



Entergy Nuclear Northeast  
Vermont Yankee  
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May 14, 2003  
BVY 03-047

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

Subject: Vermont Yankee Nuclear Power Station  
License No. DPR-28 (Docket No. 50-271)  
Vermont Yankee Emergency Plan Implementing Procedure Changes

In accordance with 10 CFR 50.54(q), enclosed are the latest changes to the following Vermont Yankee Emergency Plan Implementing Procedures including the change memos and the 10 CFR 50.54(q) Evaluation Checklists:

OP 3536, Rev. 2  
OP 3504, Rev. 36, LPC#1

These changes were determined to not need prior NRC review and approval.

If you have any questions, please contact Audra Williams, Emergency Planning Coordinator, in our Brattleboro office at (802) 258-4177.

Sincerely,

ENERGY NUCLEAR NORTHEAST  
VERMONT YANKEE

  
Lori Tkaczyk  
Emergency Planning Manager

Attachments

cc: USNRC Region 1 Administrator  
USNRC Resident Inspector – VYNPS  
USNRC Project Manager – VYNPS (no attachments)  
David M. Silk, Senior Emergency Preparedness Specialist,  
USNRC Region 1  
Vermont Department of Public Service

A045

# E-Plan Implementing Plant Procedures

To: E-Plan Implementing Procedure Controlled Set Holders  
From: Technical Support - DCC - Angela M. Hogan  
Date: 05/14/03  
Re: Entergy Vermont Yankee Emergency Plan Implementing Procedure Change 217,  
Instruction Sheet

A new Table of Contents is included.

**LPCs:** The following LPC should be incorporated into the appropriate procedures:

<b><u>Proc/Rev #</u></b>	<b><u>LPC #</u></b>	<b><u>Procedure Title</u></b>
OP 3504/36	1	Emergency Communications

**REVISIONS:** The following Revs should replace the appropriate procedures:

<b><u>Proc/Rev #</u></b>	<b><u>Procedure Title</u></b>
OP 3536/2	In-Plant Air Sample Analysis with Abnormal Conditions

<b>Vermont Yankee Emergency Plan Implementing Procedures</b>				
<b>Table of Contents</b>				
<b>May 14, 2003</b>				
<b>Title</b>	<b>Number</b>	<b>Revision</b>	<b>LPC #</b>	<b>Use Classification</b>
Emergency Plan Classification and Action Level Scheme	AP 3125	Rev. 19		"Reference"
Emergency Communications	OP 3504	Rev. 36	1	"Reference"
Emergency Preparedness Exercises and Drills	OP 3505	Rev. 24	1	"Information"
Emergency Equipment Readiness Check	OP 3506	Rev. 42	1	"Reference"
Emergency Radiation Exposure Control	OP 3507	Rev. 30		"Reference"
On-Site Medical Emergency Procedure	OP 3508	Rev. 23		"Reference"
Environmental Sample Collection During an Emergency	OP 3509	Rev. 17		"Reference"
Off-Site and Site Boundary Monitoring	OP 3510	Rev. 27		"Reference"
Off-Site Protective Action Recommendations	OP 3511	Rev. 12		"Reference"
Evaluation of Off-Site Radiological Conditions	OP 3513	Rev. 21		"Reference"
Emergency Actions to Ensure Initial Accountability and Security Response	OP 3524	Rev. 20		"Reference"
Radiological Coordination	OP 3525	Rev. 10		"Reference"
Emergency Call-In Method	OP 3531	Rev. 16		"Reference"
Emergency Preparedness Organization	AP 3532	Rev. 11		"Information"
Post Accident Sampling of Reactor Coolant	OP 3533	Rev. 6	1	"Continuous"
Post Accident Sampling of Plant Stack Gaseous Releases	OP 3534	Rev. 4		"Continuous"
Post Accident Sampling and Analysis of Primary Containment	OP 3535	Rev. 4		"Continuous"
In Plant Air Sample Analysis with Abnormal Condition	OP 3536	Rev. 2		"Continuous"
Control Room Actions During an Emergency	OP 3540	Rev. 3		"Reference"
Activation of the Technical Support Center (TSC)	OP 3541	Rev. 2		"Reference"
Operation of the Technical Support Center (TSC)	OP 3542	Rev. 2		"Reference"
Activation of the Operations Support Center (OSC)	OP 3543	Rev. 0		"Reference"
Operation of the Operations Support Center (OSC)	OP 3544	Rev. 3		"Reference"
Activation of the Emergency Operations Facility/Recovery Center (EOF/RC)	OP 3545	Rev. 2		"Reference"
Operation of the Emergency Operations Facility/Recovery Center (EOF/RC)	OP 3546	Rev. 3		"Reference"
Security Actions During an Emergency	OP 3547	Rev. 1	1	"Reference"
Emergency Plan Training	OP 3712	Rev. 17		"Information"

**PREAPPROVED LPC FORM**

**PART 1 - Initiation**

**Converted to Admin. Revision #**

**LPC No:** /

A. Procedure No.: <b>OP 3504</b>	Current Revision #: <b>36</b>	Title: <b>Emergency Communications</b>
B. Description of Change: <b>Changed phone number of ISO on Appendix B, page 1 of 3.</b>		
C. Reason for Change: <input type="checkbox"/> Result of Design Change, Minor Mod, EDCR _____ <input type="checkbox"/> Related ER No. _____ - _____ <input type="checkbox"/> Other: _____ <input checked="" type="checkbox"/> Editorial		
D. Duration: <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> One Time Only	I. Originator (Print/Sign/Date) (Use AP 0096, App. A as a reference) (Complete & attach AP 0096 App. C, unless editorial)  <b>Audra Williams</b> <b>4/28/03</b> <i>Audra Williams</i>	E. Surveillance Database Change? <input type="checkbox"/> Yes, change submitted <input checked="" type="checkbox"/> No
F. Procedure Type: <input checked="" type="checkbox"/> Technical <input type="checkbox"/> Admin. (AP,PP)		G. AP 0091, Risk Assessment <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H. Page(s) affected: <u>App. B, page 1 of 3</u>		

**PART 2 - Review/Approval (Refer to LPC Criteria of Appendix A)**

A. Technical Verification Review (Print/Sign/Date) (Use AP 0096, Appendix B as a reference) <input checked="" type="checkbox"/> N/A	B. Cross-Discipline Review(s) (Print/Sign/Date) <input checked="" type="checkbox"/> N/A
(May perform Qualified Review) (N/A if editorial change)	
C. Qualified Review (Print/Sign/Date) (Use AP 0096, Appendix D, as a reference) <input checked="" type="checkbox"/> N/A	D. 50.59 review completed type: <input type="checkbox"/> AD/Screen <input type="checkbox"/> Evaluation <input checked="" type="checkbox"/> N/A (N/A if editorial change) <input checked="" type="checkbox"/> 50.54(q) (EPIP only)
E. RPO Approval (Print/Sign/Date) <i>Brian M. Fin</i> <i>Brian M. Fin</i> <b>4/30/03</b>	F. IF 50.59 Evaluation: <input checked="" type="checkbox"/> N/A PORC Mtg.      Date:
G. Plant Manager (Print/Sign/Date) (SPs only) N/A	
H. Training: (Required for Admin Procedures, unless editorial) <input checked="" type="checkbox"/> N/A	
I. Effective Date: <b>5/14/03</b>	

CDS Initials *Amf*

### 10 CFR 50.54(q) Evaluation Checklist

List of Emergency Plan Section(s)/Emergency Plan Implementing Procedure(s) or any other document to be evaluated. (Include Title and Revision No.):

OP 3504, Rev. 36, LPC#1, Emergency Communications

**A. Screening Evaluation**

Based on a review of the following questions, determine if the change has the potential to affect our ability to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50.

A "YES" answer to any part of the questions requires that a written evaluation be done to determine whether the effectiveness of the Emergency Plan was decreased as specified in Section B of this checklist.

A "NO" answer to all questions requires no written evaluation as specified in Section B of this checklist.

1. Could the proposed change affect our ability to meet the following standards of 10CFR50.47(b):

YES	NO
-----	----

(1) Assignment of Emergency Response Organization responsibilities		X
(2) Assignment of on-shift Emergency Response Organization personnel		X
(3) Arrangements for Emergency Response Support and Resources		X
(4) Emergency Classification and Action levels, including facility system and effluent parameters		X
(5) Notification Methods and Procedures		X
(6) Emergency Communications among principal response organizations and the public		X
(7) Public Education and Information		X
(8) Adequacy of Emergency Facilities and Equipment		X
(9) Adequacy of Accident Assessment methods, systems and equipment		X
(10) Plume exposure pathway EPZ protective actions		X
(11) Emergency Worker Radiological Exposure Control		X
(12) Medical Services for contaminated injured individuals		X
(13) Recovery and Reentry Plans		X
(14) Emergency response periodic drills and exercises		X
(15) Radiological Emergency Response Training		X
(16) Plan development, review and distribution		X

**10 CFR 50.54(q) Evaluation Checklist (Continued)**

<b>YES</b>	<b>NO</b>
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2. Could the change affect our ability to meet the following requirements of Appendix E to 10CFR50

- (1) Section IV. A - Organization
- (2) Section IV. B - Assessment Actions
- (3) Section IV. C - Activation of Emergency Organizations
- (4) Section IV. D - Notification Procedures
- (5) Section IV. E - Emergency Facilities and Equipment
- (6) Section IV. F - Training
- (7) Section IV. G - Maintaining Emergency Preparedness
- (8) Section IV. H - Recovery

	X
	X
	X
	X
	X
	X
	X
	X

**B. Effectiveness Determination**

For each applicable (i.e., a "yes" answer specified) standard to 10CFR50.47(b) and Appendix E to 10CFR50 identified from Section A above, complete the evaluation form below to determine whether the change decreases the effectiveness of the Emergency Plan and whether it continues to meet the stated applicable standard or requirement.

A facsimile of the evaluation form may be used as needed and attached to this checklist.

For applicable item 10CFR50 N/A of Section A above, this change

- DOES  DOES NOT decrease the effectiveness of the Emergency Plan and  
 DOES  DOES NOT continue to meet the stated applicable standard or requirement.

**BASIS FOR ANSWER:**

This change was editorial for a phone number change.

10 CFR 50.54(q) Evaluation Checklist (Continued)

C. Conclusion (Fill out appropriate information)

- The changes made do not decrease the effectiveness of the Emergency Plan and continue to meet the standards of 10CFR50.47(b) and the requirements of Appendix E to 10CFR50.
- The changes made do decrease the effectiveness of the Emergency Plan and decrease our ability to meet the standards of 10CFR50.47(b) and the requirements of Appendix E to 10CFR50. The following course of action is recommended:
  - Revise proposed changes to meet applicable standards and requirements.
  - Cancel the proposed changes.
  - Process proposed changes for NRC approval prior to implementation in accordance with 10CFR50.54(q).

D. Impact on Other Documents (TRM, Tech Specs)

Keywords used in search: \_\_\_\_\_

- This change does not affect any other documents.
- This change does affect other documents.

Document(s) affected: \_\_\_\_\_

Section(s) affected: \_\_\_\_\_

E. Impact on the Updated FSAR

Use AP 6036 to determine if the proposed E-Plan change modifies existing UFSAR information or requires the addition of new UFSAR information and initiate UFSAR change(s) as required.

Keywords used in UFSAR search: \_\_\_\_\_

Additional Comments:

Prepared By: Chrissy Canty Chrissy Canty Date: 4/30/03  
(Print/Sign)

Reviewed By: Audra Williams Audra Williams Date: 4/28/03  
(Emergency Plan Coordinator) (Print/Sign)

VERMONT YANKEE NUCLEAR POWER STATION

**OPERATING PROCEDURE**

OP 3504

REVISION 36

EMERGENCY COMMUNICATIONS

USE CLASSIFICATION: REFERENCE

LPC No.	Effective Date	Affected Pages
1	05/14/03	App. B pg. 1 of 3

**Implementation Statement: N/A**

Issue Date: 04/02/03

APPENDIX B

OFF-SITE EMERGENCY TELEPHONE NUMBER LIST  
(In Alphabetical Order)

	TELEPHONE NUMBER
American Nuclear Insurers (ANI)	860-561-3433
AT&T (NOAA radio phone lines to Ames Hill)	800-413-5410 (prompt 4)
Brattleboro Memorial Hospital Emergency Room (Ref. OP 3508)	802-257-8222
CAN - Operations Manager (Ref. OP 3531) to verify operator and callback #'s	800-992-2331 800-552-4226 or 877-786-8478 800-739-9023(in-dial) 800-794-5826(in-dial) 518-862-0987 (Admin.)
Central Vermont Communications (Ref. OP 3531)	800-696-6474 802-775-8400 (pager)
Consultation:	
Dave E. Drum, MD, Radiation Safety Officer (Ref. OP 3508)	617-732-5656 Page 11161 ████████████████████ 617-323-7700 5939 Voice Mail
Department of Energy (DOE) Radiological Assistance, Brookhaven Lab	631-344-2200
Framatome ANP, Marlborough, MA (Main Switchboard) (Ref. OP 3504, OP 3510, OP 3531)	508-229-2100
Framatome ANP Pagers (Ref. OP 3531)	800-366-2337
Franklin Medical Center (Ref. OP 3508)	413-772-0211
GE Emergency Support Assistance	408-971-1038
INPO	
Main Switchboard	770-644-8000
Emergency Network Telephone	800-321-0614
LPCI ISO - New England (Ref. OP 3504, OP 3506)	413-535-4303
Keene Dispatch (Ref. OP 3506)	603-352-1100 (Primary) 603-352-1291 (Backup)
Maine Yankee - Wiscasset (Ref. OP 3504)	207-882-6321

## REVISED PROCEDURE CONTROL FORM

### PART 1 - Initiation

<b>A. Procedure No.</b> OP 3536	<b>New Revision No.</b> 2	<b>Title</b> In-Plant Air Sample Analysis With Abnormal Conditions		
<b>B. Review Criteria:</b> <input type="checkbox"/> Partial <input type="checkbox"/> Editorial <input checked="" type="checkbox"/> Complete		<b>C. Periodic Review Cycle:</b> <input checked="" type="checkbox"/> 2 Year (Event Driven) <input type="checkbox"/> N/A		
<b>D. List DIs &amp; LPCs:</b> N/A				
<b>E. Description and Reasons for Procedure/Changes:</b> <ul style="list-style-type: none"> <li>• Added text to control the need for future Applicability Determinations.</li> <li>• Title changes.</li> <li>• Removed specific counting facilities in discussion A.</li> <li>• Added reference to DP4585</li> </ul>				
<b>F. Originator Name:</b> (App. A was used as references to create this revision, App. C is completed and attached unless Part 1.B above is "Editorial".)				<b>Telephone Extension:</b>
(Print/sign/date) Audra Williams		<i>Audra Williams</i>		1/6/03 x4177

### PART 2 - Reviews

<b>A. Walk-Through Validation:</b> <input type="checkbox"/> Required <input checked="" type="checkbox"/> N/A		<b>B. Technical Verification Reviewer</b> <input type="checkbox"/> N/A (App. B used as a reference)	
<input type="checkbox"/> Field Walk-Through <input type="checkbox"/> Table-Top <input type="checkbox"/> Simulator Validation		(Print/Sign/Date) <i>2/11/03</i> <i>Lon A. Tkaczyk</i> <i>Lon A. Tkaczyk</i>	
<b>C. Cross-Discipline Reviews:</b> <input type="checkbox"/> N/A			
Department	Name	Signature	Date
Rad Protection	<i>Mike Morgan</i>	<i>[Signature]</i>	<i>2/6/03</i>
<b>D. 50.59 Review Per AP 6002, Preparing 50.59 Evaluations</b> <input type="checkbox"/> N/A			
<input type="checkbox"/> 50.59 AD previously performed and documented in the text of this procedure and is still applicable. <input checked="" type="checkbox"/> 50.59 Applicability Determination completed and attached; 50.59 Screening NOT required. <input type="checkbox"/> 50.59 Review Screening completed and attached, 50.59 Evaluation NOT required. <input type="checkbox"/> 50.59 Evaluation completed and attached.			
<b>E. QUALIFIED REVIEWER:</b> Use App. D as a reference (May perform 50.59 Applicability Determination) (Part 2.D)			
(Print/Sign/Date) Audra Williams		<i>Audra Williams</i> 2.10.03	
<b>F. ORIGINATOR:</b> <input checked="" type="checkbox"/> Comments Resolved <input checked="" type="checkbox"/> Re-verify All DIs & LPCs Considered			
<input checked="" type="checkbox"/> Sent for Final Type (CDS or STC (SPs only)) Initial/Date <i>amp 4/28/03</i> <input checked="" type="checkbox"/> Proofread after Final Type			
(Print/Sign/Date) Audra Williams		<i>Audra Williams</i> 4.5.03	

**PART 3 - Training/Notification Requirements**

A. Indicate training or notifications required to implement procedure: (Required for Administrative Procedures)

Include in formal training (TCR submitted):

E-Mail notification:

Crew Briefings:

Other:

N/A

**PART 4 - PORC**

Plant Operation Review Committee:  Required  N/A

Meeting No:

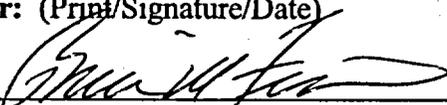
PORC Secretary:

Date:

Plant Manager:

**PART 5 - Approval**

A. Responsible Procedure Owner: (Print/Signature/Date)

Brian M. Finn  5/2/03

B. Plant Manager (Print/Sign/Date) (For SPs Only)

N/A

C. Special Instructions:  N/A

Approved for Training

Issue on DATE: 5.14.03

Submit Surveillance Database Change per AP 4000

Other:

**PART 6 - Issuance**

Procedure Change No.: 217

Date procedure issued: 5/14/03

Notes:

**APPENDIX C  
CROSS-DISCIPLINE REVIEW CHECKLIST**

Required to be completed for new procedures, procedure revisions, and LPCs unless they are designated as Editorial.

Procedure Number/Revision OP 3536, Rev. 1  
Reviewer/Date (Print) Audra Williams 1/6/03

**GENERAL REVIEW GUIDELINES/SPECIAL REVIEW REQUIREMENTS**

- The Cross-Discipline Review Guidelines below constitute minimum review requirements; other reviews may apply.
- Determination of reviews should focus on *changes* made to a procedure and the potential impact of those changes on the affected group. Changes that are minimally or nonimpacting do not need review by the potentially affected group. If change impact is unclear, the procedure should be routed to the potentially affected group for review.
- New or revised Administrative or Program Procedures that significantly impact other departments, shall be reviewed by the appropriate Superintendent or Senior Manager. The PAA maintains a list of these Administrative and Program Procedures.
- ALL noneditorial changes to Special Process procedures (WP, NE, heat treating, etc.), including Vendor Procedures that address Special Processes, shall be reviewed by: a Welding Engineer (welding procedures) or a NDE Level III certified in the method addressed by the procedure (nondestructive examination procedures), AND the Quality Assurance Manager, AND submitted to the Authorized Nuclear Inservice Inspector (ANII) prior to use.
- A "YES" indicates that a Cross Discipline Review shall be done by the indicated Department. Document the review on VYAPF 0096.01, VYAPF 0097.01, or VYAPF 0097.02, as applicable.

	APPLICABLE	
	YES	NO
<b>Chemistry:</b> <ul style="list-style-type: none"> <li>• Potentially affects condensate, feedwater, or reactor water chemistry, or chemistry instruments.</li> <li>• Procedures that implement the requirements of the VY Environmental Program. (see PP 7603, Appendix A)</li> <li>• Produces/affects effluents or effluent monitoring (VY/QA 01-015).</li> <li>• Affects NPDES limits or method of compliance.</li> </ul>		X
<b>Maintenance (Mech, Elec, I&amp;C):</b> <ul style="list-style-type: none"> <li>• Requires Maintenance personnel to perform activities, such as performance of maintenance procedures, installation of M&amp;TE, lifting and landing of leads and connectors.</li> </ul>		X
<b>Operations:</b> <ul style="list-style-type: none"> <li>• Changed requirements for entry into a Limiting Condition for Operation (LCO) or significantly changes duration of LCO.</li> <li>• Requires Operations alignment/restoration of systems or components.</li> <li>• Specifies surveillance or post maintenance testing by Operations.</li> </ul>		X
<b>EOP/SAG Coordinator:</b> <ul style="list-style-type: none"> <li>• Procedures that have the potential to affect the EOPs/SAGs.</li> </ul>		X

**APPENDIX C (Continued)**

	APPLICABLE	
	YES	NO
<b>Quality Assurance:</b> <ul style="list-style-type: none"> <li>• Changes to procedures that implement the requirements of the VOQAM. (see PP 7802, Appendix B)</li> <li>• New procedures that have a potential for reduction of VOQAM commitments.</li> <li>• Obtain and attach a 10CFR50.54(a)(3) evaluation.</li> </ul>		X
<b>Radiation Protection:</b> <ul style="list-style-type: none"> <li>• Involves work in contaminated areas and high radiation areas.</li> <li>• Involves work that breaches contaminated systems or components.</li> <li>• Changes in radwaste or hazardous waste generation.</li> </ul>	X	
<b>Emergency Plan Coordinator:</b> <ul style="list-style-type: none"> <li>• Emergency Plan Implementing Procedures.</li> <li>• Obtain and attach a 10CFR50.54(q) Evaluation.</li> <li>• Affects Emergency Plan personnel, facilities or equipment.</li> </ul>	X	
<b>Software Quality Assurance Administrator</b> <ul style="list-style-type: none"> <li>• Procedures that define how software is developed.</li> </ul>		X
<b>Reactor Engineering:</b> <ul style="list-style-type: none"> <li>• Could affect core reactivity, thermal power, reactor heat balance, or fuel integrity.</li> <li>• Involves refueling operations.</li> </ul>		X
<b>Systems/Project/Design Engineering:</b> <ul style="list-style-type: none"> <li>• Maintenance Rule in-scope systems unavailability time.</li> <li>• Involves infrequently performed test or evolution.</li> <li>• Changed requirements for entry into a Limiting Condition for Operation (LCO) or significantly changes duration of LCO.</li> <li>• Significant changes in system test or operation methodology.</li> </ul>		X
<b>Appendix J Coordinator:</b> <ul style="list-style-type: none"> <li>• Changes that affect App. J leakrates or containment boundaries, or boundary valve manipulation.</li> </ul>		X
<b>Appendix R Coordinator:</b> <ul style="list-style-type: none"> <li>• Appendix R implementing procedures.</li> </ul>		X
<b>Environmental Qualification (EQ) Coordinator:</b> <ul style="list-style-type: none"> <li>• Change in EQ test methodology or component lifetime.</li> <li>• Potentially affects area EQ component environment.</li> </ul>		X
<b>Fire Protection Coordinator (FPC):</b> <ul style="list-style-type: none"> <li>• Fire Protection procedures.</li> <li>• Affects fire loading</li> <li>• Affects fire barrier integrity.</li> <li>• Affects fire protection systems or component functionality.</li> </ul>		X
<b>IST Program Coordinator:</b> <ul style="list-style-type: none"> <li>• Inservice Testing Program implementing procedures.</li> <li>• All surveillance procedures.</li> </ul>		X
<b>ISI Program Coordinator:</b> <ul style="list-style-type: none"> <li>• Inservice Inspection Program implementing procedures.</li> </ul>		X

**APPENDIX C (Continued)**

	APPLICABLE	
	YES	NO
<b>Setpoint Coordinator:</b> <ul style="list-style-type: none"> <li>• Changes that impact setpoints, as-found/as-left tolerances, M&amp;TE or testing methodology.</li> </ul>		X
<b>Nuclear &amp; PRA</b> <ul style="list-style-type: none"> <li>• Potentially affects IPEEE or ORAM Sentinel Risk Models.</li> <li>• Potentially affects plant SSCs reliability.</li> <li>• Potentially affects Nuclear or Radiological Safety Analysis.</li> </ul>		X
<b>Security:</b> <ul style="list-style-type: none"> <li>• Procures that implement the requirements of the VY Physical Security and Training and Qualification Plans.</li> <li>• Changes that have a potential for reduction of the VY Physical Security and Training and Qualification Plan commitments.</li> <li>• Obtain and attach a 10CFR50.54(P) Evaluation.</li> </ul>		X

## APPLICABILITY DETERMINATION

Activity/Document Number: OP 3536

Revision Number: 2

Title: In-Plant Air Sample Analysis With Abnormal Conditions

Provide or attach a brief description of activities (section 6.3 of RM):

Added text to control the need for future Applicability Determinations.

Address the questions below for all aspects of the activity. If the answer is "YES" for any portion of the activity, apply the identified process to that portion of the activity. It is not unusual to have more than one process apply to a given activity. For example, a change to a door that is a fire door, a security door and a secondary containment door would require an evaluation to the Fire Protection license condition, 10CFR50.54 (p) and a 50.59 screen. See Section 4 of the "50.59 Resource Manual" (RM) for additional guidance.

I. Does the proposed activity involve a change to the:		Section 4.2.1 of the RM
1. Technical Specifications or Operating License (10CFR50.90)? Note that stand-alone changes to the TS Bases are evaluated in accordance with 10CFR50.59 per AP 0063.	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES process per AP 0063)
2. Quality Assurance Plan, related implementing procedures identified in PP 7802 or facility changes (10CFR50.54(a))?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES contact QA for 10CFR50.54(a)(3) assessment)
3. Security Plan, related implementing procedures or facility changes (10CFR50.54(p))?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES contact Security for 10CFR50.54(p) assessment)
4. Emergency Plan, related implementing procedures or facility changes (10CFR50.54(q))?	<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	(If YES contact E-Plan for 10CFR50.54(q) assessment per AP 3532)
5. IST Program Plan, related implementing procedures or facility changes (10CFR50.55a(f))?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES, and a deviation from the code requirement is required, contact Licensing to ensure applicable NRC approval is obtained per AP 0058)
6. ISI Program Plan, related implementing procedures or facility changes (10CFR50.55a(g))?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES, and a deviation from the code requirement is required, contact Licensing to ensure applicable NRC approval is obtained per AP 0058)
7. Fire protection program, related implementing procedures or facility changes (License Condition 3.F)?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES provide an evaluation that satisfies License Condition 3.F)

II. Does the proposed activity involve:		Section 4.2.2 of the RM
1. Maintenance which restores SSCs to their original condition.	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES perform maintenance in accordance with plant procedures (e.g. AP 0021, AP 0049, AP 0050)
2. A temporary alteration supporting maintenance that will be in effect during at-power operations for 90 days or less that has been (or will be) evaluated under 10CFR50.65(a)(4) prior to implementation?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES process in accordance with AP 0091.)
III. Does the proposed activity involve a change to the UFSAR (including documents <i>incorporated by reference</i> ) excluded from the requirement to perform a 50.59 Review (NEI 96-07 or NEI 98-03)?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	Section 4.2.3 of the RM (If YES, process FSAR change per AP 6036 "FSAR Revision Process". Include basis for excluding 10CFR50.59 evaluation below.)
IV. Does the proposed activity involve a change to the:		Section 4.2.4 of the RM
1. Managerial or administrative procedures governing the conduct of Facility operations, maintenance and training (subject to the control of 10CFR50, Appendix B) (RM section 4.2.4). Some procedures may be VOQAM implementing procedures requiring evaluation per 10CFR50.54(a)(3) (prompted above). Also, Maintenance procedure changes that include changes to Design Information, not evaluated under a design change process, shall be evaluated in accordance with 10CFR50.59	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES process per procedure change process (e.g. AP 0095, AP 0096, AP 0097))
2. Regulatory commitment where changing commitment is not covered by another regulation based change process (NEI 99-04)?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES process per AP 0055 "Regulatory Commitment Management".)
V. Does the activity impact other plant specific programs (e.g., The ODCM and PCLRTP controlled per TS 6.7 and the PCP controlled per TRM Section 6 ) which are controlled by regulations, the Operating License, the Technical Specifications or TRM ?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES process per the procedure(s) for the appropriate activity.)
VI. Is the activity covered by any other specific regulatory change process not discussed above that would preclude the need to evaluate under 10CFR50.59 ? (e.g., 10CFR50.46 for changes to ECCS models and PCT changes, 10CFR50.12 for Exemption Requests, etc)	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES document below and process per applicable regulatory requirements.)
VII Does the activity require a 50.59 Screen based on the following Generic NRC correspondence? GL 95-02 for performing Analog-to-Digital upgrades, IEB 80-10 for Contamination of non-radioactive systems, IEC 80-18 for changes to radioactive waste systems and GL 91-18 for compensatory actions including using manual actions in-lieu of automatic actions or use-as-is dispositions affecting the FSAR. GL 95-02 assessments need to look at both system and component level failures (ER20000558_01)	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	(If YES complete 50.59 Screen for the subject activity.)

All aspects of the activity are controlled by one or more of the processes above, therefore a 50.59 Screen is not required. If checked, provide any additional comments below and sign and date below.

Any portion of the activity is not controlled by one or more of the processes above, therefore a 50.59 Screen or 50.59 Evaluation is required. If checked, provide any additional comments below, sign and date below and complete 50.59 Screen for identified activities.

Additional Applicability Considerations:

Applicability Signoffs: Preparer: Audra Williams *Audra Williams* Date: 1 / 06 / 03  
(Print name) (Sign)

Reviewer: Lori A. Tkaczyk *Lori A. Tkaczyk* Date: 2 / 11 / 03

10 CFR 50.54(q) Evaluation Checklist

List of Emergency Plan Section(s)/Emergency Plan Implementing Procedure(s) or any other document to be evaluated. (Include Title and Revision No.):

OP 3536, Rev 2, In-Plant Air Sample Analysis With Abnormal Conditions

A. Screening Evaluation

Based on a review of the following questions, determine if the change has the potential to affect our ability to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50.

A "YES" answer to any part of the questions requires that a written evaluation be done to determine whether the effectiveness of the Emergency Plan was decreased as specified in Section B of this checklist.

A "NO" answer to all questions requires no written evaluation as specified in Section B of this checklist.

1. Could the proposed change affect our ability to meet the following standards of 10 CFR 50.47(b):
- (1) Assignment of Emergency Response Organization responsibilities YES NO
  - (2) Assignment of on-shift Emergency Response Organization personnel YES NO
  - (3) Arrangements for Emergency Response Support and Resources YES NO
  - (4) Emergency Classification and Action levels, including facility system and effluent parameters YES NO
  - (5) Notification Methods and Procedures YES NO
  - (6) Emergency Communications among principal response organizations and the public YES NO
  - (7) Public Education and Information YES NO
  - (8) Adequacy of Emergency Facilities and Equipment YES NO
  - (9) Adequacy of Accident Assessment methods, systems and equipment YES NO
  - (10) Plume exposure pathway EPZ protective actions YES NO
  - (11) Emergency Worker Radiological Exposure Control YES NO
  - (12) Medical Services for contaminated injured individuals YES NO
  - (13) Recovery and Reentry Plans YES NO
  - (14) Emergency response periodic drills and exercises YES NO
  - (15) Radiological Emergency Response Training YES NO
  - (16) Plan development, review and distribution YES NO

10 CFR 50.54(q) Evaluation Checklist (Continued)

2. Could the change affect our ability to meet the following requirements of Appendix E to 10 CFR 50.

- |   |     |           |
|---|-----|-----------|
| (1) Section IV. A - Organization                          | YES | <u>NO</u> |
| (2) Section IV. B - Assessment Actions                    | YES | <u>NO</u> |
| (3) Section IV. C - Activation of Emergency Organizations | YES | <u>NO</u> |
| (4) Section IV. D - Notification Procedures               | YES | <u>NO</u> |
| (5) Section IV. E - Emergency Facilities and Equipment    | YES | <u>NO</u> |
| (6) Section IV. F - Training                              | YES | <u>NO</u> |
| (7) Section IV. G - Maintaining Emergency Preparedness    | YES | <u>NO</u> |
| (8) Section IV. H - Recovery                              | YES | <u>NO</u> |

B. Effectiveness Determination

For each applicable (i.e., a "yes" answer specified) standard to 10 CFR 50.47(b) and Appendix E to 10 CFR 50 identified from Section A above, complete the evaluation form below to determine whether the change decreases the effectiveness of the Emergency Plan and whether it continues to meet the stated applicable standard or requirement.

A facsimile of the evaluation form may be used as needed and attached to this checklist.

For applicable item 10 CFR 50 N/A of Section A above, this change DOES NOT decrease the effectiveness of the Emergency Plan and DOES continue to meet the stated applicable standard or requirement.

BASIS FOR ANSWER:

Added a statement to control the need of an Applicability Determination. ~~No other changes made.~~ Added references to other VY procedure and updated title changes. Removed examples of other counting facilities. Counting facilities are still used, just not specified in this procedure. None of these changes ~~effect~~ decrease the effectiveness of the E-Plan.

10 CFR 50.54(q) Evaluation Checklist (Continued)

C. Conclusion (Fill out appropriate information)

- The changes made do not decrease the effectiveness of the Emergency Plan and continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50.
- The changes made do decrease the effectiveness of the Emergency Plan and decrease our ability to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E to 10 CFR 50. The following course of action is recommended:
  - Revise proposed changes to meet applicable standards and requirements.
  - Cancel the proposed changes.
  - Process proposed changes for NRC approval prior to implementation in accordance with 10 CFR 50.54(q).

D. Impact on Other Documents (TRM, Tech Specs)

Keywords used in search: \_\_\_\_\_

- This change does not affect any other documents.
- This change does affect other documents.

Document(s) affected: \_\_\_\_\_

Section(s) affected: \_\_\_\_\_

E. Impact on the Updated FSAR

Use AP 6036 to determine if the proposed E-Plan change modifies existing UFSAR information or requires the addition of new UFSAR information and initiate UFSAR change(s) as required.

Keywords used in UFSAR search: \_\_\_\_\_

Additional Comments:

Prepared By: Audra Williams *Audra Williams*  
(Print/Sign)

Date: 1/6/03

Reviewed By: Lori A. Traczyk *Lori A. Traczyk*  
(Emergency Plan Coordinator) (Print/Sign)

Date: 2/11/03

VERMONT YANKEE NUCLEAR POWER STATION

**OPERATING PROCEDURE**

OP 3536

REVISION 2

IN-PLANT AIR SAMPLE ANALYSIS WITH ABNORMAL CONDITIONS

USE CLASSIFICATION: CONTINUOUS

LPC No.	Effective Date	Affected Pages

**Implementation Statement: N/A**

Issue Date: 05/14/2003

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## PURPOSE

To outline the special procedures necessary to handle air samples, perform analyses and interpret results during post accident conditions.

## DISCUSSION

During post accident conditions, system samples may be highly radioactive. Because of the potentially high radiation levels, these samples require special handling. This procedure outlines the special handling required. The RP Superintendent is responsible for implementation of this procedure.

During certain postulated accidents, the availability of on-site counting equipment may be compromised. In these instances, post accident samples may be counted at remote counting facilities. A determination will be made by the Operations Support Center Coordinator's Assistant, in conjunction with the Radiological Assistant at the Emergency Operations Facility/Recovery Center, as to the most appropriate alternative laboratory facility.

VYOPF 3536.01, Sample Accountability Log shall be utilized from the onset of emergency sampling and analysis to control the location of all emergency samples.

In accordance with AP 6002, Preparing 50.59 Evaluations, the results of an Applicability Determination (AD) has determined that an AD is not required for future changes provided the scope of the procedure or program is not revised to include a different type of activity. The basis for this conclusion is that this document is an Emergency Implementing Procedure and is subject to 10CFR50.54(q) to determine if the changes decrease the effectiveness of the Emergency Plan and if they have the potential to affect our ability to meet the standards of 10CFR50.47(b) and the requirements of 10CFR50 Appendix E.

## ATTACHMENTS

1. VYOPF 3536.01 Sample Accountability Log

## REFERENCES AND COMMITMENTS

1. Technical Specifications and Site Documents
  - a. None
2. Codes, Standards, and Regulations
  - a. NUREG 0737, Sec. II.B.3
3. Commitments
  - a. None

4. Supplemental References

- a. VYDPF 0530.02, Emergency Air Sample Analysis Using Portable Dose Rate Instruments, Report #43
- b. VYAPF 0645.01, Evaluation of PASS High Activity Correction Factor
- c. DP 2631, Radiochemical Instrumentation
- d. OP 4533, Airborne Radioactivity Concentration Determination
- e. DP 4562, Calibration and Use of the SAM-2
- f. DP 4585, Control of the RP Multichannel Analyzer
- g. AP 6807, Collection, Temporary Storage and Retrieval of QA Records

**PRECAUTIONS/LIMITATIONS**

- 1. During sampling, communications with the OSC or RP Checkpoint should be maintained using either a portable radio or a Gai-Tronics.

**PREREQUISITES**

- 1. Obtain post accident sampling equipment and tools.
- 2. Obtain a dose rate meter.
- 3. Dose commitment limits have been established and should be adhered to for all Post Accident Sampling. Consult with the OSC Coordinator for specific instructions.
- 4. The duty RP Supervisor shall evaluate the need for respiratory protection and evaluate whether or not extremity dosimetry and high range pocket dosimeters should be worn during sampling.

**PROCEDURE**

INITIALS

- 1. Charcoal cartridges should be purged of noble gases for 1 minute prior to counting.
  - a. Run the air sampler with charcoal cartridge for 1 minute in a low airborne activity location.
- 2. Ensure the sample is properly wrapped to minimize the potential for contaminating counting equipment.
- 3. Log the sample identifying information onto VYOPF 3536.01.

\_\_\_\_\_  
RP Tech.

\_\_\_\_\_  
RP Tech.

\_\_\_\_\_  
RP Tech.

4. Analyze the sample and quantify the airborne exposure hazard. The preferred order of analysis is as follows:

a. HpGe Isotopic Analysis:

1) Count samples, ensuring that dead time is  $\leq 10\%$ .

\_\_\_\_\_  
RP Tech.

**CAUTION**

**If general area dose rates in the counting room exceeds 5 mR/hr, the use of the MCA at extended distance with the shield top removed is prohibited (LAI-417B).**

2) If counter dead time is  $\geq 10\%$ , count the sample at extended distances.

a) Open the shield top of the 10% HpGe.

\_\_\_\_\_  
RP Tech.

b) Using the rod and holder, suspend the sample above the detector at a distance (minimum distance is 1 foot) that will give a counter dead time of  $\leq 20\%$ .

\_\_\_\_\_  
RP Tech.

c) Measure the distance from the sample to the top of the detector.

d = \_\_\_\_\_ feet

\_\_\_\_\_  
RP Tech.

d) Count the sample using the Lo Vol Air Sample Filter/Charcoal geometry.

\_\_\_\_\_  
RP Tech.

e) Calculate the Off Contact Geometry Correction Factor as follows:

$$\text{Off Contact Geometry CF} = 17d^2$$

Where d= the off contact distance between sample and detector, as measured in FEET.

CF = \_\_\_\_\_

\_\_\_\_\_  
RP Tech.

INITIALS

3) Complete VYOPF 4533.01.

\_\_\_\_\_  
RP Tech.

a) If the sample was counted in an extended geometry, correct the results obtained by multiplying by the Off Contact Geometry CF calculated in step 4.a.2)e).

\_\_\_\_\_  
RP Tech.

b. Stabilized Assay Monitor (SAM)-II Iodine 131 Analysis

CAUTION

**The SAM-II is a single channel analyzer "windowed-in" on the 364 KEV peak from I-131. Therefore, this monitor can only be used to assay for I-131 activity; it will not quantify any other isotopes.**

1) Perform pre-operational checks and determine the background count rate as per DP 4562.

\_\_\_\_\_  
RP Tech.

2) Position the sample in the counter and count for a minimum of 1 minute.

\_\_\_\_\_  
RP Tech.

3) If the net count rate is greater than 100,000 cpm:

a) obtain a new sample with less air volume, or

\_\_\_\_\_  
RP Tech.

b) assay the sample using portable dose rate meters as per step 4.c.

\_\_\_\_\_  
RP Tech.

4) Calculate the airborne I-131 levels as follows:

a) Airborne I-131 exposure rate

$$\text{I-131 mR/hr} = \frac{0.056 \text{ (net cpm)}}{(\text{Efficiency, c/d})(\text{Volume, Liters})}$$

$$0.056 \text{ ( } \underline{\hspace{1cm}} \text{ net cpm)}$$

$$\text{I-131 mR/hr} = \underline{\hspace{2cm}}$$

$$(\underline{\hspace{1cm}} \text{ c/d}) (\underline{\hspace{1cm}} \text{ liters})$$

$$\text{I-131 mR/hr} = \underline{\hspace{2cm}}$$

RP Tech.

b) If needed, I-131 airborne activity concentration

$$\text{I-131 } \mu\text{Ci/cc} = \frac{4.5\text{E-}10 \text{ (net cpm)}}{(\text{Efficiency, c/d})(\text{Volume, Liters})}$$

$$\text{I-131 } \mu\text{Ci/cc} = \underline{\hspace{2cm}}$$

RP Tech.

5) Complete VYOPF 4533.01.

RP Tech.

c. Portable Dose Rate Instrumentation

1) Obtain a dose rate reading (in mR/hr) at 3 feet off contact with the sample.

$$\text{Dose Rate} = \underline{\hspace{2cm}} \text{ mR/hr}$$

RP Tech.

2) If a filter/cartridge sample, calculate the airborne activity levels as follows:

$$\text{a) Internal exposure rate, mRem/hr} = \frac{6\text{E}10 \text{ (mR/hr)}}{(\text{Sample Volume, ml})}$$

$$\text{Volume} = \underline{\hspace{1cm}} \text{ ml}$$

$$\text{Internal Exposure Rate} \underline{\hspace{2cm}} \text{ mRem/hr}$$

RP Tech.

INITIALS

b) If needed, airborne concentration,  $\mu\text{Ci/cc} = \frac{1179 \text{ (mR/hr)}}{\text{(Sample Volume, ml)}}$

Airborne Concentration = \_\_\_\_\_  $\mu\text{Ci/cc}$  \_\_\_\_\_  
RP Tech.

3) If a Marinelli gas sample, calculate the airborne activity levels as follows: \_\_\_\_\_  
RP Tech.

a) Deep Dose Exposure Rate due to Airborne Semi-Infinite Cloud,  $\text{mRem/hr} = \frac{2\text{E}10 \text{ (mR/hr)}}{\text{(Sample Volume, ml)}}$

Volume = \_\_\_\_\_ ml  
DDE Rate = \_\_\_\_\_  $\text{mRem/hr}$  \_\_\_\_\_  
RP Tech.

b) If needed, airborne concentration,  $\mu\text{Ci/cc} = \frac{2920 \text{ (mR/hr)}}{\text{(Sample Volume, ml)}}$

Airborne Concentration = \_\_\_\_\_  $\mu\text{Ci/cc}$  \_\_\_\_\_  
RP Tech.

4) Complete VYOPF 4533.01. \_\_\_\_\_  
RP Tech.

5. Reporting Analysis Results

a. If the sample was a charcoal sample, and the I-131 activity concentration determined in step 4 is  $\geq 1\text{E-}6 \mu\text{Ci/cc}$  I-131:

1) notify the RP Supervisor or OSC Coordinator who will:

a) determine the need to resample and verify results using silver zeolite cartridges. \_\_\_\_\_  
RP Tech.

b. Update VYOPF 3536.01, as needed. \_\_\_\_\_  
RP Tech.

c. Route completed VYOPF 4533.01 to the RP Supervisor or OSC Coordinator. \_\_\_\_\_  
RP Tech.

**FINAL CONDITIONS**

1. **Submit all forms for review and filing as per AP 6807.**

### SAMPLE ACCOUNTABILITY LOG

Sample Identification	Location (Update after each movement)	Date	Time	Initials