephone book public information material, addresses CR 00-2180-37.
6	Section K, Page 2 of 6, Step K.2, removed the phrase "by mail".	Public information material is no longer mailed to Emergency Planning Zone Residents annually, addresses CR 00-2180-37.
7	Section K, Page 2 of 6, Step K.2, removed the computerized listing of residents within the Emergency Planning Zone.	This computer data base is no longer used for calendar mail-outs of Public information material to Emergency Planning Zone Residents annually, the telephone book contains this information now.
8	Section K, Page 1 of 1, Figure K-1, revised Typical Joint Information Center Layout.	Joint Information Center layout has been modified.
9	Section M, Page 2 of 4, Step M.2.3, clarification on position re-qualification.	Editorial clarification, addresses CR 00-5103-5.

Summary of Changes for
STPEGS Emergency Plan
Revision ICN 19-1

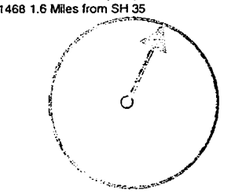
NO.	CHANGE TO REV. 19	REASON
10	Attachment 2, changed procedure 0ERP01-ZV-EF22 title from Owners Liaison to Emergency Operations Facility Liaison.	Procedure title changed to more adequately describe it's purpose, addresses CR 00-2180-36.
11	Attachment 2, moved applicable steps from 0ERP01-ZV-EF23, INPO/Industry Liaison, to procedure 0ERP01-ZV-EF22, Emergency Operations Facility Liaison, and deleted procedure 0ERP01-ZV-EF23.	Combined duties into one position, addresses CR 00-2180-36.
12	Attachment 2, moved applicable steps from 0PGP05-ZV-0008, Siren System Activation, Testing, and Documentation to procedure 0PGP05-ZV-0007, Prompt Notification System, and deleted procedure 0PGP05-ZV-0008.	Combined duties into one position, addresses CR 00-2180-50.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION 10-MILE EPZ



SIREN LOCATIONS

SIREN		LOCATION
1.	AAA	Wadsworth Volunteer Fire Department
2.	ABA	Selkirk North
3.	ABB	Selkirk South
4.	ABC	Matagorda Volunteer Fire Department
5.	ABD	Matagorda Beach at end of road
6.	ADA	Markham Volunteer Fire Department
7.	ADB	El Maton at FM 1095
8.	AEA	SH 35 at SH 71
9.	AEB	Blessing Volunteer Fire Department
10.	AEC	Tidewater Oaks at FM 2853
11.	AED	Tres Palacios Volunteer Fire Department
12.	AEE	Collegeport Volunteer Fire Department
13.	ABE	FM 2668, 0.5 mi. (S) of Riverside Park
14.	ABF	Selkirk Volunteer Fire Department
15.	BAA	FM 3057 at FM 2668
16.	BBA	CR 222 at SH 60
17.	BAB	FM 2078 at FM 2668
18.	BBB	Equistar Plant (SH 60)
19.	BAC	CR 242
20.	BBC	CR 259
21.	BAD	River Bend Boat Access
22.	CAA	FM 1468 (Railroad Tracks)
23.	CBA	CR 352 at FM 1095
24.	CAB	FM 521. 1.0 miles (E) of SH 35
25.	CBB	FM 2853 at FM 521
26.	CCA	FM 1095 at Tin Top
27.	CCB	CR 385 at FM 1095
28.	CDA	CR 378 / CR 379
29.	CDB	CR 323 at FM 2853
30.	CCD	West Side of Reservoir (STP)
31.	CCE	East Side of Reservoir (STP)
32.	CCF	FM 1468 1.6 Miles from SH 35



APPROXIMATE SIREN RANGE = 1 1/2 MILE RADIUS

○ DESIGNATES THAT SIREN IS IN A LOCATION OTHER THAN ACTUALLY SHOWN ON MAP.

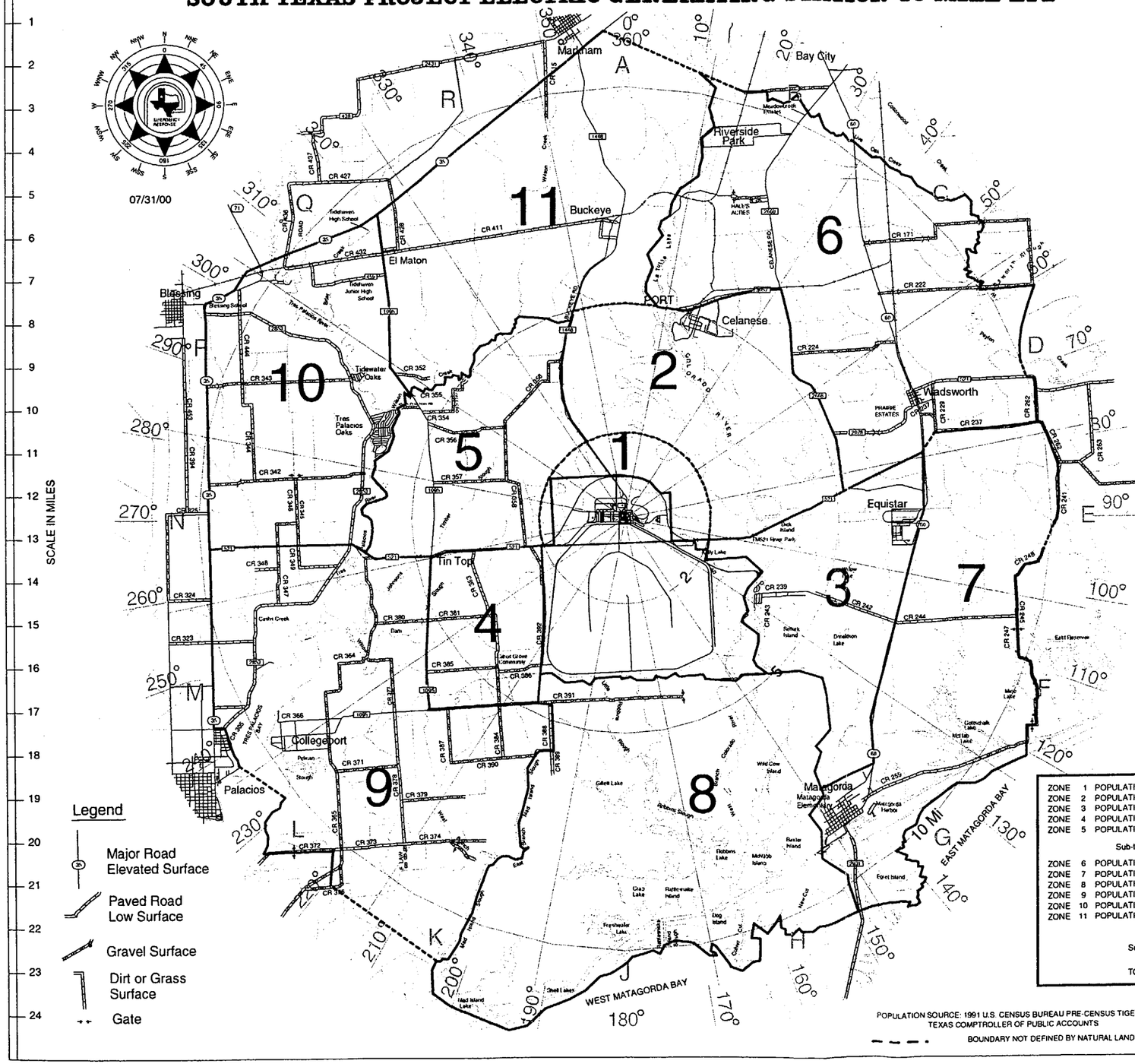
I.4 The Station is designed and equipped with a series of safety systems engineered to meet Title 10 Code of Federal Regulations Part 100 criteria for reactor safety. The Station recognizes that in any accident situation, it is prudent and logical to make every effort to reduce and minimize exposure of the public to radioactive materials and radiation. This is accomplished by issuing offsite protective action recommendations when plant conditions indicate a potential for release of radioactive material or if a release is occurring or has occurred. The Protective Action Guidelines for the general public for thyroid dose due to inhalation from a passing plume and exposure to airborne radioactive material, as recommended by the Environmental Protection Agency, are five (5) rem Thyroid Committed Dose Equivalent and one (1) rem Total Effective Dose Equivalent respectively. Additional information is provided in Addendum I-1.

Recommendations for protective actions for the general public will originate from the Control Room, the Technical Support Center, or the Emergency Operations Facility (depending on facility activation) based on plant conditions and/or based on data derived from offsite dose assessment or actual field monitoring measurements. Emergency Response Procedures establishing these methodologies are 0ERP01-ZV-TP01, Offsite Dose Calculations and 0ERP01-ZV-IN07 Offsite Protective Action Recommendations. These procedures establish methods for determining projected dose to the public at risk. Recommendations will be made in accordance with agreements made with the Texas Department of Health, Bureau of Radiation Control. Whenever possible, message formats provided in the Emergency Response Procedure 0ERP01-ZV-IN02, Notifications to Offsite Agencies, in accordance with Section E of this Plan will be utilized. The implementing procedures relating to Protective Action Guidelines assure that the recommendations are determined through an approved process. The Emergency Director shall approve Offsite protective action recommendations.

I.5 In the event public notification is required, both transient and resident population within the ten mile Emergency Planning Zone will be initially notified through the Prompt Notification System as referenced and described in Section E of this Plan and by the Matagorda County officials. Additional notification and information will be provided to the transient and resident population as well as the general public outside the ten mile Emergency Planning Zone through the Emergency Alert System. Radio station KMKS Frequency Modulation, Bay City, is the primary Emergency Alert System station for the Station nuclear emergency response and KIOX Frequency Modulation is secondary.

Information brochures and other public information documents describing notification, protective actions and general radiological education are provided by general distribution to residents and transients within the ten mile Emergency Planning Zone. Matagorda County will issue messages similar to

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION 10-MILE EPZ



ZONE 1	POPULATION	0	
ZONE 2	POPULATION	29	
ZONE 3	POPULATION	360	
ZONE 4	POPULATION	64	
ZONE 5	POPULATION	98	
	Sub-total		551
ZONE 6	POPULATION	609	
ZONE 7	POPULATION	559	
ZONE 8	POPULATION	0	
ZONE 9	POPULATION	468	
ZONE 10	POPULATION	708	
ZONE 11	POPULATION	145	
	Sub-total		2489
	TOTAL		3040

POPULATION SOURCE: 1991 U.S. CENSUS BUREAU PRE-CENSUS TIGER LINE FILE
TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

BOUNDARY NOT DEFINED BY NATURAL LANDMARKS

PROTECTIVE RESPONSE ZONES AND POPULATIONS

ZONE BOUNDARY DESCRIPTIONS

Zone 1

An area generally north and northeast of the South Texas Project Electric Generating Station and FM 521, running in an arc around the northern portion of the Station.

(Note: No population lives in this area.)

Zone 2

An area generally northeast of the South Texas Project Electric Generating Station within these boundaries: East of FM 1468, south of FM 3057, west of FM 2668, and north of FM 521 East, and which includes Celanese.

Zone 3

An area generally southeast of the South Texas Project Electric Generating Station within these boundaries: East of the Colorado River and Kelly Lake, south of FM 521, west of SH 60, north of the protection levee at Matagorda, and includes Selkirk Island, Exotic Isle, and Equistar.

Zone 4

An area generally west of the South Texas Project Electric Generating Station within these boundaries: East of FM 1095, south of FM 521, west of CR 392, north of CR 391, and which includes Tin Top and Citrus Grove Community.

Zone 5

An area generally northwest of the South Texas Project Electric Generating Station within these boundaries: East of the Tres Palacios River, south of Wilson Creek, west of FM 1468, and north of FM 521.

Zone 6

An area generally northeast of the South Texas Project Electric Generating Station within these boundaries: East of the Colorado River, south and west of Live Oak Creek, west of CR 262, north of FM 521, FM 3057 and includes Riverside Park, Hales Acres, and Meadowbrook Estates.

Zone 7

An area generally east and southeast of the South Texas Project Electric Generating Station within these boundaries: East of SH 60, west of, CR 262, and CR 248, south of CR 237, and south of the protection levy at Matagorda, north of St. Mary's Bayou which includes the town of Matagorda, and the Intracoastal Waterway east of the Colorado River.

Zone 8

An area generally south of the South Texas Project Electric Generating Station within these boundaries: East of Mad Island Slough, south of the South Texas Project Generating Station south property boundary, west of the Colorado River, and north of West Matagroda Bay

Zone 9

An area generally southwest of the South Texas Project Electric Generating Station within these boundaries: East of SH 35, south of FM 521, west of FM 1095, and Mad Island Slough, and which includes Collegeport and the northern portion of Tres Palacios Bay.

Zone 10

An area generally northwest of the South Texas Project Electric Generating Station within these boundaries: East and south of SH 35, west of the northern portion of FM 1095 and the Tres Palacios River, north of FM 521, and which includes Tidewater Oaks, Tres Palacios Oaks.

Zone 11

An area generally north of the South Texas Project Electric Generating Station within these boundaries: East of the northern portion of FM 1095, south of SH 35 west of the northern portion of the Colorado River, north of Wilson Creek, and which includes El Maton and Buckeye.

SECTION K

K - MEDIA RELATIONS

This section of the Plan describes the media relations to be developed and utilized for the education, notification, and alerting of the general public for the purposes of emergency preparedness at the Station.

K.1 Education/Training of the public on emergency planning and how the public should respond in the event of an emergency is primarily the responsibility of the Station in conjunction with local authorities. Annually, the Station will disseminate information to the public within the ten mile Emergency Planning Zone regarding how the public will be alerted in the event of an emergency and what actions should be taken.

K.1.1 The information to be disseminated to the general public will be in the form of printed materials. Also, meetings may be held with the public in the ten mile Emergency Planning Zone to discuss specific Station emergency preparedness information.

K.1.2 The printed materials for general public information will be provided by methods such as:

a. Dissemination to residents in the ten mile Emergency Planning Zone;

b. General distribution to areas where the general public visits on a regular basis, to be picked up as needed;

c. Posters, bulletins and other visible postings in the immediate towns and unincorporated population settlements; and,

d. Personal distribution.

K.1.3 The public information may include, but is not limited to:

a. Educational information on radiation;

b. Respiratory protection;

c. Sheltering;

d. Evacuation routes;

e. Mail-in cards for persons with special needs to ensure extra precautions are taken;

f. Plume Exposure Pathway Emergency Planning Zone Map to follow while the Emergency Alert System informs the personnel of the area that the plume may be affecting; and,

g. Contacts and telephone numbers for additional information.

h. Public information material is available to residents along with a Spanish information number.

K.1.4 The Station promotes a continuing program of public education throughout the Station in regard to nuclear power in general and the Station in particular. Emergency planning will be included in these information programs.

K.1.5 Education of the public regarding nuclear power and emergency response planning is the responsibility of the Supervisor, Emergency Response.

K.1.6 The Supervisor, Emergency Response or designee will distribute the alert radios and provide the public with an introduction to the emergency notification process.

K.2 The public information is distributed annually to residences, businesses, and public buildings within the ten mile Emergency Planning Zone of the Station

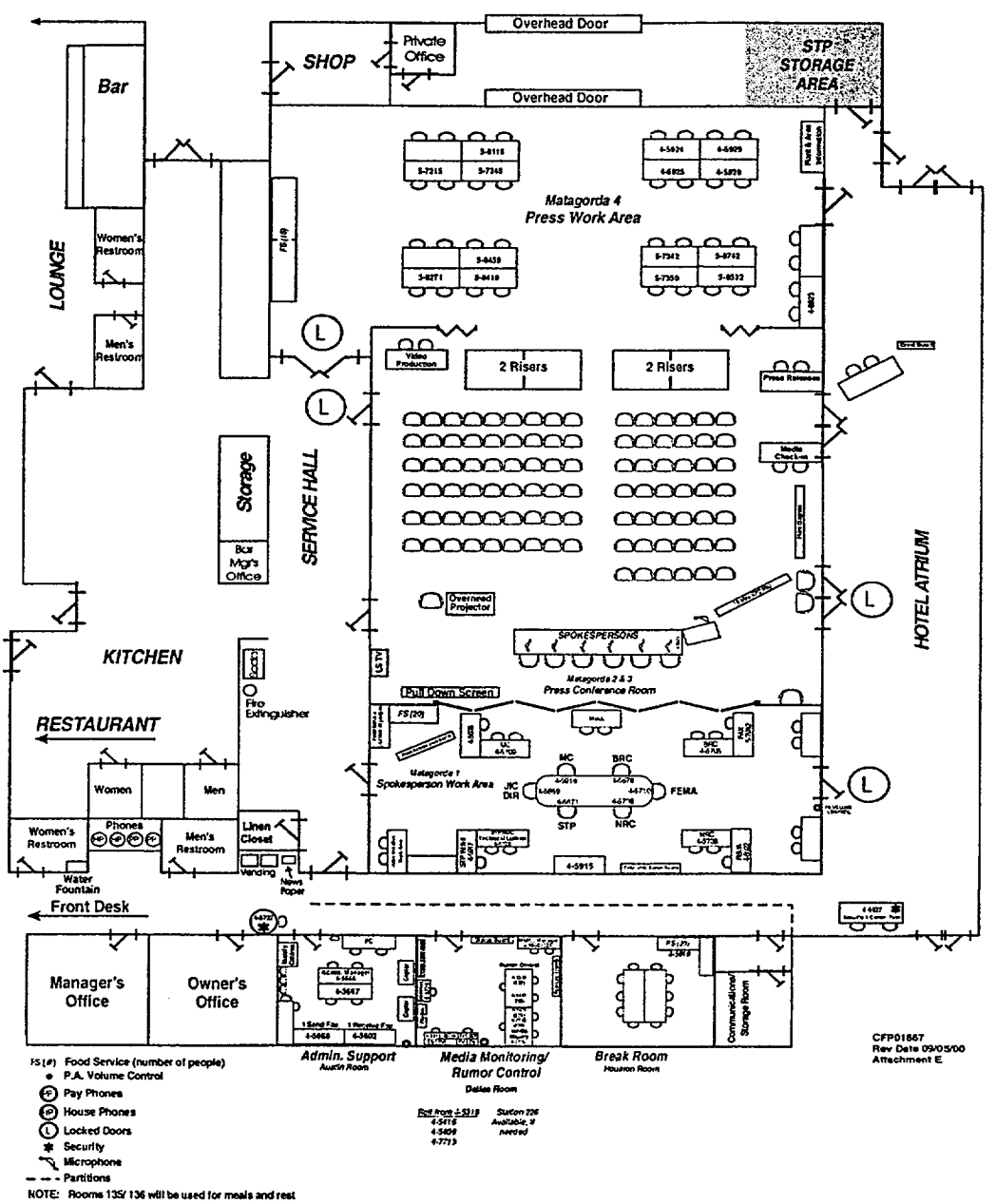
K.3 A general distribution to reach the transient population is achieved by posting information in public areas and by placing supplies of prepared written materials in areas where the general populace frequents.

K.4 Media advertisements, telephone messages, news releases, and public information seminars may be utilized as necessary to achieve an effective information and education program.

K.4.1 At least annually, the news media will be invited to participate in a program to acquaint them with the emergency planning effort at the Station. Typical topics covered will be information concerning radiation, and points of contact for release of information to the media in the event of an emergency, or for plant specific material sent to the media.

K.4.2 The South Texas Project Communications and Public Affairs Group will respond to specific media requests for information concerning nuclear power emergency planning and the Station.

FIGURE K-1
Page 1 of 1
TYPICAL JOINT INFORMATION CENTER LAYOUT



M.1.1 To meet these objectives, the Emergency Preparedness Training Program will include, but is not limited to the following:

a. General content of the Plan and procedures

b. Location of emergency equipment and supplies

c. Names, locations, and functions of the emergency response facilities

d. Use of Station communication systems

e. Personnel accountability, assembly, and evacuation

M.2 The overall responsibility for assignment of Emergency Preparedness Training lies with the Supervisor, Emergency Response as described in approved Plant Procedures.

M.2.1 Each Emergency Response Facility Manager is responsible to ensure the personnel within their facility receive the training required to attend their duties in the Station Emergency Response Organization. Personnel assigned Station Emergency Response Organization duties are responsible to become familiar with their emergency response duties and responsibilities.

M.2.2 All Station Emergency Response Organization personnel are not required to have the in-depth training that is required of those personnel who will be in a management position during a declared event. However, cross-training is allowed.

M.2.3 Annually, Station personnel shall re-qualify for their position. The requalification may be accomplished by either classroom instruction or through the drill and exercise program by being a participant, mentor, coach, evaluator, or controller, but not as an observer in his/her position. Multiple assignees to a given key Emergency Response Organization position may receive credit for the same drill if their participation is a meaningful and thorough opportunity to gain proficiency in the assigned position.

M.2.4 New personnel assigned to the Station shall attend applicable Emergency Plan Training prior to assuming any Emergency Response Organization position.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

EMERGENCY PLAN

ATTACHMENT 2

PROCEDURE CROSS-REFERENCE

0ERP01-ZV-EF01	EOF Director	C
0ERP01-ZV-EF02	Deputy EOF Director	
0ERP01-ZV-EF03	Radiological Director	C
0ERP01-ZV-EF04	Technical Director	C
0ERP01-ZV-EF07	Support Organization Director	C
0ERP01-ZV-EF08	Licensing Director	C
0ERP01-ZV-EF09	Procurement/Resources Supervisor	F
0ERP01-ZV-EF10	Offsite Field Team Supervisor	J
0ERP01-ZV-EF11	Records Supervisor	
0ERP01-ZV-EF12	Communications Systems Supervisor	
0ERP01-ZV-EF15	Dose Assessment Specialist	H, I, J
0ERP01-ZV-EF17	System Status Evaluator	
0ERP01-ZV-EF18	Offsite Agency Communicator	
0ERP01-ZV-EF19	Matagorda County EOC Liaison	
0ERP01-ZV-EF20	State of Texas EOC Liaison	
0ERP01-ZV-EF21	Federal Response Agency Liaison	
0ERP01-ZV-EF22	Owners' Liaison	
0ERP01-ZV-EF23	INPO/Industry Liaison	
0ERP01-ZV-EF24	Support Orientation Coordinator	
0ERP01-ZV-EF25	Site Public Affairs Coordinator	K
0ERP01-ZV-EF26	Materials Engineer	
0ERP01-ZV-EF27	Engineering Assistant	
0ERP01-ZV-EF28	Assistant Support Organization Director	F
0ERP01-ZV-IN01	Emergency Classification	D, H
0ERP01-ZV-IN02	Notifications to Offsite Agencies	D, E, F, H, I
0ERP01-ZV-IN03	Emergency Response Organization Notification	E, F
0ERP01-ZV-IN04	Assembly and Accountability	F, I
0ERP01-ZV-IN05	Site Evacuation	F, I, J
0ERP01-ZV-IN06	Radiological Exposure Guidelines	F, H, I, J
0ERP01-ZV-IN07	Offsite Protective Action Recommendations	H, I
0ERP01-ZV-OF01	Alternate Emergency Operations Facility Activation, Operation, and deactivation	G
0ERP01-ZV-OF02	Joint Information Center Activation, Operations, and Deactivation	G, K
0ERP01-ZV-OS01	OSC Coordinator	C
0ERP01-ZV-OS02	Assistant OSC Coordinator	C
0ERP01-ZV-OS03	Radiological Coordinator	C
0ERP01-ZV-OS04	Security Coordinator	C
0ERP01-ZV-OS05	Materials Handler	
0ERP01-ZV-OS06	Emergency Teams	C

ATTACHMENT 2

PROCEDURE CROSS-REFERENCE

0ERP01-ZV-RE01	Recovery Operations	F, L
0ERP01-ZV-RE02	Documentation	L
0ERP01-ZV-SH01	Shift Supervisor	C, H
0ERP01-ZV-SH02	Acting Radiological Manager	C
0ERP01-ZV-SH03	Acting Security Manager	C
0ERP01-ZV-SH04	Acting OSC Coordinator	C
0ERP01-ZV-TP01	Offsite Dose Calculations	F, H, I, J
0ERP01-ZV-TP02	Offsite Field Teams	H, I, J
0ERP01-ZV-TP03	Severe Accident Management Guidelines	C
0ERP01-ZV-TS01	TSC Manager	C
0ERP01-ZV-TS02	Assistant TSC Manager	
0ERP01-ZV-TS03	Operations Manager	C
0ERP01-ZV-TS04	Radiological Manager	C, H, I, J
0ERP01-ZV-TS05	Chemical/Radiochemical Manager	
0ERP01-ZV-TS06	Maintenance Manager	C
0ERP01-ZV-TS07	Technical Manager	C
0ERP01-ZV-TS08	Security Manager	C
0ERP01-ZV-TS09	Administrative Manager	C
0ERP01-ZV-TS11	Engineering Supervisor	
0ERP01-ZV-TS12	Security Supervisor	
0POP04-ZO-0004	Personnel Emergencies	E, F, J
0PGP03-ZA-0106	Emergency Medical Response Plan	F, J
0PGP03-ZT-0139	Emergency Preparedness Training Program	M
0PGP05-ZV-0001	Emergency Response Exercises and Drills	M, N
0PGP05-ZV-0002	Emergency Response Activities Schedule	E, N
0PGP05-ZV-0003	Emergency Response Organization	C, F
0PGP05-ZV-0005	Emergency Response Program	A, O
0PGP05-ZV-0006	Emergency Notification and Response System	C
0PGP05-ZV-0007	Prompt Notification System	E, G
0PGP05-ZV-0009	Emergency Facilities Inventories and Inspections	G, O
0PGP05-ZV-0010	Emergency Plan Revision	A, O
0PGP05-ZV-0011	Emergency Communications	E, G
0PGP07-ZA-0011	Communications System	E