Melvin N. Browne
Manager, Nuclear Licensing & Operating Experience

SCE&G®
A SCANA COMPANY

February 14, 2001
RC-01-0038

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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
TRANSMITTAL OF EMERGENCY PLAN PROCEDURE

In compliance with 10CFR50 Appendix E(V), South Carolina Electric & Gas Company, acting for itself and as agent for South Carolina Public Service Authority, transmits one controlled copy of EPP-014, Revision 7, Change A, "Toxic Release".

The effectiveness of the Virgil C. Summer Nuclear Station Radiation Emergency Plan is not decreased by the change to this procedure.

Should you have any questions, please contact Mrs. Donna Railey at (803) 345-4107.

Very truly yours,

R. J. Estes for

Melvin N. Browne

DWR/MNB/dr
Attachments

c. (Without Attachment unless noted)
L. A. Reyes (With 2 Attachments)
NRC Resident Inspector
RTS (RR 6000, O-L-99-0354)
File (810.10-2)
DMS (RC-01-0038)

A045

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMMER NUCLEAR STATION

NUCLEAR OPERATIONS

NUCLEAR OPERATIONS

COPY NO. 157

EMERGENCY PLAN PROCEDURE

EPP-014

TOXIC RELEASE

REVISION 7

L C Lippo
DISCIPLINE SUPERVISOR

9/14/98
DATE

S H C Bowen
APPROVAL AUTHORITY

9/16/98
DATE

RECORD OF CHANGES

CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE	CHANGE LETTER	TYPE CHANGE	APPROVAL DATE	CANCELLATION DATE
A	P	1-15-01					

INFORMATION USE

Procedure May Be Performed From Memory.
User Retains Accountability For Proper Performance.

NUCLEAR OPERATIONS

COPY NO. 157

SAP-139
ATTACHMENT III
PAGE 1 OF 3
REVISION 19

PROCEDURE DEVELOPMENT FORM - A

I. DATE: 12-19-00 PROC.# EPP-014 REV. # 7 CHG. A COMM. #
TITLE: Toxic Release

NEW PROC ___ CHANGE ✓ PERMANENT ✓
REVISION ___ RESTRICTED ___ FROM ___ TO ___
SAFETY RELATED ___
QUALITY RELATED ___
NON-SAFETY RELATED ✓

II. **DESCRIPTION:** Added Reference 2.16, Regulatory Guide 1.78, and section 4.9.

REASON FOR CHANGE: To identify the most probable chemical releases that may affect Control Room habitability as described in PIP C-00-0425 Corrective Action #11

Originator R.J. Schwartz Sign/Print

III. **WILL THIS REVISION/CHANGE/NEW PROCEDURE:**

	*YES	NO	N/A
1. Result in significant increased personnel radiation exposure? (ALARA review)	___	✓	
2. Result in a release of effluents to the Environment?	___	✓	
3. Degrade the effectiveness of the Radiation Emergency Plan?	___	✓	
4. Degrade the safeguards effectiveness of the Physical Security, Safeguards Contingency of Training and Qualification Plans?	___	___	✓

* **If any question 1 through 4 is answered "YES", refer to appropriate section of procedure for direction**

Required Reviews: Check ALL selections in first 3 columns for SAPs

								Other Reviews:
() MCHS	() MNL&OE	() MPLE	() GMES	() CWPS	() ISEG	() NOET	() QC	XGMNSS
() MDE	() MNPS	() MPSE	() GMNPO	() DE	() MNTS	XNPS	XQR	X QA
() MHPS	() MNT	() MSPD	() GMNSS	() FFD	() MQS	() NTET	() RC	X NL&OE
() MMPR	() MOPS	() SAS	() GMSPD	XHPS	() MPR	XOPS	() RE	X MCHS
() MMS	() MP&S	() QA	() CHS	() ISD	() NL&OE	() PSE	() TU	

Discipline Supervisor
12/20/00 Date

IV. **10CFR50.59 SCREENING REVIEW/SAFETY EVALUATION**
☐ REQUIRED ☒ EXEMPT ☐ PSRC SUPPORTING DOCUMENT: 10CFR50.54q
Discipline Supervisor Concurrence

V. **TEMPORARY APPROVAL:**
QUALIFIED REVIEWER ___ DATE ___
TELECON BY ___
SHIFT SUPERVISOR ___ DATE ___
QA REVIEW ___ DATE ___
TELECON BY ___
FINAL APPROVAL REQUIRED BY: DATE ___

VI. **DISCIPLINE SUPERVISOR FINAL REVIEW:**
PSRC REVIEW PRIOR TO IMPLEMENTATION? YES ___ NO ✓
TRAINING REQUIRED? YES ___ NO ✓
IF YES, PRIOR TO PROCEDURE IMPLEMENTATION? YES ___ NO ___
P/CAP AFFECTED? YES ___ NO ✓
COMMENTS RESOLVED: Discipline Supervisor 11/10/01 Date

VII. **P/CAP ACCEPTABLE?**
C. YES ___ NO ___ N/A NL&OE / Date
N. YES ___ NO ___ N/A RESP. MGR. / Date

VIII. **FINAL QA REVIEW (As Applicable)**
N/A QA Concurrence / Date

IX. **APPROVAL AUTHORITY:**
N/A Training Completed / Date
BCWilliams Procedure Approval/Concurrence 11/15/01 Date

X. **PSRC REVIEW:**
A. REVIEWED BY:
PSRC Chairman / Date
COMMENTS: YES ___ NO ___

B. PSRC COMMENTS RESOLVED:
Responsible Manager / Date
PSRC Chairman / Date

TABLE OF CONTENTS

1.0 PURPOSE

1.1 This procedure provides guidelines for the protection of plant personnel in the event of a significant unplanned or planned release of toxic, hazardous or flammable materials or waste on site.

1.2 This procedure provides guidelines to terminate the release of toxic, hazardous, or flammable materials or waste on site.

2.0 REFERENCES

2.1 Virgil C. Summer Nuclear Station Radiation Emergency Plan.

2.2 Virgil C. Summer Nuclear Station Environmental Report, Section 7.3.3.

2.3 NUREG-0654, Criteria for Preparation & Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

2.4 Hazardous Waste Contingency/Emergency Response Plan.

2.5 29CFR1910.120, Hazardous Waste Operations and Emergency Response.

2.6 Nuclear Training Manual, Sections III.6 and III.11.

2.7 Emergency Planning Telephone Directory.

2.8 EPP-001, Activation and Implementation of Emergency Plan.

2.9 EPP-012, Onsite Personnel Accountability and Evacuation.

2.10 EPP-103, Emergency Equipment Checklist.

2.11 ISP-020, Use of HazMat Personnel Protective Equipment.

2.12 CP-630, Hazardous Waste Management.

2.13 HazMat Risk Assessment.

2.14 South Carolina Hazardous Waste Management Regulations, R.61-79.124 - R.61-79.270.

2.15 SAP-1131, Electronic Processing of Condition Evaluation Reports.

2.16 Regulatory Guide 1.78, Assumptions for Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release. | Chg A

3.0 DEFINITIONS AND ABBREVIATIONS

3.1 Definitions

3.1.1 Qualified - In this procedure, "qualified" denotes those personnel who have received appropriate training in accordance with the Hazardous Waste Contingency/Emergency Response Plan.

3.1.2 HazMat Responder, Level A - Personnel who have received 24 hours of initial training on HazMat response in accordance with the Nuclear Training Manual and are thereby qualified to take offensive measures during a HazMat Emergency.

3.1.4 HazMat Responder, Level B - Personnel who have received 8 hours of initial training on HazMat response in accordance with the Nuclear Training Manual, and are thereby qualified to take defensive measures during a HazMat Emergency.

3.2 Abbreviations

3.2.1 HazMat - Hazardous Material/Waste

3.2.2 SCDHEC - South Carolina Department of Health & Environment Control

3.2.3 MSDS - Material Safety Data Sheet

3.2.4 DOT - Department of Transportation

3.2.5 EPA - Environmental Protection Agency

3.2.6 NFPA - National Fire Protection Association

4.0 CONDITIONS AND PREREQUISITES

4.1 An emergency response exists when there is an uncontrolled release of a hazardous material or waste that can not be controlled by employees in the immediate release area. If personnel from outside the immediate release area are needed to handle an emergency response, only qualified HazMat Responders may respond.

4.2 The HazMat Risk Assessment is a document that provides guidance on the hazards which are in areas and facilities of the plant site, individual chemical information, and Emergency Response guidelines. The Manager, Chemistry Services, is responsible for maintaining the HazMat Risk Assessment.

4.3 HazMat Emergency Response Teams dispatched within the Protected Area should be made up of, as a minimum, the Shift Chemist (Team Leader) and two (2) Fire Brigade personnel. The Shift Chemist must be trained as a Level A responder; however, as Team Leader, is not required to be qualified to wear a respirator or the protective suits. If the Team Leader is not qualified to wear a respirator or protective suits he/she cannot enter the immediate release area and can only direct activities from outside the immediate release area. The Team will be under direct or indirect supervision of the IED/ED.

4.4 HazMat Emergency Response efforts outside the Protected Area will be the responsibility of the local Volunteer Fire Departments, with support from qualified plant staff, as long as shift manning requirements are maintained.

4.5 Refer to EPP-001, Activation and Implementation of the Emergency Plan, and declare the appropriate emergency classification when the Initiating Conditions are met.

4.6 If the release is of sufficient magnitude that public health and safety or the environment could be adversely affected, notification of local, State and federal agencies must be accomplished in accordance with Attachment I.

4.7 If there is fire involved with hazardous materials or waste, the Fire Brigade will respond. Non-Fire Brigade qualified HazMat Emergency Response personnel may provide technical advice to the Fire Brigade Leader, but will not participate in fire emergencies.

4.8 The SS/CRS must note in the Station Log Book, the time, date, and details of any incident which requires implementing this procedure.

4.9 Reference 2.16 requires the most probable chemical release that could effect Control Room habitability be identified. Evaluation shows Ammonium Hydroxide and Chlorine gas, both stored in the vicinity of the Water Treatment Building, are the most probable chemical releases that could effect Control Room habitability. The HazMat Risk Assessment lists quantities and response guidelines for release of these chemicals. Chg A

5.0 PROCEDURE

NOTE 5.1

If a toxic or hazardous gas release has occurred onsite, the SS should evaluate placing Control Room Emergency Ventilation in service.

5.1 For releases, fires, or explosions of hazardous materials or waste inside the Protected Area, the SS/CRS shall:

5.1.1 Announce the emergency condition to all plant personnel over the plant paging system. Dispatch the HazMat Emergency Response Team to a control location (Fire Brigade Locker, HazMat Trailer). The Team will then respond to the scene using the buddy system.

Attention all personnel: There has been a hazardous material fire/explosion/release __(state specific location)__

All personnel evacuate the area and assemble at __(state specific location)__

Hazmat Emergency Response Team respond and assemble at ____(state specific location)____

Repeat the announcement.

5.1.2 Implement EPP-012, Onsite Personnel Accountability and Evacuation, if necessary.

5.1.3 Request offsite assistance from the Fairfield County Dispatcher (ESSX *42 or 635-5511), if necessary. Inform Security if offsite assistance is requested.

5.1.4 Notify Security of the details of the emergency, and request evacuation assistance or crowd control at the scene.

5.1.5 Using the HazMat Risk Assessment, determine the types of hazardous materials in the area and the protective measures to be taken. Also, refer to the appropriate MSDS for additional information. Inform the HazMat Emergency Response Team Leader.

5.1.6 During off-normal hours, notify HazMat Emergency Response personnel. See the Emergency Planning Telephone Directory for a listing of personnel and telephone numbers.

5.1.7 If any personnel comes in contact with the hazardous material, refer to the appropriate MSDS for first aid guidance.

5.2 For releases, fires, or explosions of hazardous materials or wastes outside the Protected Area, the SS/CRS shall:

5.2.1 Announce the emergency condition to all plant personnel over the plant paging system.

Attention all personnel:

There has been a hazardous material fire/explosion/release
(state specific location)

All personnel evacuate the area and assemble at
(state specific location).

A. Sound the Fire Alarm

B. Repeat the announcement

NOTE 5.2.2

Do not violate shift manning requirements.

5.2.2 Dispatch qualified shift personnel to the scene if manpower is available.

5.2.3 If necessary, request offsite assistance from Fairfield County Dispatcher (ESSX *42 or 635-5511). Explain the nature of the emergency.

5.2.4 Notify Security of the details of the emergency and request evacuation assistance or crowd control at the scene. Inform Security of the request for offsite assistance.

5.2.5 Using the HazMat Risk Assessment, determine the types of hazardous materials in the area and the protective measures to be taken. Also, refer to the appropriate MSDS for additional information. Inform the HazMat Emergency Response Team Leader and responding fire department(s).

5.2.6 Notify HazMat emergency personnel listed in the Emergency Planning Telephone Directory.

5.2.7 If any personnel come in contact with the hazardous material, refer to the appropriate MSDS for first aid guidance.

5.3 HazMat Emergency Response Team Actions

5.3.1 Prior to entry into the area, refer to HazMat Risk Assessment for a list of hazardous chemicals that could be present. Follow the stated precautions concerning respiratory protection and protective clothing listed in ISP-020.

5.3.2 The HazMat Emergency Response Team Leader should assess the situation and determine the best methods for containment and termination of the release using the following guidelines:

A. Maintain open communications with SS/CRS.

B. Establish protective zones at the emergency scene.

C. Determine if there are any contaminated or injured personnel.

D. Determine the chemical or chemicals involved in the release and their hazards. Use the appropriate MSDSs, DOT Emergency Response Guidebook, NFPA Fire Protection Guide On Hazardous Materials, shipping papers, or any other references available.

E. Select the appropriate personal protective equipment to respond safely to the emergency.

F. Determine the location and set up decontamination area using CP-630.

G. Determine the response/control methods to be used (cover storm drains, patching, plugging, neutralization, etc.).

5.3.3 Dispatch team member(s) to obtain necessary equipment or supplies from the HazMat Response Trailer or from individual HazMat Response equipment storage locations found in Attachment II. The trailer can be pulled to the scene, if desired. Request assistance through the SS/IED/ED.

NOTE 5.3.4

The HazMat Emergency Response Team Leader will obtain permission from the SS/CRS prior to operating any valves. (Chemistry personnel are permitted to operate Water Treatment System valves without SS/CRS approval.)

5.3.4 Only HazMat Responder, Level A trained personnel can take offensive measures to terminate a release requiring operating valves, applying patches to leaking cylinders, etc. Level B trained personnel can take defensive measures such as building dams, assisting in decontamination efforts, applying absorbent materials, blocking drains, etc.

5.4 For releases, fires, or explosions of hazardous materials or waste, the SS/CRS should ensure the following is performed:

5.4.1 Designate Chemistry personnel to identify the character, exact source, amount, and the extent of any released materials.

5.4.2 Assess possible hazards to human health or the environment which may result from the fire, or explosion or waste release. This assessment must consider both direct and indirect effects of the fire, explosion, or waste release (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, and the effects of any hazardous surface water runoffs from the water or chemical agents used to control fire and heat-induced explosions). The HazMat Risk Assessment provides guidance.

5.4.3 If the SS/CRS, with assistance from Chemistry supervision, determines that the facility has had a release, fire, or explosion which involves hazardous material or waste which could threaten human health or the environment outside the facility, the SS/CRS ensures the following notifications are completed:

A. If the assessment indicates that evacuation of offsite areas may be advisable, notify appropriate county dispatchers. The SS/CRS should assist appropriate officials in deciding whether local areas should be evacuated.

B. The SS/CRS should ensure that Chemistry Supervision notifies SCDHEC, the National Response Center, the SCE&G Environmental Group, Local Planning Committee, and the SCANA Public Affairs Coordinator and this notification is documented, in accordance with Attachment I.

C. The SS/CRS should direct the Chemistry Supervisor to review Attachment I to determine any additional notifications that may be required.

5.4.4 During any emergency, the SS/CRS, with assistance from Chemistry supervision, ensures that all reasonable measures necessary are taken to ensure that fire, explosions, or waste releases do not occur, recur, or spread to other hazardous materials or waste at the facility. These measures must include, where applicable, collecting and containing released material or waste, and removing, or isolating containers.

5.4.5 When the emergency is terminated, ensure that the actions of 5.5 are taken.

5.5 Post-Emergency Actions

5.5.1 Immediately following an emergency, the Chemistry Supervisor must coordinate the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from fire, explosion, or waste release at the facility. The Chemistry Supervisor must ensure that in the affected area(s) of the facility:

A. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.

B. All emergency equipment listed in EPP-103 for HazMat response is cleaned and fit for its intended use before operations involving hazardous waste are resumed.

5.5.2 The Chemistry Supervisor will assess long term cleanup requirements. Offsite assistance should be used for major cleanup activities.

5.5.3 Nuclear Licensing must notify SCDHEC that the facility is in compliance with Section 5.5.1 before operations involving hazardous waste are resumed in the affected area of the facility.

5.5.4 Within 15 days after the incident, a written report on the incident must be submitted to SCDHEC, in accordance with the Hazardous Waste Contingency/Emergency Response Plan.

6.0 RECORDS

6.1 Forward all written material or copies of written material generated because of the emergency to the Emergency Services Unit (ESU). The ESU will insure appropriate written material is included in the applicable Condition Evaluation Report.

7.0 REVISION SUMMARY

7.1 Incorporated Revision 6, Change A.

7.2 Changed 4.3 to specify the Team Leader has to be trained as a Level A responder but not necessarily qualified as such.

7.3 Changed 6.1 from forwarding written material to Nuclear Licensing to insuring written material is included in the applicable Condition Evaluation Report.

REPORTING RELEASES FROM FACILITY

This form is to be completed, if the Shift Supervisor/Emergency Director determines that the facility has had a fire, explosion, or release which involves hazardous waste which could threaten human health or the environment, outside the facility (refer to Section 5.4). Chemistry supervision should perform these notifications when available.

(1) Name and telephone number of reporter:_____

(2) Name and address of facility.
V.C. Summer Nuclear Station, SCE&G
P.O. Box 88, Route 215
Jenkinsville, S.C. 29065

(3) Time and type of incident (e.g., release, fire).
_____

(4) Name and quantities of material(s) (specify units) involved to the extent known.
_____

(5) The extent of injuries, if any.
_____
_____

(6) The possible hazards to human health, or the environment outside the facility.
_____
_____

Groups Notified (See EP Telephone Directory for numbers).

A. SCDHEC
Individual Contacted _____ Date/Time _____

B. National Response Center
Individual Contacted _____ Date/Time _____

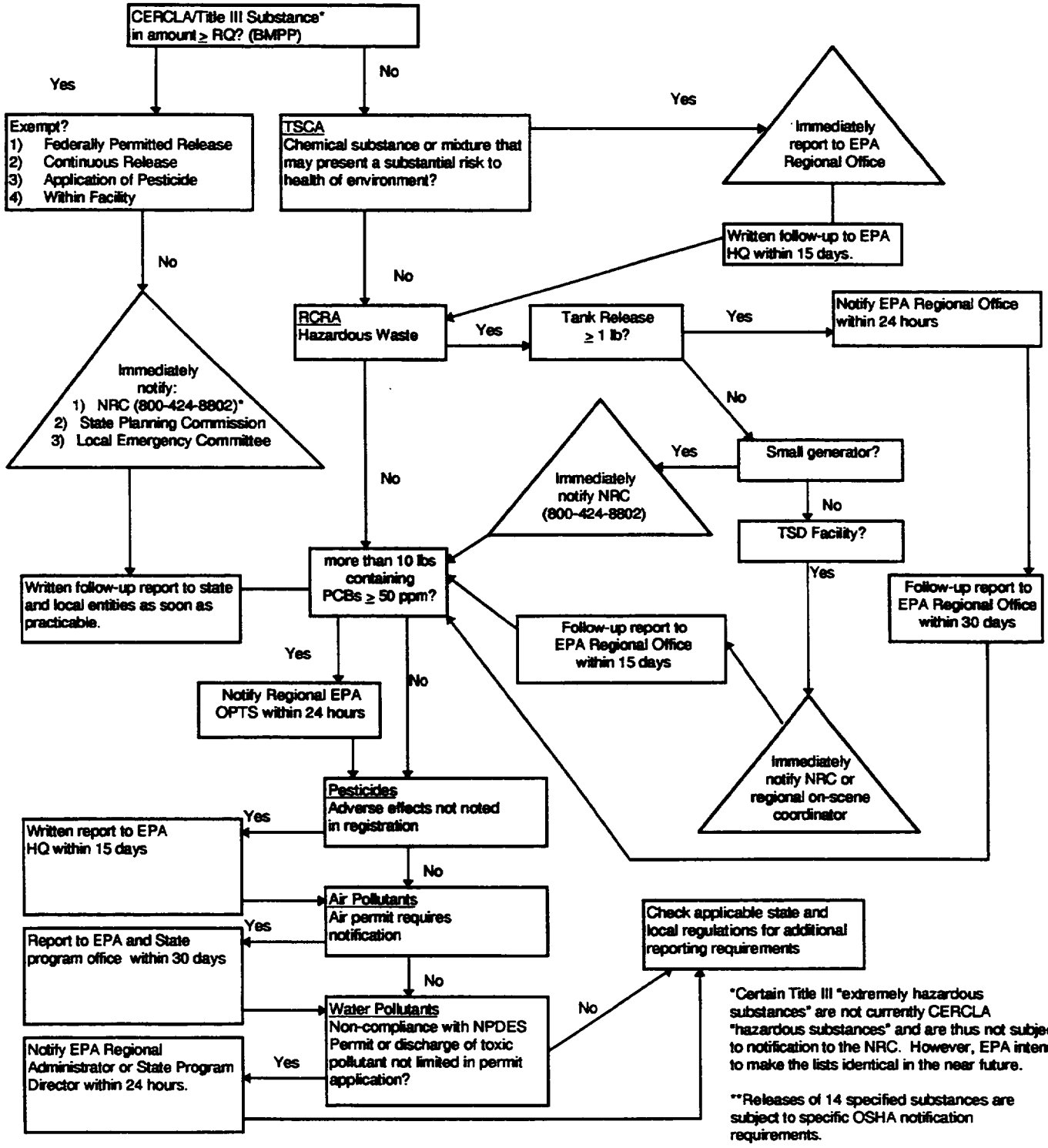
C. SCE&G Environmental Services
Individual Contacted _____ Date/Time _____

D. Local Planning Committee
(Director, Fairfield County Disaster Preparedness Agency or other appropriate official)
(Call County Dispatcher)
Individual Contacted _____ Date/Time _____

E. SCE&G Media Coordinator
Individual Contacted ___ Date/Time ___

_____
Signature

REPORTING RELEASES FROM FACILITY
(For Chemistry Supervisor Use)



*Certain Title III "extremely hazardous substances" are not currently CERCLA "hazardous substances" and are thus not subject to notification to the NRC. However, EPA intends to make the lists identical in the near future.

**Releases of 14 specified substances are subject to specific OSHA notification requirements.

EMERGENCY EQUIPMENT AND LOCATIONS

A. Hazardous Waste Accumulation Point (L-52)

Fire Extinguisher
Sand Bags
Shovel
Speedi-Dry (Absorbent)
Oil Spill Kit

B. Warehouses A and B

Fire Extinguishers
Fire Suppression System (Water)
Speedi-Dry (Absorbent)

C. Water Treatment Plant Chemical Storeroom and Labs

Fire Extinguishers on 463' and 436' elevations
Fire Hose Reel on 436' and 463' elevations
Fire Suppression System (Preaction Sprinkler on 463' only)
Fire Hose Cabinet (North of Diesel Generator Building)
Gloves (Rubber)
Lab Coats
Face Shields
Goggles
SCBA's (463' elevation)

D. HazMat Response Trailer

Protective clothing
Absorbents
Drain Stoppers
Salvage Drum
Neutralizing Solutions
Reference Material