

Jan. 20, 2003

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130 - 130 - HP II DOSE CALCULATOR: EMERGENCY PLAN-
POSITION SPECIFIC PROCEDURE

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A045

PROCEDURE COVER SHEET

PPL SUSQUEHANNA, LLC	NUCLEAR DEPARTMENT PROCEDURE	
HP II DOSE CALCULATOR: Emergency Plan Position Specific Instruction		EP-PS-130 Revision 15 Page 1 of 3
<u>QUALITY CLASSIFICATION:</u> () QA Program (X) Non-QA Program		<u>APPROVAL CLASSIFICATION:</u> () Plant () Non-Plant (X) Instruction
EFFECTIVE DATE: <u>1/17/2023</u> PERIODIC REVIEW FREQUENCY: <u>2 Years</u> PERIODIC REVIEW DUE DATE: <u>1/17/2025</u>		
<u>RECOMMENDED REVIEWS:</u> All		
Procedure Owner: <u>Nuclear Emergency Planning</u> Responsible Supervisor: <u>Radiation Protection Manager</u> Responsible FUM: <u>Supervisor-Nuclear Emergency Planning</u> Responsible Approver: <u>Vice President-Nuclear Operations</u>		

HP II DOSE CALCULATOR: Emergency Plan-Position Specific Instruction

WHEN: At request of Shift Supervisor

HOW NOTIFIED: Working hours - telephone call or plant page

REPORT TO: Shift Supervisor until TSC is activated, then TSC Dose Calculator

WHERE TO REPORT: OSC initially, then TSC

OVERALL DUTY:

Perform, validate, and report dose calculations.

MAJOR TASKS:	TAB:	REVISION:
Report to the Operations Support Center.	TAB A	5
Obtain briefing from OSC Coordinator or Shift Supervisor.	TAB B	1
Obtain meteorological data.	TAB C	4
Withdraw vent monitor data from SPING console.	TAB D	7
Perform dose calculations, then report results to those who request them.	TAB E	7
Initiate radio communications with and direct OSCAR until relieved by the Health Physics Radioman.	TAB F	7
Validate dose calculations with field reading from OSCAR and report.	TAB G	6
Once TSC is activated, maintain dose calculations and direct clerk.	TAB H	3

SUPPORTING INFORMATION:

TAB:

Emergency Telephone Instructions	TAB 1
Emergency Organization	TAB 2
Intentionally Blank	TAB 3
Onsite Emergency Monitoring Locations	TAB 4
Emergency Facility Form Flow	TAB 5
Emergency Classification	TAB 6
Public Protective Action Recommendation Guide	TAB 7
PPL Emergency Personnel Dose Assessment and Protective Action Recommendation (PAR) Guide	TAB 8
Meteorological Data Acquisition	TAB 9
Vent Monitor Data Acquisition	TAB 10
MIDAS Dose Projection Computer Model Instructions	TAB 11
PAVSS Instructions	TAB 12
I-131 Frisker Measurement: Conversion Factors	TAB 13
Intentionally Blank	TAB 14
Remote Monitoring System Base Station Instructions	TAB 15
TSC Dose Assessment Flowchart	TAB 16

REFERENCES:

SSES Emergency Plan

NUREG-0654, Planning Standards and Evaluation Criteria

NUREG-0731, Guidelines for Utility Management Structure and Technical Resources,
September 1980

MAJOR TASK:

Report to the Operations Support Center.

SPECIFIC TASKS:

HOW:

- | | |
|---|---|
| 1. Obtain RO-2/2A and master keys for locked doors/gates. | 1a. Go to the Health Physics office. Obtain the following:

(1) High Radiation Area master keys.
(2) Source checked RO-2/2A. |
| 2. Proceed to OSC. | 2a. Proceed to the OSC when:

(1) Paged.
(2) Notified by phone.
(3) As directed by Supervision. |

MAJOR TASK:

Obtain vent monitor data.

SPECIFIC TASKS:

HOW:

1. Obtain vent monitor data from PICSY.

NOTE:

"White" PICSY data is an indication of unreliable data. It may be normal and acceptable due to low or no flow in the SPING Monitor or may indicate a release exceeding the range of the instrument or an indication of instrumentation or computer interface problems.

HELP

Meteorological Data Acquisition
See TAB 9

HELP

Vent Monitor Data Acquisition
See TAB 10

HELP

TSC Dose Assessment Flowchart
See TAB 16

2. Assess reliability of data.

- 2a. Determine if Iodine detection channels are over responding due to interference from noble gas or short lived nitrogen isotopes. The data is suspect if the NG/I-131 release rate ratio is less than 1,000 for a given vent.

HELP

TSC Dose Assessment Flowchart
See TAB 16 Page 3

SPECIFIC TASKS:

HOW:

2b. If low confidence (white) PICSY data exists:

- (1) If the OSC is in control, contact Operations to determine if condition is normal. If the TSC is in control, notify the TSC dose calculator of the low confidence (white) data.
- (2) Use appropriate data such as grab sample (vent, PAVSS, HP air samples) results or previously measured or default noble gas to iodine/particulate ratios in Forward Calculation.

HELP

PAVSS Instructions
See TAB 12

HELP

TSC Dose Assessment
Flowcharts
See TAB 16 Page 4

- (3) Ensure OSCAR is taking air samples as appropriate and is maintaining their exposure ALARA.
- (4) Report conditions as a potential unmonitored or an unmonitored release depending on measured to projected dose rate ratios.
- (5) Initiate Back Calculations if field data is available.

MAJOR TASK:

Perform dose calculations, then report results to those who request them.

SPECIFIC TASKS:

HOW:

1. Log on and start up MIDAS.

HELP

**MIDAS Operation
See TAB 11**

2. Report results to those who request them.

- 2a. Compare release rates and EPB projected dose/dose rates to EAL 15 limits.

HELP

**Emergency Classification
See TAB 6**

HELP

**TSC Dose Assessment Flowchart
See TAB 16 Page 2**

- 2b. Report results after each calculation to the Shift Supervisor, TSC Dose Calculator, or RPC.

- 2c. Report change in classification due to releases.

3. Notify the Operations Shift Supervisor if doses are projected to exceed 1 rem TEDE or 5 rem Thyroid CDE.

NOTE:

The Control Room needs radiological data to evaluate entry conditions and action levels for EOP procedures. These procedures require operator actions such as rapid depressurization based on projected doses.

These procedures also require that projected doses be determined when containment venting is needed.

- 3a. Discuss projection time with the Operations Shift Supervisor if unavailable from RPC or TSC Dose Calculator.

SPECIFIC TASKS:

HOW:

NOTE:

This may differ from the default projection time being used in the dose projection model.

3b. Consider the following:

- (1) Prognosis of event
- (2) Time to cooldown to <200 deg.
- (3) Duration & type of release
- (4) Weather forecasts
- (5) Protective measures already implemented
- (6) Release pathway - possible filtration and/or monitoring

MAJOR TASK:

Validate dose calculations with field team readings from OSCAR and report.

SPECIFIC TASKS:

HOW:

1. Compare the peak field measurements obtained by OSCAR during their traverse through the plume to the OSCAR EDE and thyroid CDE dose rates projected by MIDAS.

- 1a. Periodically determine the following ratios:

$$\frac{\text{OSCAR 3" closed window reading or RMS EDE dose rate}}{\text{MIDAS OSCAR EDE dose rate}}$$

and

$$\frac{\text{OSCAR air sample NET CPM X 0.7 or RMS Thyroid CDE dose rate}}{\text{MIDAS OSCAR Thyroid CDE dose rate}}$$

- 1b. If field readings are low (ratio < 0.1), the peak conditions may exist elsewhere. Continue search for higher field conditions.
- 1c. If field readings are higher than the MIDAS projected dose rates (ratio > 1), initiate a Back Calculation and utilize the more conservative of the results.
- 1d. If field results are considerably higher than the MIDAS projections (ratio > 5), an unmonitored release pattern may exist.

2. Report findings to OSC Coordinator/ Shift Supervisor or RPC.

MIDAS OPERATING PROCEDURE

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A. INTRODUCTION/SYSTEM STARTUP

1. The following conventions are used in this procedure to describe computer operations:
 - a. Bold, upper case text (i.e., **CURRENT DATE**), denotes text which appears on the screen.
 - b. Underlined, uppercase text (i.e., LOGIN) denotes text to be typed.
 - c. Bracketed, upper case text (i.e., [ENTER]), denotes special keys which are to be pressed.
 - d. Most mouse selections can be made with a single click.
 - Single click **RESET** to cancel previous screen selections.
 - Double click **RESET** to back out of present menu.
 - Double click to **EXIT** menu.
2. The met and vent spreadsheet will appear with all of the meteorological and ventilation release rate parameters across the top of the page. The current time period is highlighted in the left-hand column. The first time interval is 2 hours before the current time and the last time interval is 16 hours after the current time.
3. All required meteorological and ventilation data for MIDAS can be obtained using the MET/VENT DATA ACQUISITION OPTIONS tab.
4. To start MIDAS on a DOS computer:
 - a. Turn ON each component (monitor, computer, and printer) of the computer system on which MIDAS is loaded.
 - b. At the MIDAS logon screen, enter the password **MIDAS** and [ENTER].
 - c. At the MIDAS MAIN MENU screen, select A: MIDAS (Dose Calculator) and [ENTER].
 - d. The system will then display the **CURRENT DATE**. If the date is correct, press [ENTER]. If this date is incorrect, type the correct date using the format which is illustrated in the prompt and press [ENTER].
 - e. The system will then display the **CURRENT TIME**, which is stored in the computer system's clock (24-hour clock format). If the time is correct, press [ENTER]. If this time is incorrect, type the correct time using the format which is illustrated in the prompt and press [ENTER].

- f. The MIDAS logon screen will now appear for 20 seconds.
 - g. The **ACCIDENT MENU SELECTION** screen will appear. Select the appropriate calculation option and **CONFIRM** your selection.
- 5. To exit MIDAS on a DOS computer, double-click **EXIT** on each menu screen that appears. At the **SECURITY MENU**, press [F8] to log off.
- 6. To start MIDAS on a Windows computer:
 - a. Turn on each component (monitor, computer, and printer) of the computer system on which MIDAS is loaded.
 - b. At the WINDOWS LOGIN Screen, press [**CANCEL**].
 - c. On the System Desktop, double click on the MIDAS Icon.
 - d. The system will then display the **CURRENT DATE**. If the date is correct, press [**ENTER**]. If the date is incorrect, type the correct date using the format which is illustrated in the prompt and press [**ENTER**].
 - e. The system will then display the **CURRENT TIME**, which is stored in the computer system's clock (24-hour clock format). If the date is correct, press [**ENTER**]. If the date is incorrect, type the correct time using the format which is illustrated in the prompt and press [**ENTER**].
 - f. The MIDAS logon screen will now appear for a short time.
 - g. The **ACCIDENT MENU SELECTION** screen will appear. Select the appropriate calculation option and **CONFIRM** your selection.
- 7. To exit MIDAS on a Windows computer, double-click **EXIT** on each menu screen that appears until you return to the System Desktop.
 - a. On the System Desktop, select **START, SHUTDOWN, SHUTDOWN THE COMPUTER**, and press [**YES**].

EVALUATION OF UNMONITORED RELEASES FROM STATION BLOWOUT PANELS

DIRECTIONS

1. Select the appropriate station blowout panel location.
2. Select an appropriate accident source term mix.
3. Use the corresponding design base release rates for input into MENU B.
4. Enter the release rates for one (1) fifteen-minute time period.

NOTE: If Clad Failure or Fuel Melt mixes are selected, multiply the site total noble gas, I-131, and particulate release rates by the appropriate fraction of clad failure or fuel melt prior to entering the values onto the vent spreadsheet (e.g., the multiplier for 50% FUEL MELT would be 0.5).

[1] BLOWOUT PANEL LOCATION	[3] DESIGN BASIS (SITE TOTAL) RELEASE RATES		
	NOBLE GAS	I-131	PARTICULATE
RCIC PUMP ROOM	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)
[2] ACCIDENT SOURCE TERM			
Normal Reactor Coolant Activity	1.2E+02*	1.8E+02	1.1E+03
(LOCA) Reactor Depressurization-No FD	2.6E+06	8.4E+04	2.2E+04
(LOCA) 100% Clad Failure	2.1E+09	2.4E+08	9.1E+07
(LOCA) 100% Fuel Melt	4.3E+10	1.3E+09	1.7E+09

HPCI PUMP ROOM	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)
Normal Reactor Coolant Activity	2.1E+03*	3.2E+03	1.9E+04
(LOCA) Reactor Depressurization-No FD	4.6E+07	1.5E+06	3.8E+05
(LOCA) 100% Clad Failure	3.7E+10	4.3E+09	1.6E+09
(LOCA) 100% Fuel Melt	7.5E+11	2.3E+10	3.0E+10

HPCI/RCIC ROUTING AREA	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)
Normal Reactor Coolant Activity	3.2E+03*	4.9E+03	2.9E+04
(LOCA) Reactor Depressurization-No FD	7.0E+07	2.2E+06	5.8E+05
(LOCA) 100% Clad Failure	5.7E+10	6.5E+09	2.4E+09
(LOCA) 100% Fuel Melt	1.1E+12	3.5E+10	4.6E+10

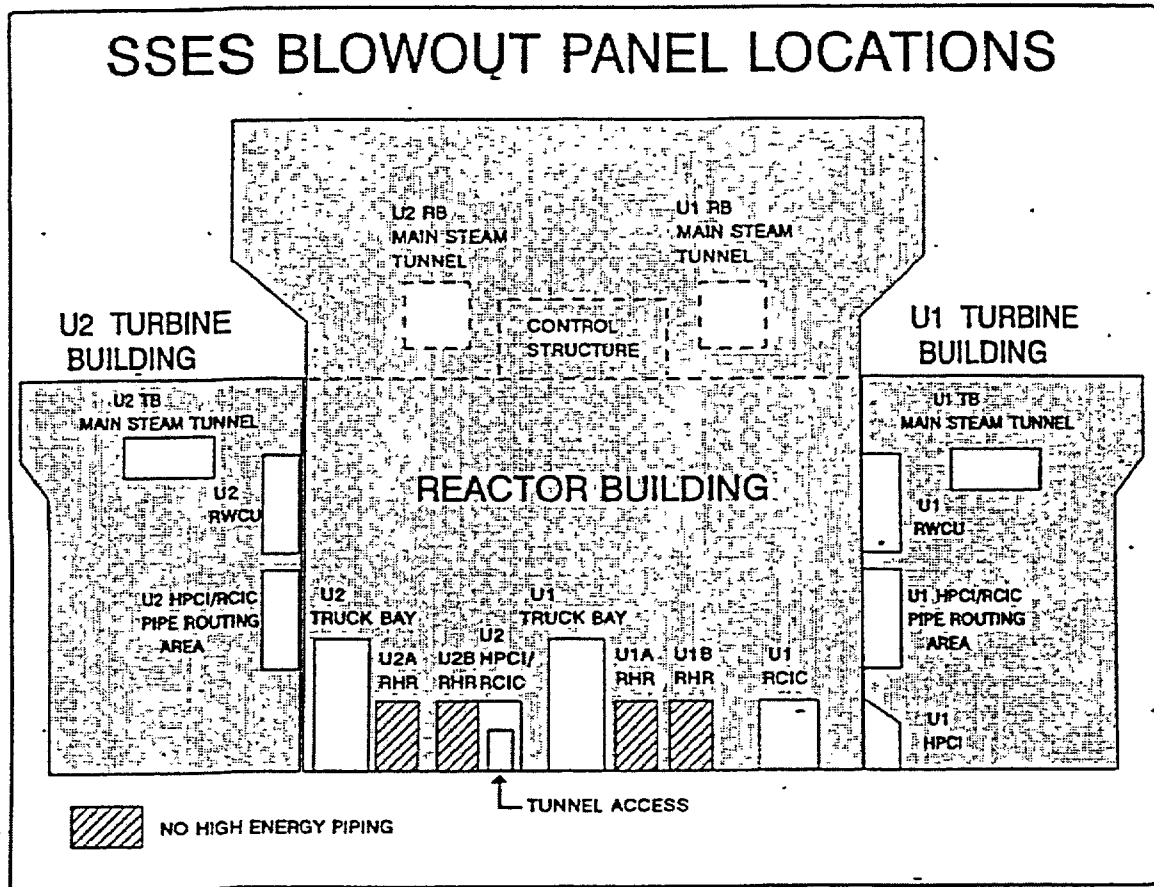
RWCU PENETRATION ROOM	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)
Normal Reactor Coolant Activity	7.3E+03*	5.8E+03	6.6E+04
(LOCA) Reactor Depressurization-No FD	1.6E+08	2.6E+06	1.3E+06
(LOCA) 100% Clad Failure	1.3E+11	7.6E+09	5.5E+09
(LOCA) 100% Fuel Melt	2.6E+12	4.1E+10	1.0E+11

RB/TB MAIN STEAM TUNNEL	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)	($\mu\text{Ci/min}$)
Normal Reactor Coolant Activity	2.6E+04*	3.9E+04	2.3E+05
(LOCA) Reactor Depressurization-No FD	5.6E+08	1.8E+07	4.7E+06
(LOCA) 100% Clad Failure	4.6E+11	5.2E+10	1.9E+10
(LOCA) 100% Fuel Melt	9.1E+12	2.8E+11	3.7E+11

FD = FUEL DAMAGE

* Value less than that defining a release.

REFERENCE: EC-RADN-1018, Evaluation of Unmonitored Releases from Station Blowout Panels, Revision 1, File R2-1.



B. MENU B: FORWARD CALCULATIONS

REQUIRED INPUTS

ENGINEERING OR OPERATIONS SUPPORT IS REQUESTED FOR THESE CALCULATIONS.

PLANT CONDITIONS

- TIME OF REACTOR SHUTDOWN
- RELEASE START TIME
- DURATION OF RELEASE
- PROJECTION TIME
- ACCIDENT SOURCE TERM SELECTION

MET DATA

- 10 M WIND SPEED
- 10 M WIND DIRECTION
- STABILITY CLASS
- PRECIPITATION RATE

VENT DATA

- SITE TOTAL NOBLE GAS RELEASE RATES
- SITE TOTAL I-131 RELEASE RATES
- SITE TOTAL PARTICULATE RELEASE RATES

1. The **MET/VENT DATA CONTROL TABLE** screen will appear.

a. Select **START NEW SCENARIO** and then **CONFIRM, OR**

b. If you have already initiated calculations and wish to modify either the existing met spreadsheet file or vent spreadsheet, select **CURRENT SCENARIO EDIT** and **CONFIRM**.

NOTE: **CURRENT SCENARIO EDIT** will include releases/doses from previous time steps, if applicable.

c. Other options are available in the lower right hand section of the display if you wish to **RESET** or change your initial selection or **EXIT** the screen.

2. The **METEOROLOGICAL DATA** spreadsheet will appear with all of the required meteorological parameters across the top of the page. Place the cursor on the data period corresponding to the start of release. Input the following met data:

NOTE 1: If the met data remains the same for successive time periods, the operator need only enter the met data once. MIDAS will persist the data to future time periods automatically.

NOTE 2: If a value is to be repeated in a field it can still be manually copied down the spreadsheet using the K (copy last) key while that value is highlighted.

- a. In the column labeled **10M SPD**, enter the wind speed from the 10 meter onsite (primary) meteorological tower in MILES PER HOUR (MPH).

NOTE: If the primary meteorological tower data is not available, refer to the Met Vent Data Acquisition Options tab for other options.

- b. In the column labeled **10M WD**, enter the wind direction from the 10-meter onsite (primary) meteorological tower in DEGREES FROM (DEG FM).
- c. In the column labeled **STAB CLS**, enter the actual value for ΔT in DEGREES CENTIGRADE (preferred method) or the wind speed corrected stability class (Letter Code) if the primary tower data is not available. MIDAS will convert the letter entry to a numerical value.
- d. In the column labeled **RAIN-LMH**, enter the precipitation rate in INCHES PER 15 MINUTES (IN/15M). Divide the PICSY precipitation rate (inches/hr) by 4. If the precipitation rate is not available, estimation may be made by using the following table:

NO PRECIPITATION	<u>0</u> (zero)
DRIZZLE or MIST	<u>L</u> IGHT
STEADY RAIN	<u>M</u> EDIUM
HEAVY DOWNPOUR	<u>H</u> EAVY

- e. Type X when all data has been entered to save the data and exit out of the meteorological spreadsheet.

3. A **WEATHER SELECTION** screen will appear if any of the meteorological data inputs are missing from the spreadsheet.
 - a. If this screen appears, select **RESET** until you have returned to the **MET/VENT DATA CONTROL TABLE** screen.
 - b. Select **CURRENT SCENARIO EDIT** and enter any missing meteorological values on the spreadsheet.
 - c. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.

4. The vent (GASEOUS VENT AND FLOW) spreadsheet will appear next. Enter current vent data. The data entry for each 15-minute period is as follows:

NOTE: Vent data may be entered in a regular numerical presentation (10000) or in scientific notation (1.0E+04).

- a. In the column labeled **TOT NG RELEASE**, enter the site total noble gas release rate in $\mu\text{Ci}/\text{min}$.
 - b. In the column labeled **TOT I-131 RELEASE**, enter the site total I-131 release rate in $\mu\text{Ci}/\text{min}$.
 - c. In the column labeled **TOT P RELEASE**, enter the site total particulate release rate in $\mu\text{Ci}/\text{min}$.
 - d. When the data entry is complete, press the **X** key to save the information and exit the spreadsheet.
5. From the **ACCIDENT SOURCE TERM SELECTION** screen, select an appropriate accident source term, then **CONFIRM**. Select **RESET** if you wish to change your previous selection.

If no specific information on the type of release is available from Engineering, use the following as a guide in the selection of appropriate accident source term.

- a. Obtain Reactor Power from Engineering, Operations, or as follows:
 - 1) From PICSY, select Unit #1 or Unit #2 formats to view affected unit.
 - 2) Type STA and press **[ENTER]**.
 - 3) "Reactor Power" is in the top left section.
 - 4) Click on **MET VENT** to return to the Met/Vent data display.

- b. If the reactor is operating at or greater than 10% power, select the **ATWS** source term.
 - c. If reactor power is at less than 10%, select the **LOCA (Clad Failure)** source term.
 - d. If conditions indicate a fuel handling incident and a release from the refueling floor (Reactor Building floor 818'), select **Fuel Handling Accident**.
6. The **RELEASE TIMING SELECTION** screen will appear next. There are three lines to the screen.
- a. On Line 1, select **TRIP DATE** (date and time of reactor trip). Using the calendar wheel, enter the appropriate date and time of reactor trip. **CONFIRM** to close the calendar wheel.
 - 1) The time of reactor trip must be equal to or earlier than the **START OF RELEASE**.
 - 2) The time of reactor trip can be set up to roughly one year (8,190 hours) prior to the **START OF RELEASE**.
- NOTE (1): MIDAS assumes the reactor must be shutdown before a release can occur. The **TRIP DATE** triggers the start of decay for the accident mix.
- NOTE (2): Even during an **ATWS**, where a release is in progress and the reactor has not shut down, a **TRIP DATE** must be entered to run MIDAS. It is recommended the same date and time for the **START OF RELEASE** be used for the **TRIP DATE**. Entering a date and time for reactor trip has no impact on decay of the **ATWS** mix.
- b. On Line 2, select **START OF RELEASE**. Using the calendar wheel, enter the appropriate date and time of the start of release. **CONFIRM** to close the calendar wheel.
 - 1) If **START NEW SCENARIO** was selected, the **START OF RELEASE** date/time entered should be the current date/time at which you are starting the calculation.

- 2) If **CURRENT SCENARIO EDIT** was selected, the previously entered **START OF RELEASE** should still be used, if met/vent data have been entered for each 15-minute period since that **START OF RELEASE**. Otherwise, select **RESET** until **START NEW SCENARIO** is selected.

NOTE: The **START OF RELEASE** is defined as the date and time of the first vent data entry.

- c. On Line 3, select **REMAINING DURATION** of the release. Using the NUMPAD enter the duration of release, in minutes, and select **EN** or press **[ENTER]** to close the numpad. If the duration of release is not known, use the default of 360 minutes, except that for blow-out panel calculations, the assumed release duration is 15 minutes.

NOTE: The **REMAINING DURATION (DURATION OF RELEASE)** can use forecasted or persisted data for up to 16 hours into the future.

- d. Select **CONFIRM** to continue with the calculation or **RESET** to change any of your previous choices.

7. The **PPL SUMMARY DATA SELECTION** screen allows the user to select different options for the **MIDAS DOSE SUMMARY REPORT**.

- a. Select the projection time from the left-hand column if other than the default of six hours is needed.
- b. Select the **PEAK SECTOR** dose rate option; then **CONFIRM**. If you wish to change any of your previous choices, select **RESET**.

NOTE: The **PEAK SECTOR** is used to determine the highest dose rate in all 16 sectors. The alternate selection (**CURRENT AFFECTED SECTOR**) is applicable only when estimated dose rates from the current release period alone are requested by the RPC/DASU.

8. After the calculations have completed, the **MIDAS DOSE SUMMARY REPORT** will be displayed on the screen.

- a. If you want to select a different projection time or sector designation from the **PPL SUMMARY DATA SELECTION** screen, select **RESTART REPORT**.
- b. If you wish to view additional report options, select **CONTINUE** and, on the next page, **MORE REPORTS**.

- c. If you wish to continue with the next calculation, double click **EXIT**. This will return you to the **ACCIDENT MENU SELECTION** screen where the dose calculation process can be repeated using updated input values.
- d. If a hard copy is desired of any printout or plot displayed on the screen, press [**PRINT SCR**N].

NOTE: If a hard-copy printout is made of the **MIDAS DOSE SUMMARY REPORT**, be sure to fill in the required information documenting the name of the dose calculator, reviewer, and date the calculation was performed.

C. MENU C: EVENT TREE NUREG-1228 CALCULATIONS

REQUIRED INPUTS

ENGINEERING OR OPERATIONS SUPPORT IS REQUESTED FOR THESE CALCULATIONS.

PLANT CONDITIONS

- RELEASE PATHWAY
- CORE CONDITION
- CONTAINMENT CONDITIONS
- FILTRATION
- PROJECTION TIME

MET DATA

- 10 M WIND SPEED
- 10 M WIND DIRECTION
- STABILITY CLASS
- PRECIPITATION RATE

1. The **EVENT TREE NUREG-1228 SELECTION** screen will appear.

- a. Using information provided by Engineering Support or Operations, select one cell in each row of the menu. When a cell in the current row is selected, the next row then appears.

NOTE: Event tree menu selections, which include a definition of plant release parameters, are included (Section H) for each NUREG-1228 accident release scenario.

- b. **[PRINT SCREEN]** when final selections are made on the **EVENT TREE NUREG-1228 SELECTION** screen to document the calculation inputs.

NOTE: Engineering Support or Operations concurrence with the selections may be documented by their representatives' signatures on the printout.

- c. **CONFIRM** entries to continue with the calculation or **RESET** if you wish to change any of your selections. You may also double-click **EXIT** to return to the **ACCIDENT MENU SELECTION** screen.

2. The **MET/VENT DATA CONTROL TABLE** screen will appear.

- a. Select **START NEW SCENARIO** and then **CONFIRM**.

- b. Other options are available in the lower right hand section of the display if you wish to **RESET** your initial entries or **EXIT** the screen.
- 3. The **METEOROLOGICAL DATA** spreadsheet will appear with all of the required meteorological parameters across the top of the page.

NOTE: Ensure met data is entered for the current time. MIDAS will persist the data to future time periods automatically.

- a. In the column labeled **10M SPD**, enter the wind speed from the 10-meter onsite (primary) meteorological tower in MILES PER HOUR (MPH).

NOTE: If the primary meteorological tower data is not available, refer to the Met Vent Data Acquisition Options tab for other options.

- b. In the column labeled **10M WD**, enter the wind direction from the 10-meter onsite (primary) meteorological tower in DEGREES FROM (DEG FM).
- c. In the column labeled **STAB CLS**, enter the actual value for ΔT in DEGREES CENTIGRADE (preferred method) or the wind speed corrected stability class (Letter Code) if the primary tower data is not available. MIDAS will convert the letter entry to a numerical value.
- d. In the column labeled **RAIN-LMH**, enter the precipitation rate in INCHES PER 15 MINUTES (IN/15M). Divide the PICSY precipitation rate (inches/hr) by 4. If the precipitation rate is not available, estimation may be made by using the following table:

NO PRECIPITATION	<u>0</u>(zero)
DRIZZLE or MIST	<u>L</u>IGHT
STEADY RAIN	<u>M</u>EDIUM
HEAVY DOWNPOUR	<u>H</u>EAVY

- e. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.
- 4. A **WEATHER SELECTION** screen will appear if any of the meteorological data inputs are missing from the spreadsheet.
 - a. If this screen appears, select **RESET** until you have returned to the **MET/VENT DATA CONTROL TABLE** screen.

- b. Select **CURRENT SCENARIO EDIT** and enter any missing meteorological values on the spreadsheet.
 - c. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.
5. The **PPL SUMMARY DATA SELECTION** screen allows the user to select different options for the **MIDAS DOSE SUMMARY REPORT**.
- a. Select the projection time from the left-hand column if other than the default of six hours is needed.
 - b. Select the **PEAK SECTOR** dose rate option; then **CONFIRM**. If you wish to change any of your previous choices, select **RESET**.
- NOTE: The **PEAK SECTOR** is used to determine the highest dose rate in all 16 sectors. The alternate selection (**CURRENT AFFECTED SECTOR**) is applicable only when estimated dose rates from the current release period alone are requested by the RPC/DASU.
6. After the calculations have completed, the **MIDAS DOSE SUMMARY REPORT** will be displayed on the screen.
- a. If you want to select a different projection time or sector designation from the **PPL SUMMARY DATA SELECTION** screen, select **RESTART PROGRAM**.
 - b. If you wish to view additional report options, select **CONTINUE** and, on the next page, **MORE REPORTS**.
 - c. If you wish to continue with the next calculation, double click **EXIT**. This will return you to the **ACCIDENT MENU SELECTION** screen where the dose calculation process can be repeated using updated input values.
 - d. If a hard copy is desired of any printout or plot displayed on the screen, press **[PRINT SCR]**.

NOTE: If a hard-copy printout is made of the **MIDAS DOSE SUMMARY REPORT**, be sure to fill in the required information documenting the name of the dose calculator, reviewer, and date the calculation was performed.

7. Adjust the results to reflect the percentage of clad failure or fuel melt applicable to the current scenario.
 - a. Multiply calculated dose rates and doses by the appropriate fraction of clad failure or fuel melt. Example: The multiplier for 50% FUEL MELT would be 0.5.

D. MENU D: DEFAULT ACCIDENT CALCULATIONS

REQUIRED INPUTS

ENGINEERING OR OPERATIONS SUPPORT IS REQUESTED FOR THESE CALCULATIONS.

MET DATA

- 10 M WIND SPEED
- 10 M WIND DIRECTION
- STABILITY CLASS
- PRECIPITATION RATE

SOURCE TERM

- ACCIDENT SOURCE TERM SELECTION
- PERCENT OF CLAD FAILURE OR FUEL MELT
- PROJECTION TIME

1. The **MET/VENT DATA CONTROL TABLE** screen will appear.
 - a. Select **START NEW SCENARIO** and then **CONFIRM**.
 - b. Other options are available in the lower right hand section of the display if you wish to **RESET** your initial entries or **EXIT** the screen.
2. The **METEOROLOGICAL DATA** spreadsheet will appear with all of the required meteorological parameters across the top of the page.

NOTE: Ensure met data is entered for the current time. MIDAS will persist the data to future time periods automatically.

- a. In the column labeled **10M SPD**, enter the wind speed from the 10-meter onsite (primary) meteorological tower in MILES PER HOUR (MPH).

NOTE: If the primary meteorological tower data is not available, refer to the Met Vent Data Acquisition Options tab for other options.

- b. In the column labeled **10M WD**, enter the wind direction from the 10-meter onsite (primary) meteorological tower in DEGREES FROM (DEG FM).

- c. In the column labeled **STAB CLS**, enter the actual value for ΔT in DEGREES CENTIGRADE (preferred method) or the wind speed corrected stability class (Letter Code) if the primary tower data is not available. MIDAS will convert the letter entry to a numerical value.
- d. In the column labeled **RAIN-LMH**, enter the precipitation rate in INCHES PER 15 MINUTES (IN/15M). Divide the PICSY precipitation rate (inches/hr) by 4. If the precipitation rate is not available, estimation may be made by using the following table:

NO PRECIPITATION	<u>0</u> (zero)
DRIZZLE or MIST	<u>L</u> IGHT
STEADY RAIN	<u>M</u> EDIUM
HEAVY DOWNPOUR	<u>H</u> EAVY

- e. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.
3. A **WEATHER SELECTION** screen will appear if any of the meteorological data inputs are missing from the spreadsheet.
 - a. If this screen appears, select **RESET** until you have returned to the **MET/VENT DATA CONTROL TABLE** screen.
 - b. Select **CURRENT SCENARIO EDIT** and enter any missing meteorological values on the spreadsheet.
 - c. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.
 4. From the **ACCIDENT SOURCE TERM SELECTION** screen, select an appropriate accident source term, then **CONFIRM**.
 5. A **PERCENT FAILURE FOR LOCA** screen will appear if the clad failure or fuel melt accident source term is selected. Input the percent of clad failure or fuel melt using the numpad and **CONFIRM**.
 6. The **PPL SUMMARY DATA SELECTION** screen allows the user to select different options for the **MIDAS DOSE SUMMARY REPORT**.
 - a. Select the projection time from the left-hand column if other than the default of six hours is needed.

- b. Select the **PEAK SECTOR** dose rate option; then **CONFIRM**. If you wish to change any of your previous choices, select **RESET**.

NOTE: The **PEAK SECTOR** is used to determine the highest dose rate in all 16 sectors. The alternate selection (**CURRENT AFFECTED SECTOR**) is applicable only when estimated dose rates from the current release period alone are requested by the RPC/DASU.

- 7. After the calculations have completed, the **MIDAS DOSE SUMMARY REPORT** will be displayed on the screen.

- a. If you want to select a different projection time or sector designation from the **PPL SUMMARY DATA SELECTION** screen, select **RESTART PROGRAM**.
- b. If you wish to view additional report options, select **CONTINUE** and, on the next page, **MORE REPORTS**.
- c. If you wish to continue with the next calculation, double click **EXIT**. This will return you to the **ACCIDENT MENU SELECTION** screen where the dose calculation process can be repeated using updated input values.
- d. If a hard copy is desired of any printout or plot displayed on the screen, press [**PRINT SCR**N].

NOTE: If a hard-copy printout is made of the **MIDAS DOSE SUMMARY REPORT**, be sure to fill in the required information documenting the name of the dose calculator, reviewer, and date the calculation was performed.

E. MENU E-W: BACK CALCULATIONS

REQUIRED INPUTS

ENGINEERING OR OPERATIONS SUPPORT IS REQUESTED FOR THESE CALCULATIONS.

PLANT CONDITIONS

- TIME OF REACTOR SHUTDOWN
- RELEASE START TIME
- DURATION OF RELEASE
- ACCIDENT SOURCE TERM SELECTION
- PROJECTION TIME

MET DATA

- 10 M WIND SPEED
- 10 M WIND DIRECTION
- STABILITY CLASS
- PRECIPITATION RATE

FIELD DATA

- 3 FT (CW) SURVEY METER READING
- DISTANCE FROM PLANT
- IODINE CARTRIDGE NET CPM OR DEFAULT IODINE MIX

1. The **MET/VENT DATA CONTROL TABLE** screen will appear.
 - a. Select **START NEW SCENARIO** and then **CONFIRM**.
 - b. If you have already initiated calculations and wish to modify the existing met spreadsheet file, select **CURRENT SCENARIO EDIT** and **CONFIRM**.
 - c. Other options are available in the lower right hand section of the display if you wish to **RESET** your initial entries or **EXIT** the screen.

2. The **METEOROLOGICAL DATA** spreadsheet will appear with all of the required meteorological parameters across the top of the page.

NOTE: Ensure met data is entered for the current time. MIDAS will persist the data to future time periods automatically.

- a. In the column labeled **10M SPD**, enter the wind speed from the 10-meter onsite (primary) meteorological tower in MILES PER HOUR (MPH).

NOTE: If the primary meteorological tower data is not available, refer to the Met Vent Data Acquisition Options tab for other options.

- b. In the column labeled **10M WD**, enter the wind direction from the 10-meter onsite (primary) meteorological tower in DEGREES FROM (DEG FM).
- c. In the column labeled **STAB CLS**, enter the actual value for ΔT in DEGREES CENTIGRADE (preferred method) or the wind speed corrected stability class (Letter Code) if the primary tower data is not available. MIDAS will convert the letter entry to a numerical value.
- d. In the column labeled **RAIN-LMH**, enter the precipitation rate in INCHES PER 15 MINUTES (IN/15M). Divide the PICSY precipitation rate (inches/hr) by 4. If the precipitation rate is not available, estimation may be made by using the following table:

NO PRECIPITATION	<u>0</u> (zero)
DRIZZLE or MIST	<u>L</u> IGHT
STEADY RAIN	<u>M</u> EDIUM
HEAVY DOWNPOUR	<u>H</u> EAVY

- e. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.

3. A **WEATHER SELECTION** screen will appear if any of the meteorological data inputs are missing from the spreadsheet.

- a. If this screen appears, select **RESET** until you have returned to the **MET/VENT DATA CONTROL TABLE** screen.
- b. Select **CURRENT SCENARIO EDIT** and enter any missing meteorological values on the spreadsheet.
- c. Type **X** when all data has been entered to save the data and exit out of the meteorological spreadsheet.

4. From the **ACCIDENT SOURCE TERM SELECTION** screen, select an appropriate accident source term, then **CONFIRM**.

If no specific information on the type of release is available from Engineering, use the following as a guide in the selection of an appropriate accident source term:

- a. Obtain Reactor Power from Engineering, Operations, or as follows:
 - 1) From PICSY, select Unit #1 or Unit #2 formats to view affected unit.
 - 2) Type STA and press **[ENTER]**.
 - 3) "Reactor Power" is in the top left section.
 - 4) Click on **MET VENT** to return to the Met/Vent data display.
 - b. If the reactor is operating at or greater than 10% power, select the **ATWS** source term.
 - c. If reactor power is at less than 10%, select the **LOCA (Clad Failure)** source term.
 - d. If conditions indicate a fuel handling incident and a release from the refueling floor (Reactor Building floor 818'), select **Fuel Handling Accident**.
5. The next screen is the **FIELD MONITOR PARAMETER SELECTION** screen. Select the appropriate cells and input the information requested using the numpad on the screen or enter the data using the computer keyboard. Once the data entry is complete, **CONFIRM** to continue with the calculation.
 - a. Enter Field Team or ERMS Fixed Monitor gamma (EDE) dose rate whichever is appropriate.
 - b. Enter the distance of the Field Team or Fixed Monitor from the plant as noted on the RMS Report or for the on-site team as noted on Table 4 of EP-AD-000-124.
 - c. If iodine air sample data is available, enter either the **IODINE CARTRIDGE** reading in net counts per minute or an **IODINE CONCENTRATION** value in $\mu\text{Ci/cc}$. A zero (0) value may be entered for the net count per minute or $\mu\text{Ci/cc}$ measurement, if indicated.
 - d. If iodine data is not available, select the **DEFAULT MIX** option to characterize the iodine source term.

6. On the **RELEASE TIMING SELECTION** screen, enter the estimated remaining duration for the release, then **CONFIRM**. If the duration of release is not known, use the default of 360 minutes.
7. The **PPL SUMMARY DATA SELECTION** screen allows the user to select different options for the **MIDAS DOSE SUMMARY REPORT**.
 - a. Select the projection time from the left-hand column if other than the default of six hours is needed.
 - b. Select the **PEAK SECTOR** dose rate option; then **CONFIRM**. If you wish to change any of your previous choices, select **RESET**.

NOTE: The **PEAK SECTOR** is used to determine the highest dose rate in all 16 sectors. The alternate selection (**CURRENT AFFECTED SECTOR**) is applicable only when estimated dose rates from the current release period alone are requested by the RPC/DASU.

8. After the calculations have completed, the **MIDAS DOSE SUMMARY REPORT** will be displayed on the screen.
 - a. If you want to select a different projection time or sector designation from the **PPL SUMMARY DATA SELECTION** screen, select **RESTART PROGRAM**.
 - b. If you wish to view additional report options, select **CONTINUE** and, on the next page, **MORE REPORTS**.
 - c. If you wish to continue with the next calculation, double click **EXIT**. This will return you to the **ACCIDENT MENU SELECTION** screen where the dose calculation process can be repeated using updated input values.
 - d. If a hard copy is desired of any printout or plot displayed on the screen, press **[PRINT SCR]**.

NOTE: If a hard-copy printout is made of the **MIDAS DOSE SUMMARY REPORT**, be sure to fill in the required information documenting the name of the dose calculator, reviewer, and date the calculation was performed.

- e. Remote Monitoring System perimeter monitoring location dose rates can be displayed by MIDAS using the perimeter monitoring dose rate screen option.

NOTE: The displayed values are only numeric dose estimates based on MIDAS calculations. They are not "real-time" readings from the perimeter monitor system.

Directions for accessing the MIDAS perimeter monitor dose rate screen option are as follows:

- 1) At the **MIDAS DOSE SUMMARY REPORT** screen, select **CONTINUE**.
- 2) On the next screen select **MORE REPORTS**.
- 3) From the **MORE REPORTS SELECTION** screen, select **FM GAMMA DOSE RATE PLOT** and **CONFIRM**.
- 4) From the **REPORT PARAMETER SELECTION** screen, choose the appropriate projection time and **CONFIRM**.
- 5) From the **MAP SELECTION** screen, select **MAP SCALE** and input 1.25 miles, then **CONFIRM**.
- 6) On the next screen, select **MAP FEATURES**.
- 7) On the next screen, select **CALCULATED PERIMETER MON DOSE RATES** and **CONFIRM**.
- 8) To exit, select **CONTINUE**, **MORE REPORTS**, and **EXIT**.

F. DESCRIPTION OF INFORMATION PROVIDED ON THE MIDAS DOSE SUMMARY REPORT

1. PRINT DATE/TIME

Date and time MIDAS DOSE SUMMARY REPORT was printed.

2. CURRENT TIME PERIOD

Current meteorological time period used for dose projections provided on quarter hour increments to match met spreadsheet entries.

3. REACTOR SHUTDOWN

Date and time of reactor shutdown.

4. START OF RELEASE

This is the date and time of first dose calculation as indicated by the first positive vent release rate value entered on the vent data spreadsheet or if the vent spreadsheet is not used, the date and time of the met data used for the current projection period.

NOTE: For MENU C: NUREG-1228 CALCULATIONS, MENU D: DEFAULT CALCULATIONS, and MENU E-W: BACK CALCULATIONS, it is conservatively assumed that the date and time of reactor shutdown is concurrent with the start of release.

5. MENU SELECTION

Identifies the dose calculation option used for the current dose projection summary report. Choice of four options:

- MENU B: FORWARD CALCULATIONS
- MENU C: NR-1228 CALCULATIONS
- MENU D: DEFAULT CALCULATIONS
- MENU E-W: BACK CALCULATIONS

6. **SOURCE TERM**

Identifies the source term used for the current dose projection summary report calculations. Choice of six options:

- ATWS-Normal Reactor Coolant Activity (UNDECAYED)
- Normal Reactor Coolant Activity (DECAYED)
- (LOCA) Coolant Activity Leak with Depressurization Spike-No Fuel Damage
- (LOCA) Cladding Failure-Gap Release
- (LOCA) Fuel Melt-Early In-Vessel Release
- Fuel Handling Accident

7. **MET DATA**

Meteorological data (wind speed, wind direction, stability class, and precipitation rate) used for the summary report dose projections.

8. **CURRENT AFFECTED SECTOR OR PEAK SECTOR DOSE RATES**

This table provides the TEDE, EDE, and THYROID CDE dose rates calculated at the OSCAR and EPB distances. These rate calculations are based on a variable projection/integration period for the current affected sector or peak sector.

9. **PROJECTED DOSES**

This table provides a TEDE and THYROID CDE dose projection calculated at the OSCAR, EPB, 2-mile, and 10-mile distances for varying projection times. The projection time will appear in the header line e.g., 4 HOUR PROJECTED DOSES on the MIDAS DOSE SUMMARY REPORT. The sector designation for this dose projection is based on the maximum calculated dose determined from all sixteen sectors for the given projection time. Information for distances between 10 and 50 miles is available using the "More Reports" feature.

10. **CALCULATED/REVIEWED BY**

The sign-off for review of calculation results is done for documentation purposes. The intended review does not necessarily mean an independent verification of each input to the calculation but more an interactive discussion between the RPC/HP Level II Dose Calculator and/or DASU/DAST (or dose calculator) to ensure the calculated results are reasonable based on current plant and environmental information.

This review should occur before the calculated results are used for any emergency classification determinations or protective action recommendations.

11. **COMMENTS**

Section added to provide space for additional statements of qualification or background information pertaining to the dose projections.

MIDAS DOSE SUMMARY REPORT

① PRINT DATE/TIME: 8/19/97 11:25 ② CURRENT TIME PERIOD: 8/19/97 11:30

MIDAS DOSE SUMMARY REPORT

③ REACTOR SHUTDOWN: 8/19/97 18:53 WIND SPEED (MPH): 5
 ④ START OF RELEASE: 8/19/97 18:53 WIND FROM (DEG): 120 (ESE)
 ⑤ MENU SELECTION: FORWARD CALCULATIONS ⑦ STABILITY CLASS: D
 ⑥ SOURCE TERM: LOCA (CLAD FAILURE) PRECIPITATION: NO

CURRENT (SITE TOTAL) RELEASE RATE

NOBLE GAS 6.98E+09	(uCi/min) I-131 9.96E+01	PARTICULATES 9.96E+01
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⑧

CURRENT AFFECTED SECTOR DOSE RATES				
LOCATION	OSCAR		EPB	
UNITS	DOSE RATE (mrem/hr)	AFFECTED SECTOR	DOSE RATE (mrem/hr)	AFFECTED SECTOR
TEDE RATE	883.42	WNW	775.90	WNW
EDE RATE	883.42		775.90	
THY CDE RATE	0.22		0.16	

⑨

6.00 HOUR PROJECTED DOSES								
DISTANCE	OSCAR		EPB		2 MILE		10 MILE	
UNITS	DOSE (mrem)	PEAK SECTOR	DOSE (mrem)	PEAK SECTOR	DOSE (mrem)	PEAK SECTOR	DOSE (mrem)	PEAK SECTOR
TEDE	3.39E+03	WNW	3.02E+03	WNW	1.03E+03	WNW	29.96	WNW
CEDE	0.05		0.04		8.11E-03		2.66E-04	
PLUME	3.39E+03		3.02E+03		1.03E+03		29.96	
GND 4-DAY	0.02		0.02		3.36E-03		9.17E-05	
THY CDE	1.48	NW	1.01	NW	0.20	WNW	5.56E-03	WNW

⑩ CALCULATED BY: _____ DATE: _____
 ⑪ REVIEWED BY: _____ DATE: _____
 COMMENTS: _____

RESTART REPORT	CONTINUE
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G. INFORMATION FOR DISTANCES BETWEEN 10 AND 50 MILES

1. From the **MIDAS DOSE SUMMARY REPORT** screen, select **CONTINUE** and, on the next page, **MORE REPORTS**.
2. Select **TEDE 4-DAY DOSE REPORT** or **THYROID CDE DOSE REPORT**, depending on which **PAR** guide has been exceeded at the 10-mile distance.
3. On the **REPORT PARAMETER SELECTION** screen, select **PROJECTION TIME** until the appropriate **PROJECTION TIME** (0.25, 4, 6, or 9 hours) is displayed on the screen; then select **CONFIRM**.
4. The screen will now display projected doses at the **EPB** and at 2, 5, 10, 25, and 50 miles. To obtain finer increments of distance, select **CONTINUE** until the desired range of distances is displayed.

NOTE: An objective is to determine the approximate distance from the plant at which dose projections are less than 1 rem **TEDE** and 5 rem **THYROID CDE**. A **PAR** is then likely to be issued to the next furthest 5-mile distance increment from the plant.

Example: A **PAR** for distances to 30 miles may be selected if projected doses become less than the **PAG** values (1 rem **TEDE**, 5 rem **THYROID CDE**) between 25 and 30 miles from the plant.

H. ACCIDENT DESCRIPTIONS

DEFAULT ACCIDENT DESCRIPTIONS (MENU B AND MENU D)

1. NORMAL REACTOR COOLANT ACTIVITY

This accident scenario is defined as the release of reactor coolant system liquid and steam activity from the primary coolant system with no damage to the fuel and no activity spiking. The source term for this accident is normal reactor coolant system liquid and steam activity.

2. -LOCA (RX DP-NO FD)

This accident scenario is defined as the release of reactor coolant system liquid and steam activity from the primary coolant system. Depressurization of the primary coolant system is assumed, resulting in an activity spike in the reactor coolant. The source term for this accident is normal reactor coolant liquid and steam activity plus the depressurization activity spike. There is no fuel damage.

3. LOCA (CLAD FAILURE)

This accident scenario is defined as a Loss-of-Coolant Accident which results in damage to the reactor fuel cladding. The source term for this accident is normal reactor coolant liquid and steam activity and a percentage of the activity in the fuel clad gap. For Menu D calculations, that percentage is entered as part of the calculation process. For Menu B calculations, the valid vent data entered define the severity of the event.

4. LOCA (FUEL MELT)

This accident scenario is defined as a Loss-of-Coolant Accident which results in damage to the reactor fuel. The source term for this accident is normal reactor coolant liquid and steam activity and a percentage of the activity in the reactor fuel. For Menu D calculations, that percentage is entered as part of the calculation process. For Menu B calculations, the valid vent data entered define the severity of the event.

5. FUEL HANDLING ACCIDENT

This accident scenario is defined as a fuel handling accident which results in the release of spent fuel activity. The source term for this accident is spent fuel gap activity assuming a decay time after shutdown of 24 hours.

6. **ATWS**

This accident scenario is used for releases from a reactor unit continuing to operate at or greater than 10% power. The source term for this accident is normal reactor coolant system liquid and steam activity. The source term is undecayed; that is, no reactor trip is assumed to have occurred.

NOTE (1): For Menu D calculations, design basis assumptions are utilized. For example, design basis leakage rates are assumed and iodine filtration efficiency of 99% is assumed in those pathways for which filters are in place.

-NOTE (2): The source term for Menu D accident types is fixed. Release rate is calculated by MIDAS by dividing the total activity released by a predetermined release duration (6 hours for all but fuel handling accidents, for which release duration is 2 hours).

**NUREG 1228 ACCIDENT TYPES
(MENU C)**

1. **LOCA - DRYWELL RELEASE**

This accident is a Loss-of-Coolant Accident with an activity release into the drywell which bypasses the suppression pool for which filtration of activity by the Standby Gas Treatment System takes place before release to the environment.

2. **LOCA - WETWELL RELEASE**

This accident is a Loss-of-Coolant Accident with an activity release through the suppression pool for which filtration of activity by the Standby Gas Treatment System takes place before release to the environment.

3. **LOCA - CONTAINMENT BYPASS RELEASE**

This accident is a Loss-of-Coolant Accident with an activity release to the environment that bypasses the containment and the Standby Gas Treatment System.

4. **ZIRCALLOY FIRE IN ONE THREE MONTH OLD BATCH**

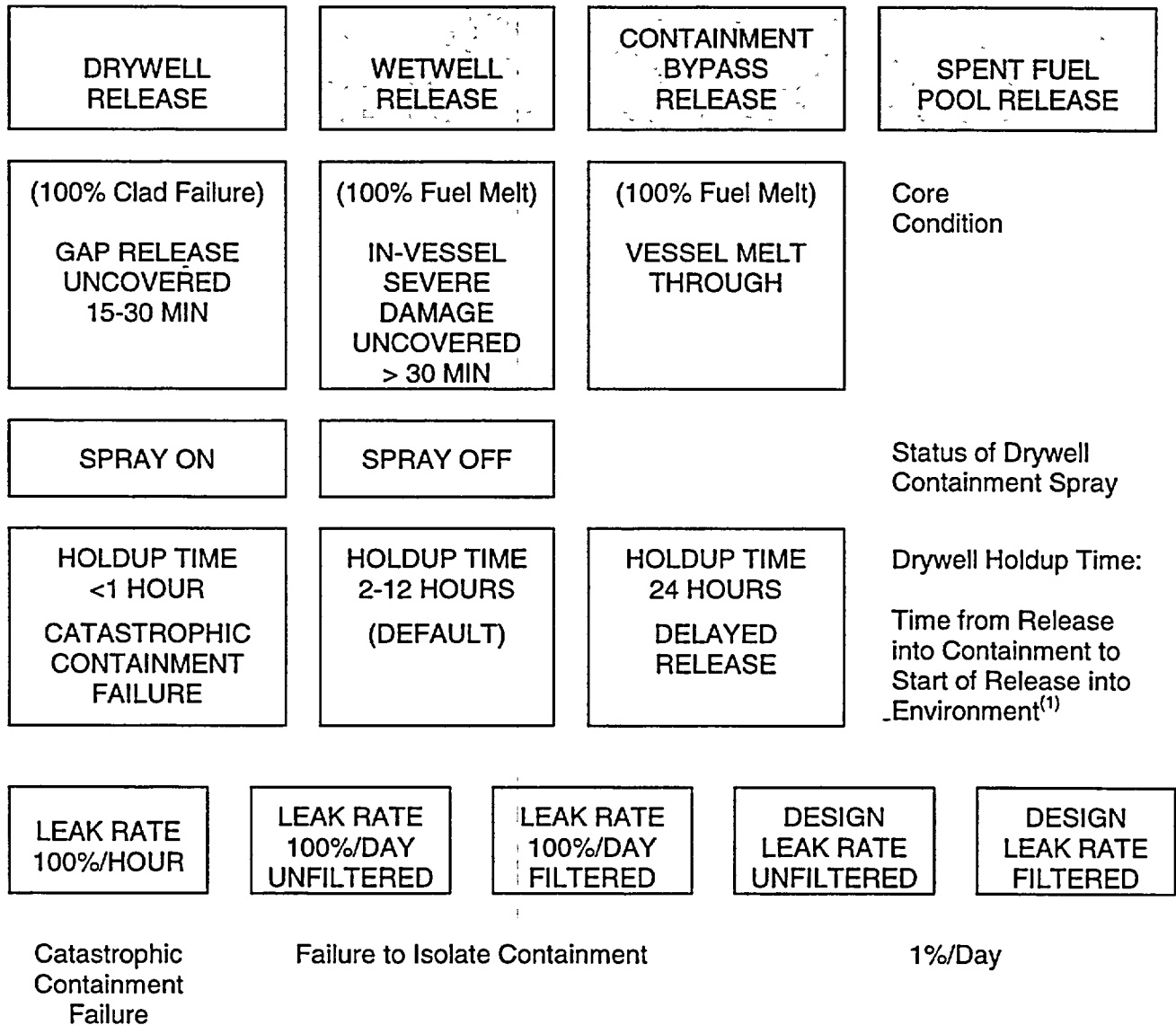
This accident is a zircalloy fire in spent fuel that results in an activity release similar to a core melt. It assumes that the activity is filtered by the Standby Gas Treatment System prior to release.

5. **SPENT FUEL GAP RELEASE**

This accident is a release of fuel gap activity from the spent fuel pool with treatment by the Standby Gas Treatment System prior to release.

NOTE: Menu C (from NUREG-1228 Event Tree Analyses) is used to relatively quickly provide a bounding estimate of offsite dose, for situations where there are substantial uncertainties in prediction of source term and any resultant doses.

**NUREG 1228 MENU STRUCTURE FOR
DRYWELL RELEASE**



⁽¹⁾ HOLDUP TIME is defined as drywell holdup time prior to release to the environment. During this time period, credit is taken for drywell airborne activity removal due to plateout by natural processes and water sprays prior to release to the environment.

**NUREG 1228 MENU STRUCTURE FOR
WETWELL RELEASE**

DRYWELL RELEASE	WETWELL RELEASE	CONTAINMENT BYPASS RELEASE	SPENT FUEL POOL RELEASE	
(100% Clad Failure) GAP RELEASE UNCOVERED 15-30 MIN	(100% Fuel Melt) IN-VESSEL SEVERE DAMAGE UNCOVERED > 30 MIN	(100% Fuel Melt) VESSEL MELT THROUGH	Core Condition	
SATURATED	SUB-COOLED		Conditions in Suppression Pool	
HOLDUP TIME <1 HOUR CATASTROPHIC CONTAINMENT FAILURE	HOLDUP TIME 2-12 HOURS (DEFAULT)	HOLDUP TIME 24 HOURS DELAYED RELEASE	Wetwell Holdup Time: Time from Release into Wetwell to Start of Release into Environment ⁽¹⁾	
LEAK RATE 100%/HOUR	LEAK RATE 100%/DAY UNFILTERED	LEAK RATE 100%/DAY FILTERED	DESIGN LEAK RATE UNFILTERED	DESIGN LEAK RATE FILTERED
Catastrophic Containment Failure	Failure to Isolate Containment		1%/Day	

⁽¹⁾ HOLDUP TIME is defined as wetwell holdup time prior to release to the environment. During this time period, credit is taken for wetwell airborne activity removal due to plateout by natural processes and water sprays prior to release to the environment.

**NUREG 1228 MENU STRUCTURE FOR
CONTAINMENT BYPASS RELEASE**

DRYWELL RELEASE	WETWELL RELEASE	CONTAINMENT BYPASS RELEASE	SPENT FUEL POOL RELEASE
(100% Clad Failure) GAP RELEASE UNCOVERED 15-30 MIN	(100% Fuel Melt) IN-VESSEL SEVERE DAMAGE UNCOVERED > 30 MIN	(100% Fuel Melt) VESSEL MELT THROUGH	Core Condition
UNFILTERED	FILTERED		Is Release Filtered?
RELEASE RATE 100%/HOUR	RELEASE RATE 100%/DAY	TYPICAL DESIGN RELEASE RATE	Release Rate, in Terms of Percent of Core Inventory
Catastrophic Containment Failure	Failure to Isolate Containment	1%/Day	

**NUREG 1228 MENU STRUCTURE FOR
SPENT FUEL POOL RELEASE**

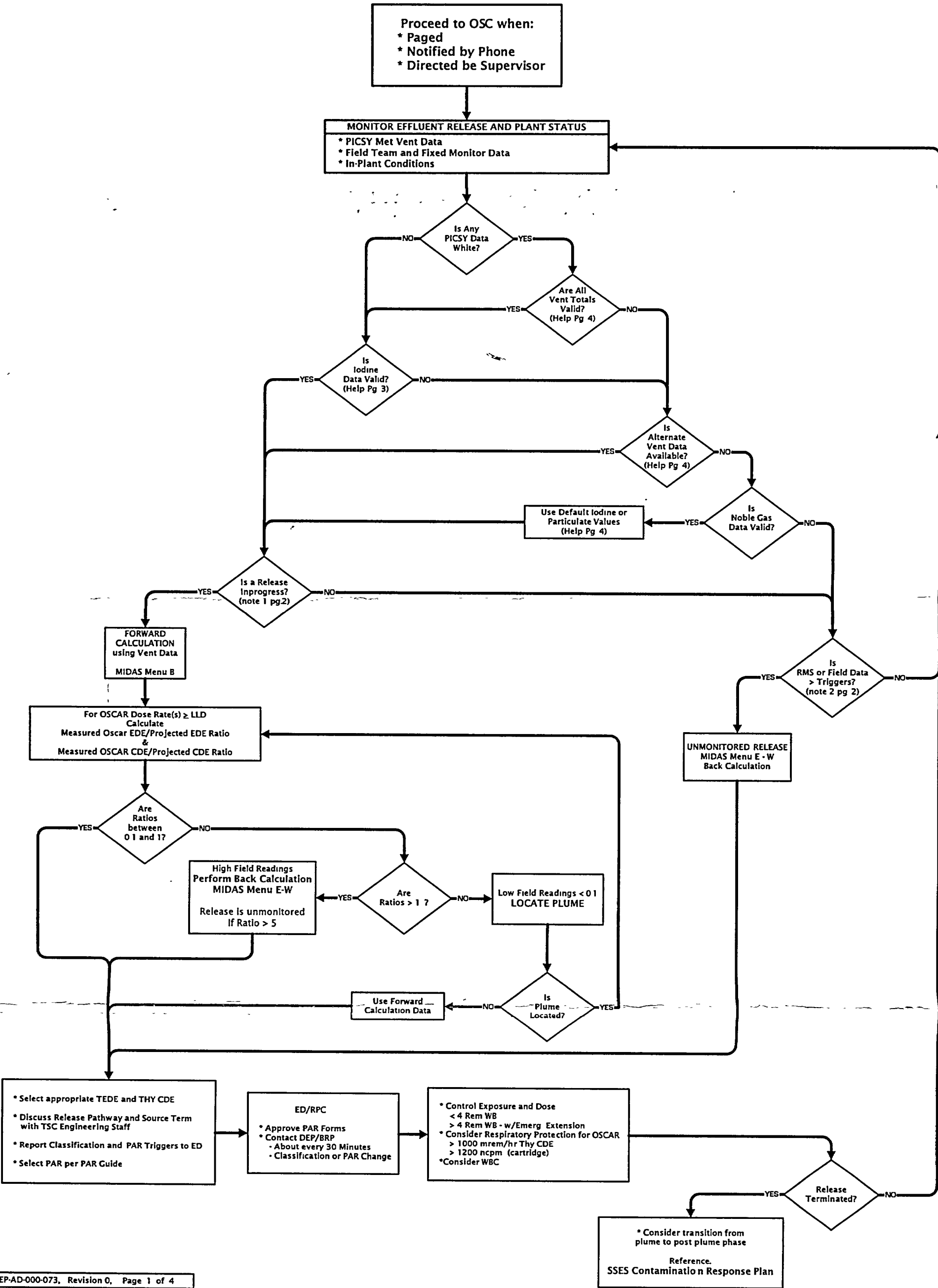
DRYWELL RELEASE	WETWELL RELEASE	CONTAINMENT BYPASS RELEASE	SPENT FUEL POOL RELEASE
ZIRCALLOY FIRE IN ONE 3 MONTH OLD BATCH	GAP RELEASE FROM ONE 3 MONTH OLD BATCH	GAP RELEASE FROM 15 BATCHES (TOTAL POOL)	Condition of Spent Fuel
SPRAY ON	SPRAY OFF (Default)		Status of Containment Spray into Pool
HOLDUP TIME <1 HOUR CATASTROPHIC FAILURE OF REACTOR BUILDING	HOLDUP TIME 2-12 HOURS (DEFAULT)		Time from Release from Fuel to Start of Release into Environment ⁽¹⁾
LEAK RATE 100%/HOUR	LEAK RATE 100%/DAY UNFILTERED	LEAK RATE 100%/DAY FILTERED	Release Rate, in Terms of Percent of Source Inventory

Catastrophic Failure of
Secondary
Containment

⁽¹⁾ HOLDUP TIME for a spent fuel pool release is defined as reactor building holdup time prior to release to the environment. During this time period, credit is taken for reactor building airborne activity removal due to plateout by natural processes and water sprays prior to release to the environment.

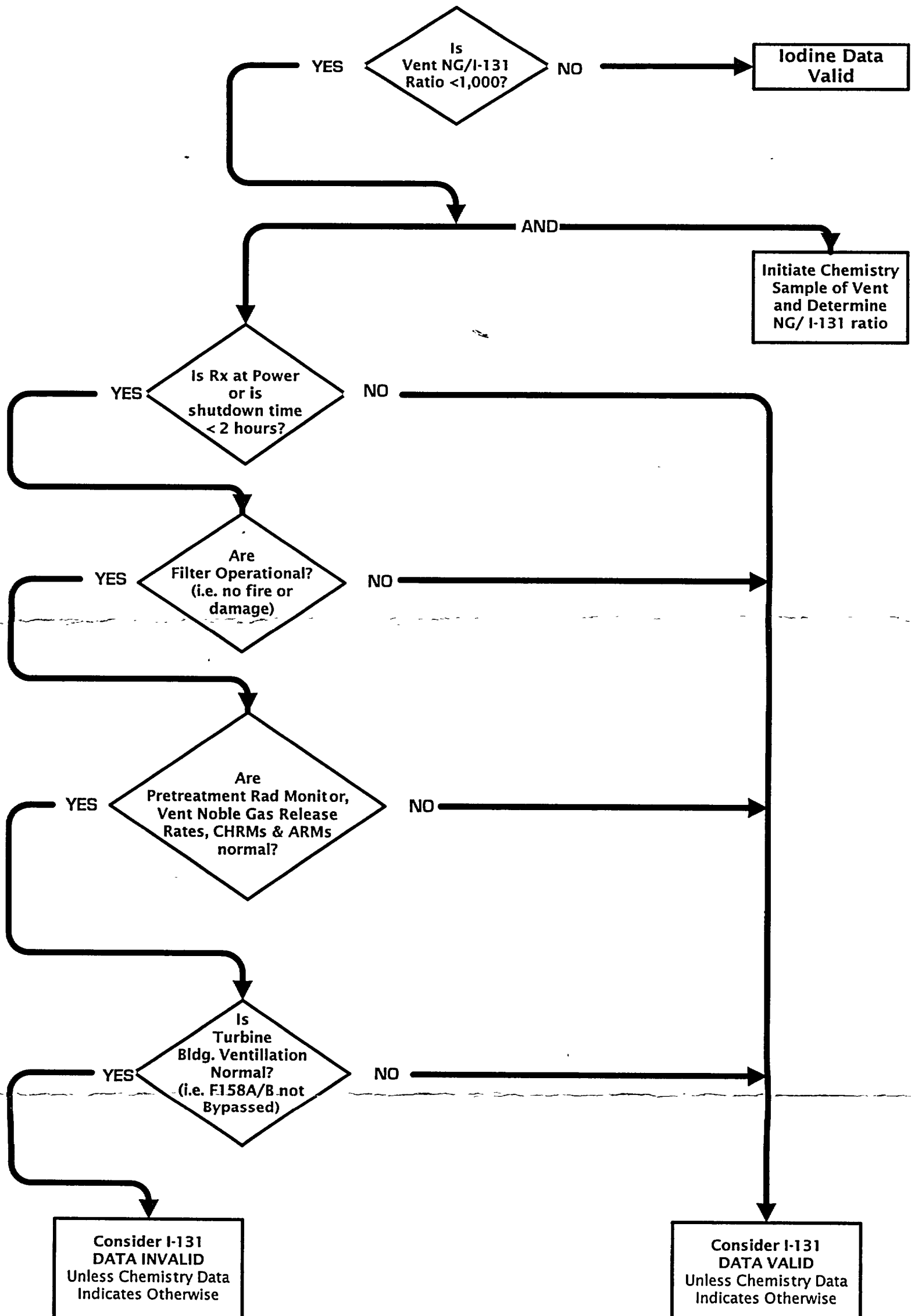
TSC DOSE ASSESSMENT FLOWCHART

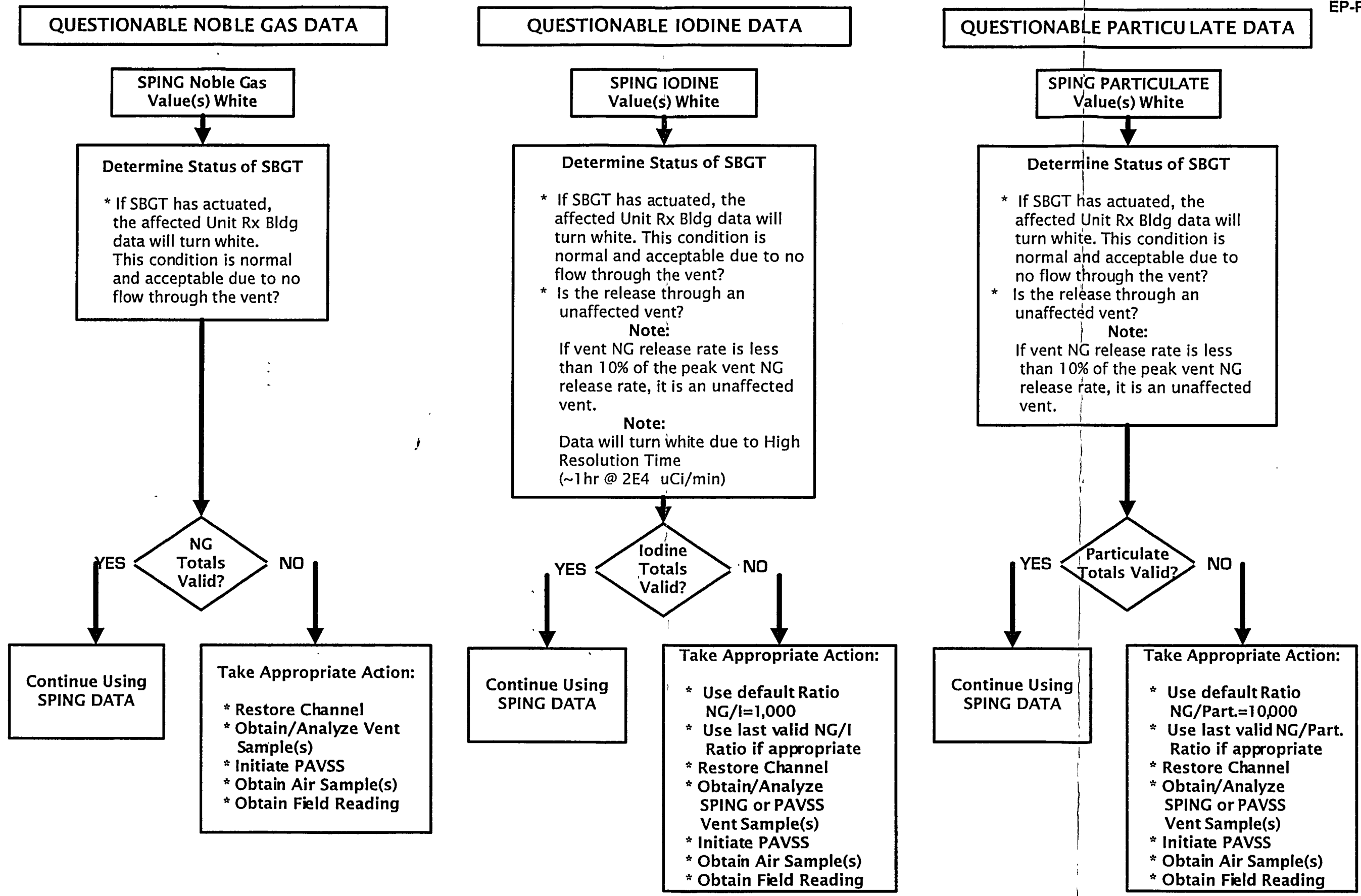
TAB 16
EP-PS-130-16



NOTE 1	NOTE 2	NOTE 3	NOTE 4	NOTE 5
VENT RELEASE TRIGGERS	RMS/FIELD TRIGGERS	DEFAULT ACCIDENT TRIGGERS	NUREG 1228 TRIGGERS	LIQUID RELEASE TRIGGERS
<p>♦ <u>AIRBORNE RELEASE</u></p> <p>>8.51E5 μci/min NG</p> <p>>1.04E2 μci/min Iodine</p> <p>>7.72E2 μci/min Part.</p>	<p>♦ <u>AIRBORNE RELEASE</u></p> <p>≥ 0.1 mrem/hr WB</p> <p>≥ 68.4 mrem/hr Thy CDE</p> <p>≥ 100 ncpm on 1 Cartridge</p>	<p>♦ <u>BLOWOUT PANEL RELEASE</u></p> <p>References:</p> <ul style="list-style-type: none"> MIDAS Operating Procedure, EP-AD-000-112 Blowout Panel Guidance/Data Sheet, EP-AD-000-094 	<p>♦ <u>UNFILTERED VENT RELEASE</u></p> <p>♦ <u>RELEASE RATE > DESIGN BASIS 1%/DAY</u></p> <p>♦ <u>CORE UNCOVERED > 15 MINUTES</u></p> <p>♦ <u>SPENT FUEL POOL RELEASE</u></p>	<p>♦ <u>LIQUID RELEASE</u></p> <p>Liquid Effl. \geq TRM</p>
<p>♦ <u>EAL 15.1 FOR 60 min.</u></p> <p>>1.70E6 μci/min NG</p> <p>>2.08E2 μci/min Iodine</p> <p>>1.54E3 μci/min Part.</p>				<p>♦ <u>EAL 15.1</u></p> <p>Liquid Effl. \geq TRM</p>
<p>♦ <u>EAL 15.2 for 15 min.</u></p> <p>>1.70E8 μci/min NG</p> <p>>2.08E4 μci/min Iodine</p> <p>>1.54E5 μci/min Part.</p>		<p>♦ <u>EAL 3.2</u></p> <p><u>SEVERE CLAD DEGRADATION</u></p> <p>>200 R/hr CHRM</p> <p>>300 μci/cc DE I-131</p>		<p>♦ <u>EAL 15.2</u></p> <p>Liquid Effl. $\geq 10 \times$ TRM</p>
<p>♦ <u>EAL 15.3</u></p> <p>Projected dose rates @ EPB</p> <p>>100 mrem/hr TEDE for 30min or</p> <p>>500 mrem/hr THY CDE for 30min or</p> <p>>15 rem/hr TEDE for 2min or</p> <p>>75 rem/hr THY CDE for 2min</p> <p>Projected dose @ EPB</p> <p>>500 mrem TEDE within 1 hour</p>		<p>♦ <u>EAL 3.3 SEVERLY DEGRADED CORE</u></p> <p>> 400 R/hr CHRM</p> <p>> 1000 μci/cc DE I-131</p>		
<p>♦ <u>EAL 15.4</u></p> <p>Projected Dose @ EPB</p> <p>≥ 1 Rem TEDE</p> <p>≥ 5 Rem THY CDE</p>		<p>♦ <u>EAL 3.4 CORE MELT</u></p> <p>>400R/hr CHRM</p> <p>>1000μci/cc DE Iodine-131</p> <p>> 2000 R/hr CHRM</p>		

TEST FOR IODINE VALIDITY





RECORDS MANAGEMENT DEPARTMENT

TO: C. GLENN
FROM: D.L. HORTON ,

NRC HEADQUARTERS

DATE: 01/21/2003
PAGE: 1

AOC-21 TEL: 716 942-4300

TRANSMITTAL NUM: 000018930

CONTROLLED COPY TRANSMITTAL / RECEIPT ACKNOWLEDGEMENT

Attached is a CONTROLLED COPY of the following document(s) and its applicable index. Add or replace your existing copy with the attached.

CONTROLLED COPY#	PROC ID	REV#	FC#	ISSUE DATE	PROCEDURE TITLE
136	EMIP-101	6		01/20/2003	GENERAL INSTRUCTIONS
136	EMIP-102	11		01/20/2003	EMERGENCY FIELD RESPONSE

The following document(s) has been CANCELLED. Remove and replace the existing document(s) with the attached page(s), if applicable. Dispose of the previous revision(s) of this document(s).

CONTROLLED COPY#	PROC ID	REV#	FC#	ISSUE DATE	PROCEDURE TITLE
136	EMIP-106	2		01/20/2003	MERCY FLIGHT UTILIZATION

Copies made from a controlled document MUST be marked UNCONTROLLED before distribution. Signature below signifies all previous revisions, if applicable, have been destroyed or marked superseded.

I have complied with the above instructions:

RETURN BY: 02/04/2003

Signature (BLACK INDELIBLE INK ONLY)

Date

FOR YOUR CONVENIENCE, A SELF-ADDRESSED, STAMPED ENVELOPE HAS BEEN INCLUDED.

DATE: 01/21/2003
TIME: 13:56

WVDP EMERGENCY MANAGEMENT IMPLEMENTING
PROCEDURES
WVDP-139 VOL I
INDEX

PAGE: 1

<u>PROC_ID</u>	<u>REV</u>	<u>EC</u>	<u>PROCEDURE_TITLE</u>	<u>STATUS</u>	<u>ISSUE DATE</u>	<u>COGNIZANT MANAGER</u>
WVDP-139	3		PREFACE - EMERGENCY MANAGEMENT IMPLEMENTING PROCEDURES	ACTIVE	06/04/2001	CHILSON, L.J.
WVDP-139	3	1	PREFACE - EMERGENCY MANAGEMENT IMPLEMENTING PROCEDURES	ACTIVE	03/20/2002	CHILSON, L.J.
EMIP-101	6		GENERAL INSTRUCTIONS	ACTIVE	01/20/2003	CHILSON, L.J.
EMIP-102	11		EMERGENCY FIELD RESPONSE	ACTIVE	01/20/2003	CHILSON, L.J.
EMIP-103	16		EMERGENCY OPERATIONS MANAGEMENT	ACTIVE	12/30/2002	CHILSON, L.J.
EMIP-105	5		PERSONNEL PROTECTION ALARM RESPONSE	ACTIVE	07/25/2001	CHILSON, L.J.

EMIP-101 General Instructions

GENERAL REVISION

1.0 PURPOSE

This procedure provides a general plan of action to be followed by all WVDP personnel in the event of an actual or potential emergency at the WVDP site. All definitions and acronyms that are specific to Emergency Management are included in the preface of WVDP-139, "Emergency Management Implementing Procedures (EMIPs)".

2.0 SCOPE

Any operational, civil, natural phenomenon, or security occurrence which could endanger or adversely affect people, property, or the environment, is considered an emergency. In order to mitigate such emergencies in the most expeditious manner and with minimum impact to personnel, the environment, or property, proper actions must be taken by WVDP picture badged personnel according to the responsibilities defined herein. The actions covered by this procedure include responding to an actual or potential emergency and implementation of protective actions including Sheltering or On-Site Relocation.

This procedure is site specific and applies to ALL personnel who may be on site during an emergency (including Ashford Office Complex (AOC) personnel on site at the time of an emergency).

During EOC activations which involve Site-Wide Sheltering events, members of the ERO that are located at the AOC are **not** required to respond to the site.

Members of the ERO located at the AOC are to respond to the site for all other events which require them to fill a specific emergency response position.

3.0 REFERENCES

3.1 Requirements

DOE Notice 471.3, "Incidents of Security Concern"
DOE Order 151.1A, "Comprehensive Emergency Management System"
DOE Order 232.1A, "Occurrence Reporting and Processing of Operations Information."
OSHA 1910.38, "Employee Emergency Plans and Fire Prevention Plans."
WVDP-242, "Event Investigation and Reporting Manual"
WVDP-022, "WVDP Emergency Plan."
WVDP-139, "WVDP Emergency Management Implementing Procedures."
WVDP-010, "Radiological Controls Manual."
WVDP-363, "Reporting Incidents of Security Concern."
COS-POS-157, "Conduct of Security Procedures Manual, Part I."
COS-POS-005, "Bomb Threats."

3.2 References

WVDP-262, "WVNS Manual for Records Management and Storage."

4.0 RESPONSIBILITIES

- 4.1 Personnel Who Witness or Discover an Emergency take immediate action, report the emergency, and request assistance via the "812" All Page or the most expeditious means.
- 4.2 All Personnel maintain current knowledge of basic WVDP on site emergency procedures and respond as instructed during an emergency.
- 4.3 Security Personnel take immediate actions to make any necessary notifications to Local Law Enforcement Agencies (LLEA), and lend assistance to the Incident Commander (IC) throughout the emergency.
- 4.4 Managers and Supervisors ensure the welfare and safety of personnel under their supervision by providing guidance during Sheltering, and performing accountability during Relocations.
- 4.5 Escorts ensure that their visitors follow WVDP emergency protocol.

5.0 PROCEDURE

This section provides a logical description of the general rules, actions, and instructions to be followed by personnel during emergencies at the WVDP.

5.1 General Rules

- 5.1.1 Respond to local alarms.
- 5.1.2 Stop work.
- 5.1.3 Listen to and obey the "812" All Page instructions.
- 5.1.4 Listen for additional messages, instructions and/or alarms.
- 5.1.5 Be alert, cautious and pay attention to conditions.

Specific actions required of WVDP personnel are determined by the emergency. Listed below are the emergencies for which specific actions are required and the attachments where more detailed information is located.

Discovery of an Emergency Event: Attachment A
Sheltering: Attachment B
Relocation: Attachment C
Assembly Area Locations and Assignments: Attachment D
Bomb/Suspicious Device/Threats: Attachment E
Biological Agent Threats: Attachment F
Bomb/Suspicious Device/Biological Agent Telephone Threat Check List:
Attachment G

6.0 RECORDS MAINTENANCE

- 6.1 Records generated as a result of implementing this document are identified as follows:
- 6.1.1 Bomb/Suspicious Device/Biological Agent Telephone Threat Check Lists, WV-3330
- 6.2 Records are identified on Nuclear Safety & Emergency Management's Records Inventory and Disposition Schedule (RIDS).
- 6.3 Records shall be prepared, maintained, and transferred to the Records & Configuration/Document Control Department for storage in accordance with WVDP-262, "WVNS Manual for Records Management and Storage." Copies of the RCRA operating records shall be submitted to the Site RCRA file custodian at mail stop WV-VH-5.

7.0 ATTACHMENTS

- Attachment A Discovery of an Emergency Event
- Attachment B Sheltering
- Attachment C Relocation
- Attachment D Assembly Area Locations and Assignments
- Attachment E Bomb/Suspicious Device/Threats
- Attachment F Biological Agent Threats
- Attachment G Bomb/Suspicious Device/Biological Agent Telephone Threat Check List

DISCOVERY OF AN EMERGENCY EVENT

Any operational, civil, natural phenomenon, or security occurrence which could endanger or adversely affect people, property, or the environment is considered an emergency. All WVDP personnel shall be familiar with basic response procedures upon discovery or identification of an emergency.

WARNING1

If the emergency involves a suspicious device or a bomb threat, **DO NOT USE "812"** All Page, two-way portable radio, the "222" Plant Page, or telephone in the immediate area and refer to Attachment E.

WARNING2

If the emergency involves a threat pertaining to a biological agent or personnel exposure to a biological agent, **DO NOT USE "812"** All Page and refer to Attachment F.

1.0 Personnel Who Witness or Discover an Emergency

- 1.1 Take any immediate action you are qualified to perform that will aid in controlling and minimizing the effects of the emergency.
- 1.2 Warn other personnel in the immediate vicinity, and evacuate the area when necessary to minimize injury, contamination, or exposure to hazardous materials. **DO NOT** move injured personnel unless failure to do so will place them at greater risk.
- 1.3 Use the "812" All Page or other means to report the emergency and request assistance.
 - 1.3.1 The "812" All Page message should include:
 - A. the type of emergency (medical, radiological release, hazardous material spill, etc.);
 - B. the location of the emergency; and
 - C. any known personnel injuries.
 - 1.3.2 **REPEAT THE "812" MESSAGE AND HANG UP.**
- 1.4 Stay clear of the scene and, when possible, secure the area to prevent any further injury or damage.
- 1.5 After making the initial report of an emergency, respond according to your area of responsibility and the type of emergency.

NOTE Should the "812" All Page be inaccessible or malfunctioning, the most expeditious alternate means of reporting the emergency should be used as follows (listed in descending order):

- Use the "222" Plant Page
- Telephone Main Plant (x-4239) or Security (x-4330)
- A Two-Way Portable Radio Message to Plant Systems Operations Shift Supervisor (PSOSS)
- Use Face-To-Face communications with the PSOSS

- 1.6 Ensure the PSOSS is notified that the "812" All Page is inoperative
- 1.7 If escorting, keep all visitors with you.
- 1.8 If the escort is a member of the ERO, ensure escort duties and responsibilities are transferred to a WVNS picture badged employee.

SHELTERING

In order to limit exposure of personnel to releases of hazardous materials, Sheltering may be required. The Sheltering Signal is a continuous 30 second tone, often followed by special instructions.

1.0 Personnel Who Shelter

Stop work, follow the general rules by responding to local alarms, listening for "812" all page instructions and paying attention to conditions.

- 1.1 Follow the general rules:
 - 1.1.1 Respond to local alarms
 - 1.1.2 Stop work
 - 1.1.3 Listen to and obey the "812" all page instructions
 - 1.1.4 Listen for additional messages, instructions, and/or alarms
 - 1.1.5 Be alert, cautious and pay attention to conditions
- 1.2 Movement from one sheltered location to another will usually occur under the direction of the IC.
 - 1.2.1 If sheltered and local conditions require facility evacuation (for example, a fire alarm) the person most knowledgeable of the area shall notify the IC and escort all assembled personnel to an alternate location for continued sheltering.
 - 1.2.2 Once at the new location, one person shall contact Security for instructions and provide them with a list of all personnel at the location.
- 1.3 If in a vehicle, immediately close the windows and vents, shut off the air conditioner and/or heater and stay in your vehicle unless there is a facility close by in which you can safely shelter.
- 1.4 If outside, seek shelter inside.
 - 1.4.1 Ensure that all windows and doors are closed.
 - 1.4.2 Ensure that any heating, ventilation, air conditioning systems or other sources of outside air intake are shutdown, if accessible
 - 1.4.3 Secure ventilation using the information provided on the placard located on the thermostat or the circuit breaker.
 - 1.4.4 Ensure that all sources of outside air intake are shutdown in nearby common areas, if accessible.
- 1.5 If escorting visitors, keep visitors with you.
 - 1.5.1 If the escort is a member of the ERO, ensure that escort duties and responsibilities are transferred to a WVNS picture badged employee.

RELOCATION

The relocation of personnel from an area or facility may be necessary to minimize actual or potential exposure of personnel to hazardous materials releases, biological agent releases, fires, security or safeguard emergencies or other potential hazards. To safely and efficiently distribute the on site population during a Relocation event, the WVDP is subdivided into six Assembly Areas (see Attachment D, Assembly Area Map), marked with large, colored, circular signs containing the first letter of the color. Each building, trailer and facility is identified by a placard with the background color for that zone and the first letter of the facility/building represents the zone color i.e., B45-Blue Zone Trailer #45. All WVDP on site personnel are assigned an Assembly Area according to their work location.

1.0 Personnel Who Relocate

1.1 Follow the General Rules:

- 1.1.1 Respond to local alarms
- 1.1.2 Stop work
- 1.1.3 Listen to and obey the "812" all page instructions
- 1.1.4 Listen for additional messages, instructions, and/or alarms
- 1.1.5 Be alert, cautious and pay attention to conditions

- 1.2 Depending on the emergency, secure site systems or facilities. If conditions exist that securing actions would endanger personnel health and safety, relocate to the Assembly Area.

2.0 GENERAL RELOCATION INSTRUCTIONS:

- 2.1 Relocate **ONLY IF THE WORK LOCATION WHERE YOU ARE AT THE TIME OF AN ALARM OR AN ANNOUNCEMENT IS BEING RELOCATED.**

- 2.2 If your normal work area is being relocated and you are in another work location that is not being relocated, **DO NOT** relocate:

Call Security, at Extension 4330 or 4288, and state your name and present location.

- 2.3 If you are in a work location being relocated, go with the occupants of that work location to **THEIR** designated Assembly Area and **DO NOT** go to the Assembly Area assigned to your normal work area.

- 2.4 Assemble at the assembly area unless instructed otherwise.

- 2.5 Form groups in the assembly area according to work group or departments.

- 2.6 Report to the work group or department manager/supervisor, if available, at the assembly area for accountability. If your immediate manager/supervisor is not at the assembly area, report to any available manager/supervisor or security officer present for accountability.

- 2.7 Do not leave the assembly area until instructed to do so or unless conditions at the assembly area are unsafe.

2.8 Listen for additional messages, instructions and/or alarms.

2.9 Be alert, cautious and pay attention to conditions.

3.0 Special Relocation Instructions

3.1 Relocating through the Administrative Annex Main Lobby

3.1.1 If you exit through the Administrative Annex Main Lobby, you must reenter the site in the following manner for accountability purposes:

3.1.2 Follow the general relocation instructions, see Section 2.0 of this attachment.

3.1.3 **DO NOT** swipe your badge through the annex card reader.

3.1.4 **DO NOT** cross the road into the parking lot as this is the emergency vehicle route.

3.1.5 **DO** turn right, stay on the sidewalk, and reenter at the Main Gatehouse.

NOTE: DURING DRILLS, EXERCISES OR ACTUAL EMERGENCY EVENTS, SECURITY WILL DE-ENERGIZE THE SECURITY WEST ENTRY DOOR ALLOWING ACCESS TO THE SITE.

3.1.6 At the Main Gatehouse, **DO NOT** swipe your badge through the card reader or pass through the portal monitor.

3.1.7 Report to the Blue (B) Assembly Area, unless instructed otherwise, staying clear of emergency vehicle traffic.

3.2 Personnel in Contaminated Areas

3.2.1 Follow the general Relocation Instructions, see Section 2.0 of this attachment.

3.2.2 Attempt to minimize the spread of contamination, but not at personal risk to self or others.

3.2.3 Remove the outer layer of protective clothing -- **ONLY IF TIME AND CONDITIONS PERMIT.**

3.2.4 Bypass any monitors upon leaving the affected area.

3.2.5 **STAY SEPARATE FROM OTHERS.** Make others, especially your manager or supervisor, aware of your condition.

4.0 Managers and Supervisors

4.1 Follow the General Relocation Instructions, see Section 2.0 of this attachment.

4.2 Managers Relocating to Assigned Assembly Area

- 4.2.1 Group evacuees (i.e., department, trailer) perform accountability of all personnel in the assembly area under your supervision or guidance.
- 4.2.2 Coordinate accountability procedures with other managers and supervisors in the assembly area.
- 4.2.3 Provide Security with a list of names of the missing personnel and a list of names of personnel present that are not normally assigned to that assembly area.

4.3 Managers Not Relocating With Personnel

- 4.3.1 Managers not in their assigned work area when it is relocated, must call Security and provide them with your location, extension where you can be reached and a list of personnel known to be away from their work stations (i.e., off site) or who have reported in from another location.
- 4.3.2 **DO NOT** attempt to report to your assigned assembly area.
- 4.3.3 If safe, stay where you are unless directed to relocate.

5.0 Escorts

- 5.1 Keep all visitors with you.
- 5.2 Ensure safe response of escorted personnel.
- 5.3 If the escort is a member of the ERO, ensure escort duties and responsibilities are transferred to a WVNS picture badged employee.

ASSEMBLY AREA LOCATIONS AND ASSIGNMENTS

BLUE (B): Between OLD and NEW WAREHOUSES in the wide section of the roadway.

RED (R): East side of OFFICE BUILDING ONE (OB1) by the parking lot.

GREEN (G): West side of the STS BUILDING on the roadway between the storage areas for subcontractors.

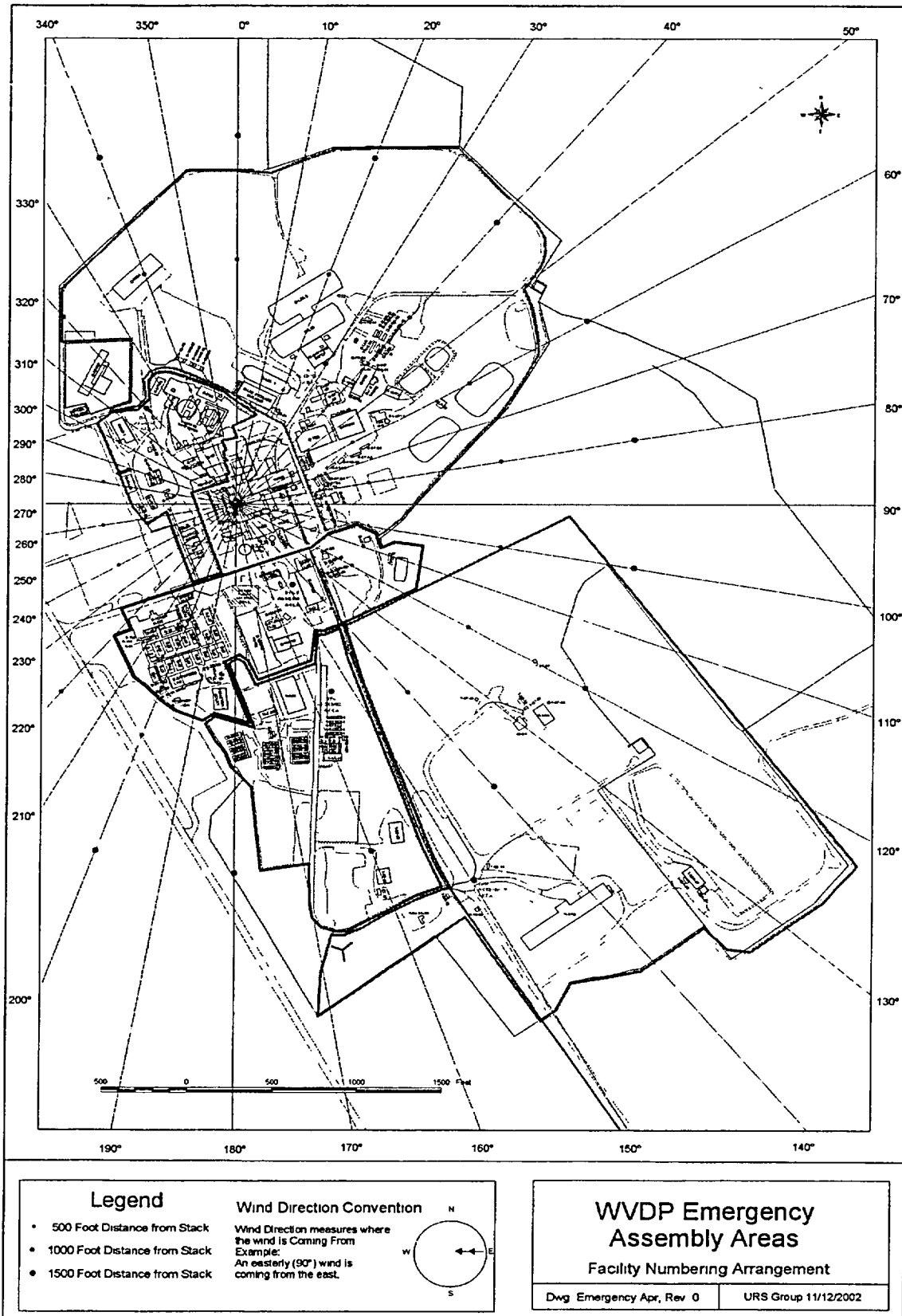
ORANGE (O): South side of LAG STORAGE FOUR (LSA4).

YELLOW (Y): East of the UTILITY ROOM and LAUNDRY FACILITY.

TAN (T): The road intersection North of the DRUM CELL.

WVDP employee assembly areas are maintained through the use of the GOALS system. The Site phone listing reports list the employees assigned work locations along with the assembly area designator code.

SITE ASSEMBLY AREA MAP



BOMB/SUSPICIOUS DEVICE/THREATS

All situations where an object or package is discovered which is suspected to contain explosive materials or other hazardous compounds, or a threat is made to inflict injury to personnel or damage to a facility by mechanical or physical means should be considered a potential emergency and Security should be notified immediately.

WARNING

If the emergency involves a suspicious device or a bomb threat, **DO NOT USE "812"** All Page, two-way portable radio, the "222" Plant Page, or telephone in the immediate area.

- 1.0 Upon discovery of a suspicious device or receipt of a bomb threat (telephone, written, or verbal), notify Security immediately (do not use phone in the immediate vicinity) at extension 4330 or 4288, and the PSOSS at extension 4239 and then notify your supervisor/manager.
 - 1.1 Suspicious Device - Do not touch or attempt to disturb the device, leave the general vicinity of the suspicious device.
 - 1.2 Telephone Threat - If available, use the "Bomb/Suspicious Device/Biological Agent Telephone Threat Check List". The telephone threat checklist (WV-3330) is available in E-Docs and is attached to the back of the WVDP Phone and Mail Stop Directory.
 - 1.3 Written Threat - Preserve all materials (i.e., envelopes, boxes, wrappings, etc...) associated with the threat.
 - 1.4 Verbal Threat or Hostile Confrontation - Do not challenge the validity of the threat or the person(s) making the threat. Leave the area.
- 2.0 Managers and Supervisors
 - 2.1 If you are notified of a suspicious device or threat, contact Security and the PSOSS as soon as safely possible.
 - 2.2 Assist Security in controlling the situation.
 - 2.3 Ensure personnel accountability.

BIOLOGICAL AGENT THREATS

All situations should be considered a potential emergency by WVNS personnel when any of the following exist:

- an actual or potential release of a biological agent to the environment
- an actual or potential exposure to a biological agent
- receipt of a threat involving a biological agent

WARNING

If the emergency involves a threat pertaining to a biological agent or personnel exposure to a biological agent, **DO NOT USE "812" All Page.**

1.0 Anyone discovering the release of a biological agent or receiving a threat involving the presence of a biological agent should contact the Plant Systems Operations Shift Supervisor (PSOSS) at extension 4239 and Security at 4288 or 4330.

1.1 Telephone Threat - If available, use the Bomb/Suspicious Device/Biological Agent Telephone Threat Check List". The telephone threat checklist (WV-3330) is available in E-Docs and is attached to the back of the WVDP Phone and Mail Stop Directory.

1.2 Written Threat - Preserve all materials (i.e., envelopes, boxes, wrappings, etc...) associated with the threat. Limit your exposure by closing the envelope or package and leaving the item alone.

Keep your hands away from your face so you do not touch your eyes, nose or mouth.

Personnel in the immediate area shall remain in the area.
Do not pass the item(s) to others.

Stay where you are and limit your movements. Inform others to stay clear of you and the suspected item(s), and the area. Await further instructions and assistance.

1.3 Verbal Threat (face to face) - Do not challenge the validity of the threat or the person(s) making the threat. Leave the area and contact the PSOSS at extension 4239 and Security at extension 4288 or 4330.

2.0 Managers and Supervisors

2.1 If you are notified of a biological agent release or threat, contact the PSOSS at extension 4239 and Security at extension 4288 or 4330.

2.2 Assist Security in controlling the situation.

2.3 Ensure personnel accountability.

BOMB/SUSPICIOUS DEVICE/BIOLOGICAL AGENT TELEPHONE THREAT CHECK LIST

INSTRUCTIONS: BE CALM. BE COURTEOUS. LISTEN. DO NOT INTERRUPT THE CALLER. PRETEND DIFFICULTY WITH HEARING - KEEP CALLER TALKING

YOUR NAME _____ EXT. _____ TIME _____ DATE _____

CALLER INFORMATION: _____ MALE _____ FEMALE _____ ADULT _____ JUVENILE _____ AGE _____

ORIGIN OF CALL: _____ LOCAL _____ LONG DISTANCE _____ BOOTH _____

VOICE CHARACTERISTICS	SPEECH	LANGUAGE
<input type="checkbox"/> Loud <input type="checkbox"/> Soft <input type="checkbox"/> High Pitch <input type="checkbox"/> Deep <input type="checkbox"/> Raspy <input type="checkbox"/> Pleasant <input type="checkbox"/> Mod. Pitch <input type="checkbox"/> Low Pitch <input type="checkbox"/> Other	<input type="checkbox"/> Fast <input type="checkbox"/> Slow <input type="checkbox"/> Distinct <input type="checkbox"/> Distorted <input type="checkbox"/> Stutter <input type="checkbox"/> Nasal <input type="checkbox"/> Slurred <input type="checkbox"/> Other	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Foul <input type="checkbox"/> Other
ACCENT	MANNER	BACKGROUND NOISES
<input type="checkbox"/> Local <input type="checkbox"/> Not Local <input type="checkbox"/> Region <input type="checkbox"/> Foreign <input type="checkbox"/> Race <input type="checkbox"/> Other	<input type="checkbox"/> Calm <input type="checkbox"/> Angry <input type="checkbox"/> Rational <input type="checkbox"/> Irrational <input type="checkbox"/> Coherent <input type="checkbox"/> Incoherent <input type="checkbox"/> Excited <input type="checkbox"/> Emotional <input type="checkbox"/> Laughing <input type="checkbox"/> Other	<input type="checkbox"/> Machines - Type _____ <input type="checkbox"/> Music <input type="checkbox"/> Animals <input type="checkbox"/> Traffic <input type="checkbox"/> Planes <input type="checkbox"/> Voices <input type="checkbox"/> Quiet <input type="checkbox"/> Other information

IF CALLER SEEMS AGREEABLE TO FURTHER CONVERSATION, ASK QUESTIONS LIKE:

Where is it located? _____ Building _____ Area _____

What kind of BOMB/BIOLOGICAL AGENT is it? _____ What does it look like? _____

What is your name and address? _____

Did the caller seem familiar with plant/building?

Write out the message in its entirety and any other comments on a separate sheet of paper and attach it to this checklist.

ACTION TO TAKE IMMEDIATELY AFTER CALL

NOTIFY (FOR A BOMB/SUSPICIOUS DEVICE DO NOT USE THE TELEPHONE IN THE IMMEDIATE VICINITY)
The Plant Systems Operations Shift Supervisor at extension 4239 and Security Supervisor at extension 4288 or 4330, deliver this form to a WVNS security officer, and contact your immediate Supervisor.

Send completed original forms to the Records and Information Department, AOC-21, and a copy to the Site RCRA file custodian at mail stop WV-VH-5.

WVNS RECORD OF REVISION

Rev. No.	Description of Changes	Revision On	
		Page(s)	Dated
6	Change title of Attachment E to add "Bomb"	2, 3, 12	01/20/03
	6.3 Corrected Records title	3	
	Changed all references to MPOSS to PSOSS	All	
	All personnel are affected by these changes		

EMIP-102 Emergency Field Response

GENERAL REVISION

1.0 PURPOSE

This procedure describes the tactical field response element of the West Valley Demonstration Project (WVDP) Emergency Response Organization (ERO).

2.0 SCOPE

The WVDP ERO is comprised of three components - the timely notification component (the Timely Notification Process), the strategic response (the Emergency Operations Center (EOC)/ Technical Support Center (TSC)) and the tactical field response (field response teams). This procedure describes the positions and duties of personnel involved in the field response to onsite emergency events as well as offsite transportation emergency events. The timely notification component and the strategic response component are described in EMIP-103. This procedure also outlines duties and responsibilities for personnel involved in response to offsite transportation events. The WVDP Transportation Emergency Plan (TEP) is described in total in attachment I, of WVDP-022, WVDP Emergency Plan.

Situations which involve actual or potential injury to personnel, or damage to the environment or the facilities may be considered emergency situations, and may require activation of the WVDP Emergency Plan and the ERO field response. This procedure defines the field response available to mitigate emergency situations in the most expeditious manner and with minimum impact to the health and safety of workers, the public, and the environment, and limit loss of damage to the facilities and plant equipment as appropriate. It includes a description of the field positions and duties as well as response teams that may be activated in an emergency.

3.0 REQUIREMENTS & REFERENCES

3.1 Requirements

DOE Order 151.1A, "Comprehensive Emergency Management System"

OSHA 29 CFR 1910.146, "Permit Required Confined Space."

10 CFR 835 "Occupational Radiation Protection."

29 CFR 1910.1030, "OSHA Occupational Exposure to Bloodborne Pathogens."

Title 40, CFR, Part 264, Subpart D, "Contingency Plan and Emergency Preparedness."

WVDP-010, "WVDP Radiological Controls Manual."

OSHA 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response"

3.2 References

29 CFR 1910.1030, "OSHA Occupational Exposure to Bloodborne Pathogens"

DOE O 440.1, "Worker Protection Management for DOE Federal and Contractor Employees"

DOE G 151.1-1, "Introduction to the Emergency Management Guide"

DOE Order 5632.7A, "Protective Force Program"

WV-228, "WVNSCO Emergency Response Organization Program"

WVDP-022, "WVDP Emergency Plan"

WVDP-026, "WVNSCO Occupational Health Manual"

"Mercy Flight of Western New York Utilization and Ground Crew Safety" (handbook)

"Western Regional Emergency Medical System (WREMS) Trauma Triage Guidelines"

"WREMS Helicopter Scene Utilization Guidelines"

WVDP-139, "WVDP Emergency Management Implementing and Administrative Procedures," Volumes I and II

WVDP-145, "WVNSCO Exposure Control Plan for Bloodborne Pathogens"

WVDP-242, "Event Investigation and Reporting Manual"

WVDP-253, "WVDP Emergency Medical Response Team (EMRT) Manual"

EMP-001, Butler Construction Co. Emergency Management Plan for the RHWF Project"

EMIP-101, "General Instructions"

EMIP-103, "Emergency Operations Management"

EMAP-204, "Equipment and Facilities"

RC-EMRG-01, "Personnel Decontamination"

ER 100.030, "Emergency Response Plan for the West Valley Site Management Program"

WV-925, "Confined Space Entry"

WVDP-262, "WVNSCO Manual for Records Management and Storage"

WVDP-106, "Westinghouse Conduct of Operations Manual"

Security Task Book, Task 5, Sub-task 20

4.0 RESPONSIBILITIES

Based on the minimum training requirements identified in Attachment D, of EMAP-202, "Training of the Emergency Response Organization," in order to participate as an active member of the ERO, all members are to complete and maintain current training qualifications.

- 4.1 Emergency Medical Response Team (EMRT) provides initial emergency medical care to injured personnel in an area free from recognizable hazards for either the responders or the victim.
 - 4.1.1 The first team member to arrive at the scene will be designated the Team Leader until relieved by any other qualified Team member.
 - 4.1.2 **The EMRT Leader will report to and receive direction from the IC.**
- 4.2 Environmental Monitoring Team (EMT) provides radiological or non-radiological environmental data, including meteorological and field data, release trajectory and dose estimates, and/or concentration calculations. Contacts Security to obtain an emergency vehicle if required.
 - 4.2.1 **During an emergency, the Environmental Lab team leader is the Lab Manager or designee. During emergencies, all Environmental Monitoring activities are under the direction of the IC.**
- 4.3 Emergency Response Organization (ERO) personnel trained to respond to emergency events at the WVDP. Based on the minimum training requirements identified in Attachment D of EMAP-202, in order to participate as an active member of the ERO, all members are to complete and maintain current qualifications.
- 4.4 HazMat Team is responsible for controlling or stabilizing incidents that involve a release of hazardous materials. Through a Memorandum of Understanding (MOU), WVDP utilizes the Cattaraugus County HazMat Team for hazardous materials response at the WVDP.
 - 4.4.1 **During an emergency response, the HazMat Team Leader reports to and receives direction from the WVDP IC.**
- 4.5 Incident Commander (IC) is the most senior qualified Plant Systems Operations Shift Supervisor (PSOSS) on duty at the time of the emergency. The IC investigates the emergency situation, activates the appropriate field response teams, directs and coordinates all activities at the scene, and retains tactical command of response activities. The IC acts as the Emergency Director (ED) until relieved by the ED or a higher authority.
- 4.6 Industrial Hygiene & Safety (IH&S) provides a broad spectrum of IH&S personnel during site emergencies. IH&S personnel provide expertise relative to safety, hazardous materials and industrial hygiene. EMRT personnel may interface directly with IH&S personnel as needed and ensure, if necessary, the IH&S Manager is informed of all significant EMRT information.

- 4.7 Mercy Flight provides air ambulance services for the WVDP. Mercy Flight responds to onsite emergencies in accordance with an established LOA with the WVDP.
- 4.8 Operations Response Team (ORT) is a designated group of Plant Systems Operations (PSO) personnel who are organized, trained, and qualified to perform emergency response activities.
- First Responders (FR's) respond to the scene of medical emergencies, deliver appropriate emergency equipment, provide initial first aid, and assist with patient care as necessary.
 - Fire Brigade (FB) performs incipient stage firefighting operations.
 - Confined Space Rescue Team (CSRT) conducts emergency and rescue services which may result from any on site confined space activity.
- 4.9 Radiological Protection and Controls consists of the Radiation Protection Operations Manager (RPOM), the Radiological Control Operations Supervisors (RCOSs), and the Radiological Controls Technicians (RCTs). The RPOM monitors on-scene radiological activities in order to minimize hazards to people, facilities, and the environment; reports to the Radiological Assessment Manager (RAM) in the EOC; and provides a liaison between the field and the EOC. The RCOSs direct the activities of the RCTs and interfaces and consults with the RPOM and IC. RCTs ensure control of radioactive material and radiation exposure to personnel.
- 4.9.1 During an emergency, the Radiological team leader is the RCOS, who reports to and receives direction from the IC.
- 4.10 Security Supervisor reports to the Security Manager and is responsible for directing the actions of the Security Team. Security assist with accountability of site personnel, makes notifications as directed, and controls movement of personnel and vehicles around the WVDP site. Ensures a security vehicle is available for EMT use as requested.
- 4.10.1 During an emergency, the Security team leader is the Security Supervisor, who will report to and receive direction from the IC.
- 4.11 Transportation Emergency Management Team (TEMO) - a subset of the WVDP ERO responsible for monitoring and providing assistance to incident responders to an offsite transportation emergency event involving a WVDP shipment. The TEMO includes the following ERO personnel and their alternates:
- West Valley Nuclear Services Company (WVNSCO) President
 - WVNSCO Regulatory and Compliance Programs(R&CP) Manager
 - WVNSCO Site Services Manager
 - WVNSCO Technical Services Manager

- WVNSCO Process Plant Decontamination Project Manager
- Notification Officer
- Public Information Director

4.12 Timely Notification Officer (TNO) is a TNO qualified PSO person. The TNO is responsible to perform the initial notification to the DOE-HQ-EOC in the Timely Notification Process when directed by the IC. The TNO will complete form WV-3325, Initial Timely Notification Form, establish verbal contact with the DOE-HQ-EOC, and communicate the information provided by the IC as noted on the form.

4.13 The West Valley Volunteer Hose Company (WVVHC) provides ground ambulance service and basic life support care along with fire protection response for the WVDP. The WVVHC responds to onsite emergencies in accordance with an established Letter of Agreement (LOA) with the WVDP.

5.0 PROCEDURE

EMIP-101, "General Instructions," includes a set of general rules, actions and instructions to be followed by all personnel, including emergency responders, during emergencies, at the WVDP. The IC is responsible for all field response activities and must know the status of emergency response teams. The following information applies to all personnel during emergencies requiring sheltering or on site relocation.

- 5.1 Personnel who witness or discover an emergency situation will take action, report the situation, and request assistance per EMIP-101.
- 5.2 The emergency situation will be reported to the PSOSS. When an emergency requires implementation of any element of WVDP-022, "WVDP Emergency Plan," the PSOSS will assume the duties of the IC and will determine if EOC activation is required.
- 5.3 The IC will assess the emergency situation and activate the appropriate field response as appropriate. All activities at the Incident scene(s) will be under the direction of the IC.
- 5.4 The IC will categorize (and classify, if appropriate) the emergency, initiate the timely notification process, and proceed as described in Attachment C.
- 5.5 The duties of each of the field response elements are contained in Attachments C-K:

Attachment C	Incident Command
Attachment D	Operations Response Team
Attachment E	Radiological Protection and Controls
Attachment F	Security Supervisor
Attachment G	Emergency Medical Response Team
Attachment H	Environmental Monitoring Team
Attachment I	Transportation Event Management Organization
Attachment J	Timely Notification
Attachment K	Mercy Flight Utilization

5.6 Communication among field respondents and between the field and the EOC is both demanding and critical. Information flow and communication guidelines should be followed.

5.6.1 Field communication involves seven positions within the Emergency Response Organization (Attachment A):

- Incident Commander (IC)
- TNO qualified personnel - (TNO)
- Radiological Control Operations Supervisor (RCOS)
- HazMat Team Leader (Cattaraugus County)
- Emergency Medical Response Team (EMRT) Leader
- Environmental Laboratory Manager
- Security Supervisor

These seven individuals should interact closely. If they cannot physically be in the same location, they should maintain radio contact. The IC communicates only with the EOC and the members of the ERO mentioned above.

5.6.2 All communication between the TNO, the EOC and the field is routed through the IC. All orders flow through the IC. The following field positions have direct liaisons in the EOC:

<u>FR</u>		<u>EOC</u>
IC	-	Operations Assessment Manager (OAM)
RPOM	-	Rad Assessment Manager (RAM)
Security Supervisor	-	Security Manager
Env. Labs Manager	-	Dose Assessment personnel
DOE FR	-	DOE Project Director

These positions will communicate with their EOC liaisons. However, any direct orders issued through these channels will be confirmed through the IC. It is the responsibility of each field response team leader to assure that no action is taken without cognizance of the IC.

5.6.3 Comply with the communication methodology found in Attachment B, Guidance for Emergency Response Communications.

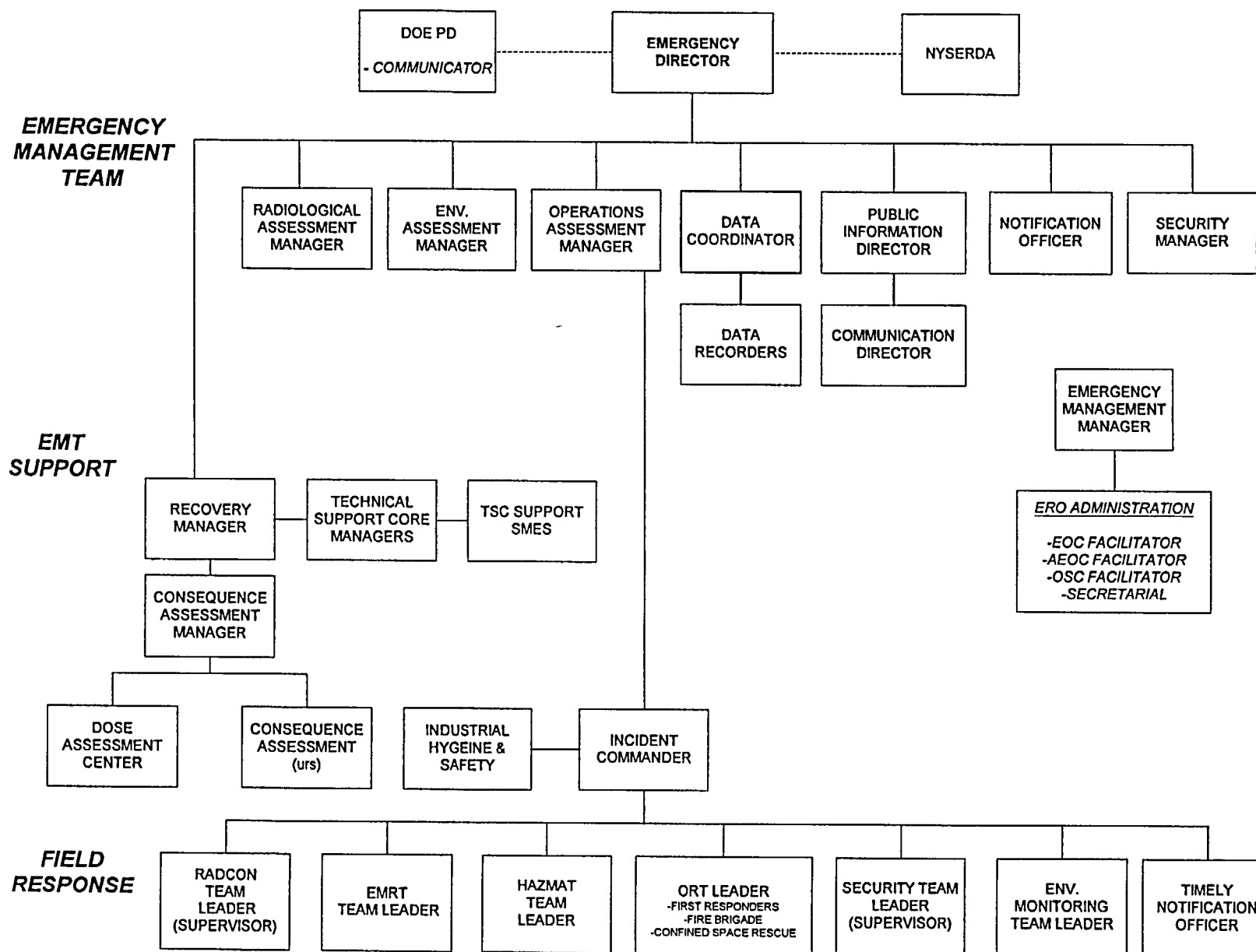
6.0 RECORDS MAINTENANCE

- 6.1 Any records generated as a result of implementing this document are identified on Emergency Management's, Records Inventory and Disposition Schedule (RIDS).
- 6.2 Records shall be prepared, maintained, and transferred to Records & Configuration/Document Control for storage in accordance with WVDP-262.

7.0 ATTACHMENTS

Attachment A WVDP Emergency Response Organization
Attachment B Guidance for Emergency Response Communication
Attachment C Incident Command
Attachment D Operations Response Team
Attachment E Radiological Protection and Controls
Attachment F Security Supervisor
Attachment G Emergency Medical Response Team
Attachment H Environmental Monitoring
Attachment I Transportation Event Management Organization
Attachment J Timely Notification
Attachment K Mercy Flight Utilization

WVDP EMERGENCY RESPONSE ORGANIZATION



Guidance for Emergency Response Communication

Remember the Key Concepts

- Anticipate the results of your next action. Think ahead.
- Believe your instrument readings to be accurate unless proven otherwise.
- Report events, conditions, and concerns to your immediate supervisor. Follow chains of command.

Make oral instructions clear and concise.

- Paraphrase and repeat back instructions to ensure they are correctly understood.
- Do not include multiple actions in a verbal instruction. Write instructions or give complex directions in several short steps. Give additional instructions after each step is completed.
- Report the completion of ordered actions. Be sure your report is acknowledged.
- Minimize the use of abbreviations and acronyms.
- Use the phonetic alphabet to avoid misinterpretation.

Use radios and telephones wisely.

- Answer phone and radio with your name and position. Begin the communication by stating your name and position if you are the caller.
- Use clear precise terminology. No slang.
- Use both the noun name and the number of equipment.
- Repeat back messages paraphrased or verbatim.
- Speak distinctly and deliberately

Double check everything.

- Ensure independent verification when returning equipment to or removing equipment from service.
- Be sure there is no doubt.
- Use self verification. Ask yourself what you should expect. Knowing what to expect will minimize chances for errors.

***Keep careful logs.* Logs may include any of the following:**

- Facility status
- Abnormal facility conditions
- Status changes to safety-related and other major equipment
- Changes in radiological or hazardous substance conditions
- Security incidents
- Personnel injuries or contaminations
- Out-of-specification chemistry or process results
- Shift reliefs, including off-going and on-coming crews
- Related engineering, maintenance activities and/or related activities from other departments, department activities
- Actions taken in response to emergency orders or conditions
- Any other information deemed necessary

Brief others conscientiously. Provide briefings at shift changes or whenever conditions warrant. Include:

- Review of facility status
- New and continuing problems with systems or equipment
- Abnormal line-ups or conditions
- Changes in radiological or hazardous substance conditions
- Maintenance planned or in progress
- Waste management status
- Changes in personnel assignments

INCIDENT COMMAND (EM206B) N24

1.0 POSITION GUIDELINES

When an emergency requires implementation of any element of WVDP-022, the "WVDP Emergency Plan" the most senior qualified on duty PSOSS will assume the duties of the IC. If the PSOSS is unavailable or incapacitated, the Plant Systems Operations Senior Operations Specialist (PSOSOS) will assume the duties of IC.

All emergency response activities are under the overall direction of the IC until relieved by the ED. During emergencies, the IC has the authority to use whatever resources necessary to mitigate the situation. The IC is authorized to communicate to anyone he/she feels necessary to obtain data, assistance, and/or additional resources.

The IC may partially or fully activate the EOC without consultation when the emergency has been categorized and it has been determined that EAL's have been met or exceeded. The IC will fully activate the EOC for any emergency which requires classification.

When notified by Security of an offsite transportation event, the PSOSS will assume the duties of the WVDP IC according to Attachment I and implement a partial activation of the EOC for assembly of the TEMO.

Additionally, the PSOSS as IC may implement a partial activation of the EOC when requested by any of the following: the Emergency Director (ED), Regulatory and Compliance Programs (R&CP) Manager, Site Services Manager, Technical Services Manager, Process Plant Decontamination Project Manager, or Human Resources (HR) Manager (for security events), or for any event which he feels would benefit from resources available in the EOC.

2.0 POSITION DUTIES

- 2.1 If not already done, perform an "812" All Page announcement identifying yourself (IC), stating the hazard, the location of the event, and the support needed and protective actions to be taken, if needed.
- 2.2 Establish and announce the location of the Incident Command System (ICP) (if not already obvious) to responders and response team leaders. If for any reason the ICP is relocated and not obviously known to responders and team leaders, the new location(s) shall be announced by the IC.
- 2.3 Establish and implement action plan(s) to ensure that the priorities of people, plant and environment are maintained.
- 2.4 Identify self as IC to others, visually or audibly. All activities at the Incident scene(s) will be under the direction of the IC.
- 2.5 Assess the emergency situation and activate the appropriate field response as appropriate.

- 2.6 Authorize dispatch of the emergency vehicle or the appropriation of additional plant vehicles or equipment as necessary.
- 2.7 If warranted, request a scribe to record emergency actions.
- 2.8 Categorize and classify (if appropriate) the emergency using guidance presented in Attachment C and Tables C1 and C2.
- 2.9 If the event is an Operational Emergency (Tables C1 and C2) contact the TNO to initiate the timely notification process.
 - 2.9.1 Use a copy of the Timely Notification Form (Attachment C) to identify the information needed by the TNO to perform the timely notification call.
- 2.10 Activate the EOC if appropriate. Assume duty of the ED to direct the ERO during the early stages of an emergency until officially relieved by the ED. (Duties of ED are found in Attachment D of EMIP-103.)
- 2.11 Establish and maintain communications. The IC will provide the communications link between all response team leaders and the EOC (if activated). Maintain contact with the activated field response leaders.
- 2.12 If the EOC is activated, transfer duties to the ED when the EOC is declared operational.
- 2.13 Provide liaison, independently or through the Site Operations Manager, between the scene of the emergency and the Operational Assessment Manager (OAM) in the EOC, if activated. Keep the OAM apprized of all field actions and results. Consult with OAM on field responsibilities if necessary. EOC phone extension for the OAM is 4719.
- 2.14 Upon determining that activation of the EOC is required and the EOC is deemed uninhabitable, the IC will direct ERO personnel to the AEOC.
- 2.15 If the EOC is not activated, keep the Site Operations Manager apprized of all field actions and results.
- 2.16 Upon receipt of notification that the "812" All Page system is inoperative instruct Security to implement operation aid posting (under the glass) #404. (Task 5, sub-task 5.7)
- 2.17 Notify, activate, warn and instruct others as needed via one or more of the following: "812" All Page, telephone, face to face, radio, runners, or by the plant "222" paging system. Provide periodic updates to the Site Operations Manager, or the OAM if the EOC is activated.
- 2.18 Direct mitigative actions. Activate and direct field response teams as necessary to mitigate the emergency.
 - 2.18.1 Request activation of off-site HazMat assistance when necessary.
 - A. Verify that a hazardous spill or release has occurred.

- B. If mitigation needs exceed the capability of Waste Management Operations (WMO), via Security or West Valley Volunteer Hose Company (WVVC), request activation of HazMat assistance from off-site resources.
 - C. Provide spill/release information to the HazMat Team Leader, Technical Advisor and the affected area supervisor.
- 2.18.2 Support EMRT activities.
- A. Ensure, to the extent possible, that injured personnel are evacuated to a safe location.
 - B. Request ambulance service if medical transport is required.
 - C. Contact Security to request that the offsite medical facility be contacted if contaminated personnel are to be transported. Provide initial information regarding the level (1,2, or 3) of contamination.
- 2.18.3 Ensure that Radiological Control Technician(s) (RCTs) accompany or are dispatched to the medical facilities whenever contaminated injured patients are being transported.
- 2.18.4 Ensure that a Material Safety Data Sheet or personnel with knowledge of the contaminant and its hazards (i.e., RCO, IH&S, etc.), accompany any chemically contaminated victims transported to a medical treatment facility.
- 2.18.5 Once entry has been authorized by the ED, brief the Protective Action and Recovery Entry (PA&RE) personnel.
- 2.18.6 Activate the Operations Response Team (ORT) if additional resources are needed.
- 2.18.7 Serve as WVDP Fire Chief if needed. (See Attachment D, Fire Brigade.)
- 2.18.8 Direct activities of the Confined Space Rescue Team (CSRT). (See Attachment D, Confined Space Rescue Team.)
- 2.18.9 Direct activities of Radiological Protection and Controls through the Radiological Control Operations Supervisor (RCOS).
- 2.18.10 Activate the Environmental Monitoring Team (EMT) through the Environmental Laboratory (E-Lab) Manager.
- 2.18.11 Coordinate activities of Security Officers through the Security Supervisor.
- 2.19 Continuously assess the status of the emergency and its consequences on the environment while directing all response efforts at the scene of the emergency.

- 2.19.1 During off-normal hours, the IC shall direct Security to activate the necessary response teams as dictated by the emergency.
(See EMIP-103, Attachment A for response team rosters).
- 2.20 Provide detailed event information in the PSOSS logbook.
- 2.21 Interface with the NYSERDA Representative during State Licensed Disposal Area (SDA) emergencies:
 - 2.21.1 During normal work hours, notify Security to contact NYSERDA per NYSERDA procedure ER 100, "Emergency Response Plan for the West Valley Site Management Program." NYSERDA has the ultimate responsibility for response measures undertaken at the SDA and must be closely apprised of and consulted on response measures being implemented for SDA emergencies.
 - 2.21.2 During back shift, weekends and holidays, instruct Security to notify NYSERDA personnel using the Security Quick Call List.
 - 2.21.3 Direct emergency response for conditions at the SDA, in the same manner as that for a WVDP emergency.
- 2.22 Interface as requested with Butler Construction Subcontractor during Remote Handled Waste Facility (RHWF) emergencies:
 - 2.22.1 Butler Construction has the ultimate responsibility for response measures undertaken at the RHWF.

Per the Butler Construction "Clarification of Emergency Management Requirements" and EMP-001, "Butler Construction Co. Emergency Management Plan," WVNSCO will direct medical emergency response for **life threatening** injuries or illnesses at the RHWF.

When WVNSCO is requested to respond to the RHWF and assist during emergencies other than **life threatening** injuries or illnesses, the IC will use his discretion for response to other RHWF emergencies.

During RHWF emergency response, the IC will advise and consult with Butler Construction on response measures being implemented during RHWF emergencies.

FIGURE C-1: Response to Potential Emergency Events at the WVDP

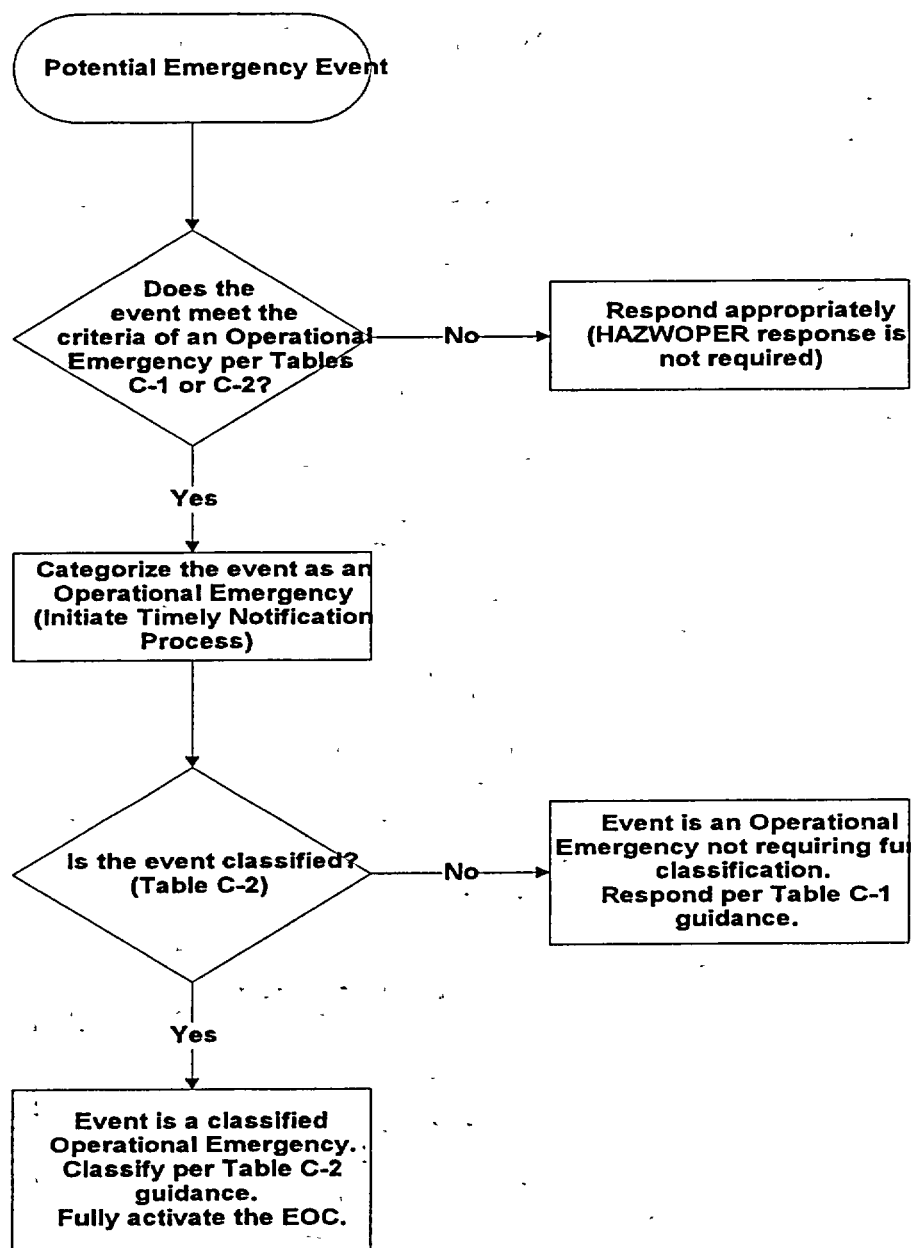


TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Aircraft Crash	Aircraft crash at the WVDP.	-Determine casualties in immediate area. -Administer first aid. -Activate EMRT. -Notify WVVHC.	-Treat injured personnel. -Verify systems are in a safe mode.
Armed Assault	Hostile, armed person on the WVDP premises.	-Notify Security to respond to area to provide assistance to ensure safe boundaries are established and isolate and confine intruder. -Notify LLEAs.	Do not use "812" All Page. -Relocate employees as needed. -Instruct employees to seek cover, report all unusual activities to Security, and await further instructions.
Biological Release	An actual or potential release or threat of a biological agent to the environment at WVDP. An actual or potential exposure of personnel to a biological agent at the WVDP.	-Identify area threatened. -Notify Security. -Shelter the exposed person(s) in place. -Notify LLEAs.	-Shelter the area affected by the release. -Instruct other personnel to stay clear of the area. - Instruct employees not to touch anything in the affected area. -Contact the appropriate personnel to treat affected person(s). -Evaluate the need for personnel relocation.

**TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION**

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Bomb Threat	Any confirmed or credible bomb threat at the WVDP.	-Identify area threatened. -Notify Security to initiate search teams. -Notify LLEAs. -Notify WVVHC.	Do not use "812" All Page. -Using face to face communication, instruct employees not to touch anything. -Evaluate local or site personnel relocation.
Demonstration	On-site assembly of persons with the potential to disrupt facility operations.	-Notify Security to establish observation team, ensure internal continuity of protective force, and establish contingency protective force for critical areas. -Inform management of all unusual activities.	-Instruct employees to avoid contact with demonstrators or strikers. -Schedule observation team personnel to maintain 24 hour surveillance.
Emergency Director Judgement: Based on the IC/ED's assessment of event an operational emergency (without further classification) may be declared and protective actions initiated if warranted.			
Environmental Release	Release of hazardous materials or pollutant to the environment. See Spill/uncontrolled release.	-Deploy the WVDP Environmental Monitoring Team. -Activate HAZMAT Team if appropriate.	-Relocate or shelter personnel as determined by incident.
Explosion	An explosion anywhere on site.	-Notify WVVHC. -Ensure personnel accountability procedures have been implemented.	-Relocate personnel within the affected facility and immediate area.

**TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION**

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Fire	A fire anywhere on site that has advanced beyond the incipient stage.	-Notify WVVHC. -Ensure personnel accountability procedures have been implemented.	-Relocate personnel within the affected facility and immediate area.
Flood	Accumulation of greater than six inches of standing water at the WVDP.	-Verify that affected systems are in a safe mode. -Initiate Radiological monitoring, environmental readings and/or fire watches as necessary. -Ensure personnel accountability procedures have been implemented.	-Instruct all personnel to remain indoors and await further instructions.
High Winds	Winds predicted by authorities or actually sustained for 15 minutes or more at the WVDP in excess of 73 mph at the Met Tower 10 m above ground level.	-Evaluate WVDP operations and shut down as necessary (i.e. crane or roof work). -Ensure personnel accountability procedures have been implemented.	-Instruct all personnel located in site trailers NOT grouped with the Administrative Building to safely relocate to the Administrative Building Conference rooms and await further instructions.
Hostage	Confirmed hostage situation involving WVDP personnel.	-Consult with Security to initiate negotiations and establish 360 degree perimeter of area. -Notify LLEA.	Do not use "812" All Page. -Relocate employees as needed. -Instruct employees to take cover, leave immediate area if possible, and report to Security with any information of value to identify hostage-taker, equipment, etc.

**TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION**

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Loss of Annunciators	Loss of "812" All Page, Sheltering Signal, high or low differential pressure alarm annunciators and/or loss of PSR process alarm annunciators in an operating system and restoration is not imminent.	-Verify that affected systems are in a safe mode. -Initiate Radiological monitoring, environmental readings and/or fire watches as necessary.	Situation dependent. -Relocate personnel from the affected facility to a safe location. -If necessary, instruct all personnel to remain indoors and await further instructions.
Loss of Electrical Power	Unexpected loss of normal and standby electrical power and restoration is not imminent.	-Verify that affected systems are in a safe mode. -Initiate Radiological monitoring, environmental readings and/or fire watches as necessary.	Situation dependent. -Relocate personnel from the affected facility to a safe location. -If necessary, instruct all personnel to remain indoors and await further instructions.
Non-Transportation Mass Casualty	Any event that results in at least three injuries and/or fatalities at the WVDP.	-Determine casualties in the immediate area. -Administer first aid. -Activate EMRT. -Notify WVVHC. -Verify systems are in a safe mode.	-Treat injured personnel.
Offsite Hazardous Material Event	Detection or notification of offsite hazards which require personnel protective actions at the WVDP.	-Verify all systems are in a safe mode. -Initiate environmental readings.	-Instruct all personnel to remain indoors and await further instructions.

TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Offsite Transportation Accident (including offsite accidents involving shipments to and/or from the WVDP site)	<p>"Any transportation accident involving a WVDP shipment that:</p> <ol style="list-style-type: none"> requires the WVDP 24-hr. emergency information phone number be provided with the shipping papers, or contains radiological waste that meets the definition of DOE radioactive, or is a hazardous material that requires response guide information to be included with the shipping papers <p>AND</p> <p>Results in an actual or potential release of the material, or actual or potential damage to the structural integrity of the shipping container."</p>	-Activate TEMO.	None.
On-site Vehicle Accident	A vehicle accident at the WVDP causing structural damage and confirmed or suspected personal injury or death.	-Determine casualties in immediate area. -Activate EMRT. -Notify WVVHC. -Verify systems are in a safe mode.	-Treat injured personnel.

TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Seismic Event	Any seismic event felt by WVDP personnel with reported damage to any WVDP structure, operating system, or component.	-Verify that affected systems are in a safe mode. -Initiate Radiological monitoring, environmental readings and/or fire watches as necessary and ensure personnel accountability procedures have been implemented.	Situation dependent. -Instruct all personnel to remain indoors and await further instructions.
Site-wide Facility Relocation	Any site-wide facility relocation at the WVDP in response to an actual occurrence that requires response by specialist personnel not normally assigned to the facility (see Note below).	-Announce relocation. -Ensure personnel accountability.	-Verify systems are in a safe mode.
Spill/ Uncontrolled Release of Hazardous or Unknown Materials	Activation of at least one of the WVDP Emergency Response Teams that are responsible for spill mitigation (See Note Below).	-Verify all systems are in a safe mode. -Initiate environmental readings. -Activate the HazMat Team if appropriate.	-Relocate or shelter personnel as needed. -Respond per the 2000 Emergency Response Guidebook.

NOTE: Investigation of a report of an unusual odor or responding to a reported smell of smoke without any indication of fire does not constitute an Operational Emergency.

**TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION**

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
Tornado	Projection by the authorities of an imminent tornado within the vicinity of the WVDP. A visual sighting of a tornado within the vicinity of the WVDP, or a tornado strike at the WVDP resulting in damage to facilities.	-Verify that affected systems are in a safe mode. -Initiate Radiological monitoring, environmental readings and/or fire watches as necessary. -Ensure personnel accountability procedures have been implemented.	-Direct all personnel located outside and trailer occupants to move to a structurally sound building and remain indoors and await further instructions.
Vandalism	Any confirmed attempt to vandalize WVDP facilities or equipment.	-Notify Security to investigate cause. -Repair equipment, system, or area damaged.	Situation dependent. -Evaluate local or site personnel relocation.
Workplace Violence	Hostile, armed or unarmed person(s) on the WVDP premises exhibiting violent behavior which has or could cause personnel injury, equipment or facility degradation.	-Identify location of hostile persons(s). -Notify Security to respond to area to provide assistance. -Ensure safe boundaries are established. -Notify LLEA.	-Instruct employees to leave the area, seek shelter, and warn others to stay clear of the area. -Evaluate the need to locate personnel.
SITE/FACILITY-SPECIFIC EVENTS			
ACTIVITY On-site movement of Chemicals	Observation of leaking drums or tote(s)	-Evaluate spill. -Activate HazMat Team if appropriate.	-Relocate or shelter personnel as appropriate. -Isolate spill 330 feet in all directions. -Consult the 2000 Emergency Response Guidebook for additional protective actions.

**TABLE C-1
OPERATIONAL EMERGENCIES NOT REQUIRING CLASSIFICATION**

BASE PROGRAM EVENTS AND HAZARDOUS MATERIALS PROGRAM Events which DO NOT involve a significant release of hazardous materials per the WVDP Hazards Assessment (WVDP-193)

Event Description	Emergency Action Level	Immediate Actions	Immediate Protective Actions
SITE/FACILITY-SPECIFIC EVENTS			
LIQUID WASTE TREATMENT SYSTEM Rupture of LWTS transfer pipe during evaporator acid wash.	Observation of transfer pipe leak.	-Terminate evaporator acid wash.	Initiate SWIMS. -Instruct personnel to relocate to the appropriate assembly area. See note below.
VITRIFICATION LOAD-IN FACILITY Breach of chemical drums in the Vitrification Load-In facility	Observation of leaking drum.	-Evaluate the spill/leak. -Activate the HazMat Team if appropriate.	-Relocate Vitrification Load-In facility personnel to the appropriate assembly area. See note below.
WAREHOUSE Breach of chemical drums in the New Warehouse	Observation of leaking drum.	-Evaluate the spill. -Activate the HazMat Team if appropriate.	-Relocate warehouse personnel to the appropriate assembly area. See note below.

NOTE: For emergency events involving chemical releases, consult the 2000 Emergency Response Guidebook for additional protective action.

**TABLE C-2
 OPERATIONAL EMERGENCIES REQUIRING CLASSIFICATION**

**HAZARDOUS MATERIALS PROGRAM - RELEASE OF SIGNIFICANT QUANTITIES OF HAZARDOUS MATERIALS
 PER WVDP-193, WVDP HAZARDS ASSESSMENT**

Facility and Emergency Event	Emergency Action Levels	Event Class	Immediate Actions	Protective Actions
LAG STORAGE FACILITY Fire in the LAG Storage Area (LSA 1,3, or 4) that has advanced beyond the incipient stage	Fire that has advanced beyond the incipient stage	ALERT	-Activate sheltering Alarm. -Activate fire alarms. -Activate EOC.	-Relocate LSA personnel to the nearest appropriate sheltered facility. -Follow sheltering alarm procedures. -Secure ventilation in occupied buildings on-site. -Instruct all personnel to remain indoors and await further instructions. See note below.

Note: For classified emergencies, at the discretion of the IC/ED, WVDP security will contact the Cattaraugus County Sheriff's Department to close Rock Springs road to further incoming traffic, and may be instructed to patrol and control vehicular and pedestrian traffic until Sheriff's personnel arrive.

**TABLE C-2
OPERATIONAL EMERGENCIES REQUIRING CLASSIFICATION**

**HAZARDOUS MATERIALS PROGRAM - RELEASE OF SIGNIFICANT QUANTITIES OF HAZARDOUS MATERIALS
PER WVDP-193, WVDP HAZARDS ASSESSMENT**

Facility and Emergency Event	Emergency Action Levels	Event Class	Immediate Actions	Protective Actions
LAG STORAGE BUILDING Explosion/Over- pressurization, and/or Fire that has advanced beyond the incipient stage in the LAG Storage Building	Explosion/Over- pressurization, and/or Fire that has advanced beyond the incipient stage	SAE	-Activate Sheltering Alarm. -Activate fire alarms. -Activate EOC.	-Relocate LSA personnel to the nearest appropriate sheltered facility. -Follow sheltering alarm procedures. -Secure ventilation in occupied buildings on- site. -Instruct all personnel to remain indoors and await further instructions. See note below.
MAIN PLANT Failure of one or more Main Plant Ventilation HEPA filters.	Activation of Main Plant stack monitor alarms (5A, 5B, 3A, or 3B) AND Low Differential pressure alarm (15PDAL-6 or 15PDAL-3)	SAE	-Activate sheltering alarm. -Turn off exhaust blowers: 15K-10 (primary) or 15K-10A (backup) AND verify switch to backup filter bank 15T-49 (primary) or 15T-49A (backup). -Activate EOC.	-Relocate the Process Building Personnel per the IC. -Follow sheltering alarm procedures. -Secure ventilation in occupied buildings on- site. -Instruct all personnel to remain indoors and await further instructions. See note below.

Note: For classified emergencies, at the discretion of the IC/ED, WVDP security will contact the Cattaraugus County Sheriff's Department to close Rock Springs road to further incoming traffic, and may be instructed to patrol and control vehicular and pedestrian traffic until Sheriff's personnel arrive.

**TABLE C-2
OPERATIONAL EMERGENCIES REQUIRING CLASSIFICATION**

**HAZARDOUS MATERIALS PROGRAM - RELEASE OF SIGNIFICANT QUANTITIES OF HAZARDOUS MATERIALS
PER WVDP-193, WVDP HAZARDS ASSESSMENT**

Facility and Emergency Event	Emergency Action Levels	Event Class	Immediate Actions	Protective Actions
VITRIFICATION FACILITY Failure of both in-cell and ex-cell HEPA filters in the Vitrification Facility	Activation of stack monitor alarms AND Low Differential pressure indicated from PDT-056 (A, B, or C)	ALERT	-Activate Sheltering Alarm. -Turn off exhaust blowers: 67K-001A (primary) or 67K-001B (backup) and switch to backup filter train: 67T-001A, B, or C. -Activate EOC.	- Follow sheltering alarm procedures. - Secure ventilation in occupied buildings. - Instruct all personnel to remain indoors and await further instructions. See note below.
Note: For classified emergencies, at the discretion of the IC/ED, WVDP security will contact the Cattaraugus County Sheriff's Department to close Rock Springs road to further incoming traffic, and may be instructed to patrol and control vehicular and pedestrian traffic until Sheriff's personnel arrive.				

IC/Initial Timely Notification Information
(For reference when calling the TNO)

Note: Once contacted by the IC, the TNO must contact DOE-HQ-EOC immediately (there is a 15 minute reporting requirement after the event has been categorized).

- 1.) The TNO will contact the DOE-HQ-EOC at 9 then 1 (202) 586-8500 or 9 then 1 (202) 586-8100 and state the following information (as provided by the IC):
- A.) "This is a Timely Notification Officer from the West Valley Demonstration Project, located in West Valley, New York."
- B.) "We have an Operational Emergency that commenced on _____ at _____
(Date) Time (E.S.T.)"
- C.) **Type of Event:** (circle all that apply):

RADIOLOGICAL HAZARDOUS MATERIALS FIRE SECURITY

NATURAL PHENOMENON ON-SITE TRANSPORTATION OFF-SITE TRANSPORTATION

- D.) **Classified:** YES _____ NO _____ at _____ on _____, as:
(circle one) **ALERT** **SITE AREA EMERGENCY**

NOTE: Full EOC Activation is Required for ALL Classified Emergencies

- E.) **EOC activated?**

YES _____, Partial _____ Full _____ activation of the EOC has been made
NO _____, the EOC has not been activated at this time

- F.) **Release in progress?**

RADIOLOGICAL	Yes _____	No _____
HAZARDOUS MATERIALS	Yes _____	No _____
UNKNOWN	Yes _____	No _____

- G.) **Protective actions taken:**

Sheltering _____ Relocating _____ None at this time _____

Event

Description: _____

OPERATIONS RESPONSE TEAM (EM207B) N25

1.0 POSITION GUIDELINES

The WVDP Operations Response Team (ORT) is composed of all Plant Systems Operations (PSO) personnel. ORT activities include search and reentry, damage control, equipment shutdown, mitigative actions, and inspections. Additionally, ORT members respond to medical emergencies, provide initial first aid, and assist with continuing patient care as necessary. Specialized units of the ORT are the First Responders (FR's), Fire Brigade (FB), and the Confined Space Rescue Team (CSRT).

Exercising a safe approach, the first person from the ORT to arrive at or near the scene shall assume the responsibility of apprising the IC of conditions.

Personal Protective Equipment (PPE) is available to ORT personnel. PPE will be used based on the conditions of the emergency.

The Site Operations Manager provides overall coordination of the WVDP ORT.

The IC shall maintain overall control of all ORT emergency activities. All emergency response activities are under the overall direction of the IC.

2.0 POSITION DUTIES

2.1 Fire Brigade (FB)

2.1.1 Shall be composed of trained and qualified PSO personnel.

2.1.2 Respond upon activation by the IC.

2.1.3 Assume charge of fire containment operations until the WVVHC arrives at the scene and takes control of all fire fighting activities. The IC acts as the FB chief until relieved by the WVVHC fire chief. The IC retains tactical command of the emergency response. The WVVHC fire chief or other local fire chief is in charge of only the fire fighting activities.

2.1.4 FB members perform only incipient stage fire fighting operations. Conditions beyond the capability of the WVDP FB include interior structure fires and environments which require crouching or crawling beneath smoke to fight the fire.

3.0 PROTECTIVE ACTION AND RECOVERY ENTRY (PA&RE) TEAMS

Each emergency event will differ and require a unique set of recovery planning and emergency termination needs. This procedure provides guidance and flexibility to a wide range of emergency conditions for use during response and implementation of protective action and/or recovery entries.

Protective Action and Recovery Entry (PA&RE) activities are time-urgent actions performed during emergency response such as search and rescue, mitigation, control, and accident assessment.

4.0 RESPONSIBILITIES

4.1 For PA&RE entries, the entry personnel, in addition to shutdown duties assigned by the IC or ED, will attempt the following:

- A. Establish personnel exclusion area boundaries, with support from security.
- B. Assist in evacuating injured or incapacitated personnel from the affected area.
- C. Evaluate and report equipment and facilities damage.
- D. Record and report to the appropriate Team Leader the radiological conditions and/or non-radiological hazardous conditions, the extent of damage in the affected area, and the condition of the operating equipment.

NOTE: *There shall be no entry into an evacuated area unless authorized by the Emergency Director (ED).*

Operations Response Team (ORT) - is composed of qualified PSO personnel. The ORT activities include damage control, equipment shutdown, mitigative actions, and inspections.

Specialized units of ORT are First Responders (FR's), Fire Brigade (FB), and Confined Space Rescue Team (CSRT). The first person from the ORT to arrive at or near the scene should assume the responsibility of apprising the IC of conditions. The ORT performs activities under the direction of the IC.

FR's - respond to medical emergencies, provide first aid, and assist with patient care.

FB - respond to location(s) of fire(s) upon activation by the IC and begins shutting down gas supply lines, electric, etc.

CSRT - Respond to the CSRT emergency in accordance with WV-925, Confined Space Entry which includes training requirements.

Radiological Operations - for radiological and mixed radioactive waste emergencies, the PA&RE lead position is to be filled by the Radiological Control Operations Supervisor.

Hazardous Materials - for non-radiological hazardous material emergencies, the PA&RE lead position is to be filled by the responding appointed HazMat Team Leader.

West Valley Volunteer Hose Company (WVVHC) - for fires beyond incipient stage (*conditions beyond incipient stage include interior structure fires and environments which require crouching or crawling beneath smoke to extinguish the fire*) the WVVHC Fire Chief or other local responding fire chief is in charge of the fire fighting activities only.

5.0 POSITION GUIDANCE

5.1 Incident Commander (IC)

5.1.1 During protective action and/or recovery entries, the IC shall maintain overall control of all activities.

- A. The IC will direct/perform operations to mitigate the effect of the emergency or hazardous condition.
- B. Situation dependant, in order to determine the appropriate team response(s) necessary to initiate mitigative actions, damage control and/or accident assessment, the IC will determine what resources are required for team assembly.
- C. Consult with Industrial Hygiene and Safety (IH&S) and Radiation Protection to confirm that WVNSCO entry personnel are equipped with the appropriate PPE and/or monitoring devices.
- D. Ensure that IH&S and RP has verified that entry personnel are adequately trained/qualified in the use of such PPE and/or devices.
- E. Ensure that PA&REs consist of a minimum of two people.
- F. Brief PA&RE members prior to entry.

NOTE: For lifesaving actions which would result in exposures beyond 25 rem to the whole body, volunteers are to be requested. Emergency exposures are authorized in accordance with the provisions contained in WVDP-010, "WVDP Radiological Controls Manual."

NOTE: *There shall be no entry into an evacuated area unless authorized by the Emergency Director (ED).*

6.0 Fire Chief - for fire(s)

6.1 For fires beyond incipient stage (*conditions beyond incipient stage include interior structure fires and environments which require crouching or crawling beneath smoke to extinguish the fire*) the WVVHC Fire Chief or other local responding fire chief is in charge of the fire fighting activities only.

6.2 The fire company Rescue Team Leader (Fire Chief) - for rescue(s)

The WVVHC Fire Chief or other local responding Fire Chief will fulfill the role of the Rescue Team Leader. The Rescue Team Leader is to report to the IC upon arrival to the WVDP and would be responsible to:

- A. Organize the search for injured, trapped or missing personnel (situation dependent, this may include IH&S, HazMat, and/or Radiation Protection personnel.)

Under the overall direction of the IC, the WVVHC members will perform search and rescue activities.

7.0 Industrial Hygiene and Safety (IH&S)

- 7.1 Industrial Hygiene & Safety personnel will support the IC and Team Leaders in a Technical Advisory position for non-radiological hazardous emergencies in accordance with WVDP-011, Industrial Hygiene and Safety Manual.

Industrial Hygiene and Safety (IH&S) is responsible for determining the type and level of PPE that on site Team personnel are to use during entry into chemically contaminated/hazardous material areas.

- 7.2 Monitoring of entry routes and identification of chemical areas will be conducted by:
 - A. Protective clothing and the appropriate monitoring devices for the types of chemical and/or radiological hazards expected to be encountered are to be worn.
 - B. Obtaining and documenting chemical exposure levels.
 - C. IH&S findings are to be reported to the IC.

8.0 Confined Space Rescue Team (CSRT)

- 8.1 A Confined Space Entry (CSE) attendant or any other individual who discovers an emergency related to any CSE shall summon rescue/emergency services by contacting the PSOSS via radio or "812" All Page or other method. The IC acts as the CSRT chief. The attendant shall not leave the area or attempt entry rescue and shall provide a status briefing at the time of the IC's arrival.
- 8.2 The shift turnover for the PSOSS shall include all confined space entries being conducted and planned for the upcoming shift. All confined space activities shall be performed in accordance with WV-925, "Confined Space Entry," and OSHA 29 CFR 1910.146, "Permit Required Confined Space."
 - A. Confined Space Rescue Team Chief shall:
 - 1. Assess the emergency situation and request assistance if necessary.

2. Review Industrial Work Permit (IWP); and Radiation Work Permit (RWP) job documentation, interview attendants or witnesses, and evaluate the emergency situation prior to beginning rescue operations.
3. Identify rescue team personnel and equipment. Each team must consist of a minimum of two members, one of whom will be in charge at the point of entrapment.
4. Develop the rescue team's plan of action, brief the team, and maintain accountability for all rescue team personnel making confined space rescue entry.
5. Provide documentation of the emergency response in the PSOSS logbook, and ensure that the equipment in the emergency vehicle is returned to operational readiness.
6. Notify IH&S and job supervisors for other confined space jobs (terminated by emergency situation) once the CSRT is back in service and inform IH&S and job supervisors when confined space jobs may be restarted.

B. Confined Space Rescue Team shall:

1. Be comprised of qualified PSO personnel.
2. Respond to the emergency in accordance with WV-925, which includes training requirements.

NOTE *EMAP-204 under "Facilities and Equipment - Surveillance and Maintenance," lists the available emergency response equipment and locations.*

RADIOLOGICAL PROTECTION AND CONTROLS (EM208B) N26

1.0 POSITION GUIDELINES

Radiological Protection and Controls consists of Radiation Protection Operations Manager (RPOM), the Radiological Control Operations Supervisor (RCOS) and the Radiological Control Technicians (RCTs).

The RPOM is the liaison between Radiological Controls in the field and the Radiological Assessment Manager (RAM) in the EOC as well as Subject Matter Expert (SME) liaison with the emergency medical facility.

All actions performed by the RPOM, RCOS and RCTs shall be based on professional expertise and those practices established in WVDP-010, the "WVDP Radiological Controls Manual." For radiological and mixed radiological waste emergencies, the RCOS will act as the Protective Action and Recovery Entry (PA&RE) team leader.

If the EOC is activated, the OSC becomes a standby assembly point for ERO field response teams that have not been activated with the exception of the EMT, ORT, and HazMat Team. Members of the Radiological Controls Team report to the RCO Shift Office. Any ERO respondent who is not directed to a specific location should report to the OSC for briefings, possible activation, dismissal or support activities as directed.

All emergency response activities are under the over all direction of the IC.

2.0 POSITION DUTIES

2.1 The Radiation Protection Operations Manager (RPOM) shall:

- 2.1.1 Establish a system of communications (via radio, telephone, or other method) with the RAM if the EOC has been activated. The EOC phone extension for the RAM is 4718.
- 2.1.2 Provide on-going recommendations on radiological control to the Lead RCOS and the EOC.
- 2.1.3 If personnel are to be transported to an emergency medical facility, provide radiological information as requested by the hospital.
- 2.1.4 Ensure personnel and equipment are available or augmented as warranted.
- 2.1.5 Ensure the implementation of appropriate radiological controls, decontamination, and assessment procedures as warranted by existing conditions and in accordance with WVDP-010, "WVDP Radiological Controls Manual" and RC-EMRG-01.

- 2.1.6 Consult and coordinate with the Lead RCOS on all activities regarding: on site relocation, sheltering, or the deactivation of response teams.
- 2.1.7 Communicate with the RAM in the EOC for assignment of post emergency required activities which may include reports, notifications, corrective actions, follow-through on injured personnel, decontamination efforts, and activities leading to the resumption of normal operations.
- 2.1.8 Provide assistance in recovery planning as assigned.

2.2 **The Lead Radiological Control Operations Supervisor (RCOS) shall:**

- 2.2.1 Report to the scene of the emergency and establish contact with the IC.
- 2.2.2 Conduct response activities in accordance with WVDP-010.
- 2.2.3 Ensure all response personnel are briefed on the appropriate radiological precautions, equipment, and the maximum permissible dose.
- 2.2.4 Notify the RPOM as soon as possible after activation of RCTs and initiation of mitigation efforts.
- 2.2.5 Coordinate response activities.
- 2.2.6 For all medical incidents dispatch RCTs to the scene. Determine the need for radiological controls, and coordinate the care of the patient with the EMRT Leader and the IC.
 - A. Assist with the transport of contaminated injured in accordance with WVDP-022, "WVDP Emergency Plan," and WVDP-010 and RC-EMRG-01, Personnel Decontamination.
 - B. Assure that a dosimetry package is sent to the hospital with contaminated-injured patients as necessary.
 - C. Assure that RCTs accompany or are dispatched to the medical facilities where contaminated-injured patients are being transported.
 - D. Prior to transport, assure that the RCTs have informed the IC of the level of contamination (Level 1, 2, or 3, according to Figures E-1 and E-2).
 - E. If Mercy Flight Air Ambulance is called to transport contaminated-injured personnel to Erie County Medical Center (ECMC), immediately dispatch 2 RCTs to that facility.

- F. Maintain communications with the RCT(s) that were dispatched to accompany the contaminated-injured personnel to the medical facility.
- 2.2.7 Assign RCTs to accompany the HazMat response personnel for emergencies involving both a radiological and hazardous materials concern.
- 2.2.8 If the PA&RE Team activation for a radiological emergency is authorized by the ED, an RCOS will lead the team. Evaluate the situation and the advisability of reentry. Provide direct supervision of the initial entry and all subsequent entries until radiation areas have been properly marked and safe routes determined. (See Attachment D, PA&RE Team.)
- 2.2.9 If the Confined Space Rescue Team (CSRT) is activated, dispatch a RCT to the scene to determine the need for radiological controls.
- 2.2.10 Ensure that any dosimeters issued by Security to off site emergency response personnel (fire fighters, ambulance crews) are collected and forwarded to Dosimetry with required paperwork (i.e., Form WV-3312).
- 2.3 **Radiological Control Technicians (RCTs) shall:**
 - 2.3.1 Report to the scene of an emergency as directed to determine the need to implement radiological controls.
 - 2.3.2 If not directed to report to the incident scene, report to the RCO Shift Office.
 - 2.3.3 If radiologically contaminated personnel are to be transported to a medical facility, prior to transport, inform the IC of the level of contamination (Level 1, 2, or 3, according to Figures E-1 and E-2).
 - 2.3.4 If directed, accompany radiologically contaminated-injured personnel to the medical facility.
 - 2.3.5 Verify that a dosimetry package is being sent to the hospital with contaminated-injured patients.
 - 2.3.6 If Mercy Flight Air Ambulance is to be utilized to transport contaminated-injured personnel, if directed, report to Erie County Medical Center to assist with contamination control and decontamination if necessary.
 - 2.3.7 Begin decontamination of injured persons under the supervision of the EMRT in accordance with RC-EMRG-01.
 - 2.3.8 Accompany FB, HazMat, CSRT or PA&RE teams as directed for emergencies in which there is a radiological concern.

- 2.3.9 In the event of an actual release of radiological materials, monitor EOC, TSC, OSC, and field response personnel.
- 2.3.10 Assist any off site emergency response personnel in the use of emergency dosimetry.
 - A. Ensure that at least one emergency responder in a radiological area is properly wearing dosimetry.
 - B. Instruct emergency responders who entered a radiological area to complete Form WV-3312, "Emergency Dosimetry Registration Form" and collect the dosimeters from all individuals prior to the responders' departure from the site.
 - C. In medical emergencies where it is impractical to obtain dosimetry and completed WV-3312 forms, arrange for later collection of dosimetry and completion of forms.
 - D. Return collected dosimetry and paper work to WVDP Dosimetry Lab.

E-1

PATIENT RADIOLOGICAL CONTAMINATION LEVELS, HOSPITAL AREA PREPARATION AND SUIT UP REQUIREMENTS

Contact Information:

Erie County Medical Center

MERS# 898-3696
ECMC Transfer Line (Back-up) # 898-4444

Bertrand Chaffee Hospital

Contact # 592-2871

WVNS Contact Phone Numbers for Radiological assistance:

Radiation Protection Operations Manager
Pager # 643-0644
Site Contact # 942-4367

Radiological Assessment Manager (EOC)
Site Contact # 942-4718

Radiological Control Operations Shift Office
Site Contact # 942-4231

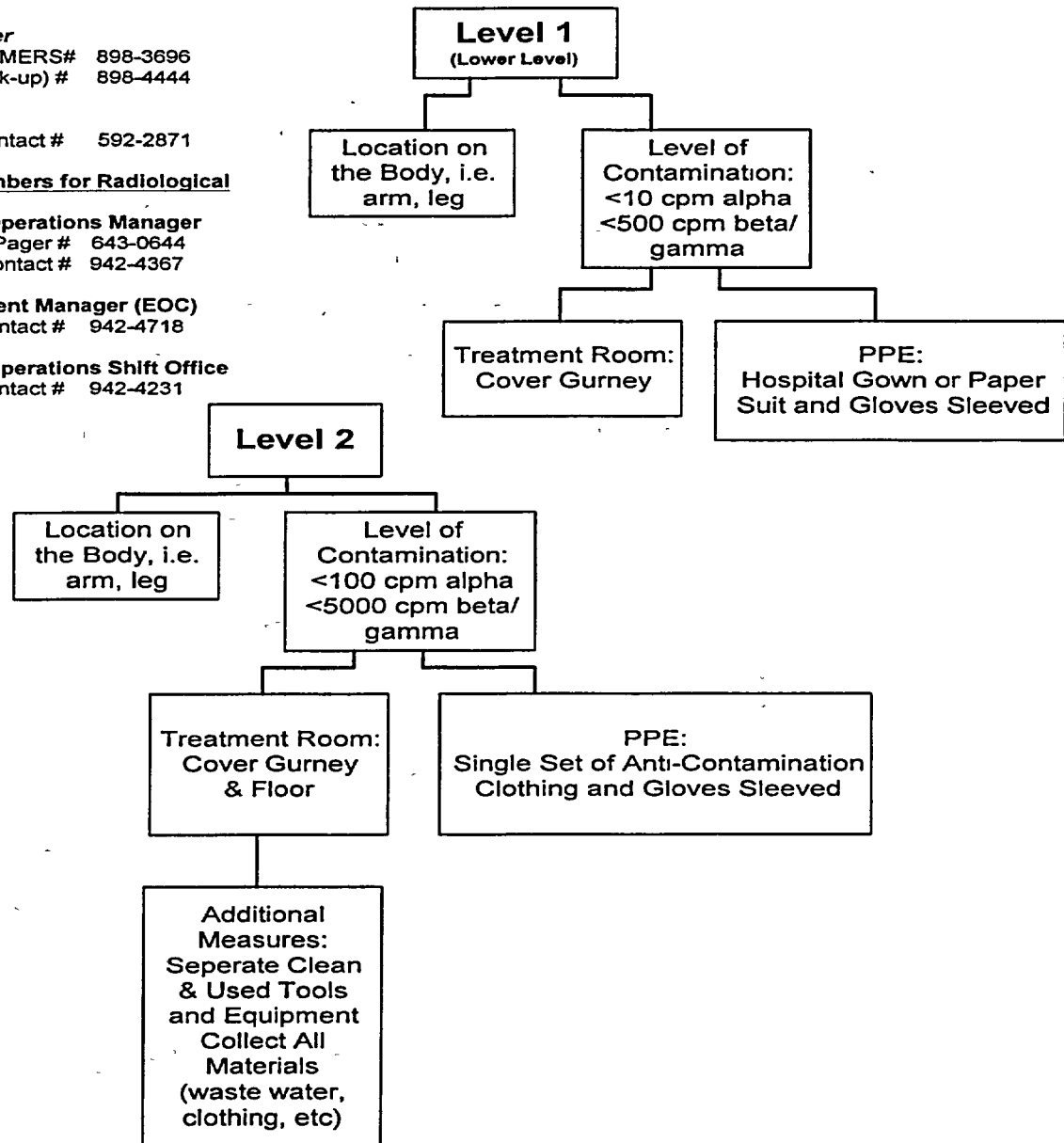
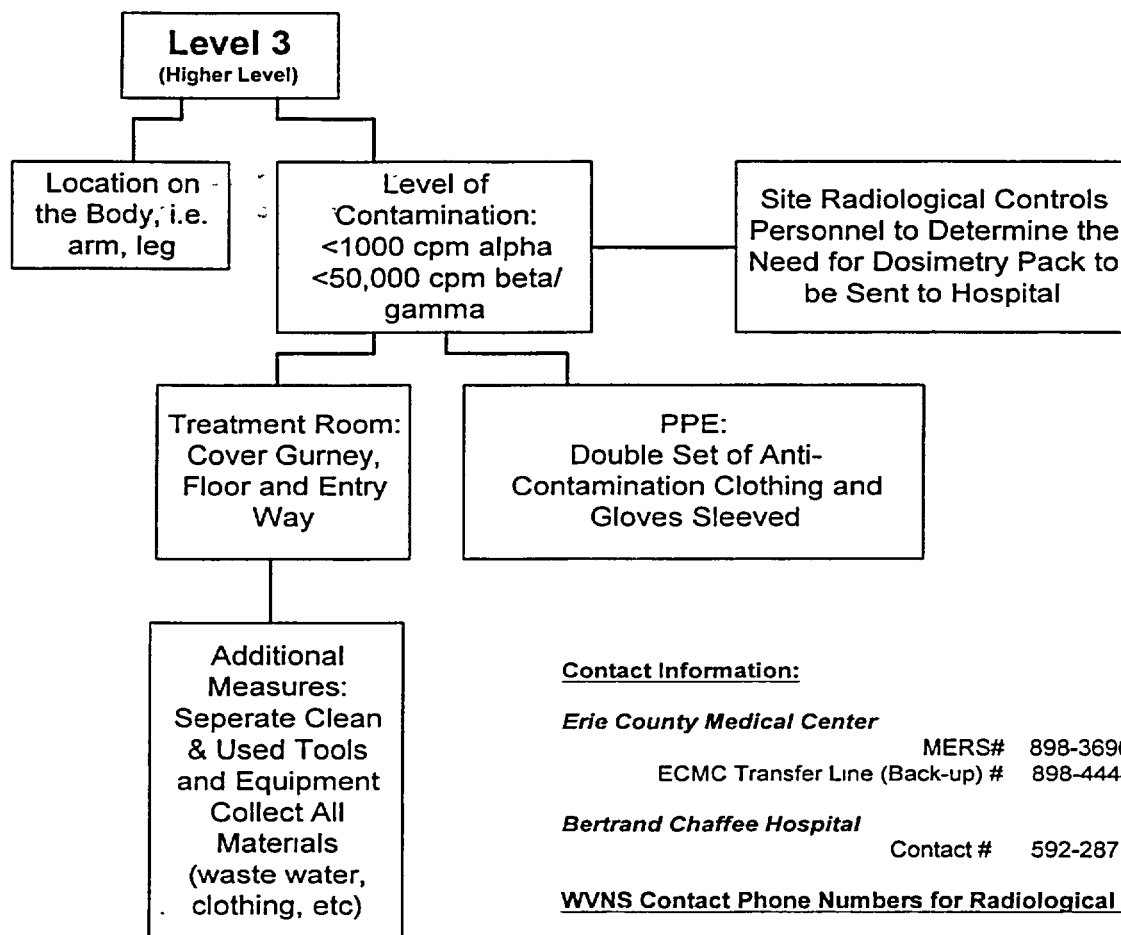


FIGURE E-2

PATIENT RADIOLOGICAL CONTAMINATION LEVELS, HOSPITAL AREA PREPARATION AND SUIT UP REQUIREMENTS



Contact Information:

Erie County Medical Center

MERS# 898-3696
ECMC Transfer Line (Back-up) # 898-4444

Bertrand Chaffee Hospital

Contact # 592-2871

WVNS Contact Phone Numbers for Radiological Assistance:

Radiation Protection Operations Manager

Pager # 643-0644
Site Contact # 942-4367

Radiological Assessment Manager (EOC)

Site Contact # 942-4718

Radiological Control Operations Shift Office

Site Contact # 942-4231

SECURITY SUPERVISOR (EM210B) N28

1.0 POSITION GUIDELINES

The Security Supervisor interfaces with both the Security Manager in the EOC and the IC.

The Security Supervisor will interface with the Security representative at the Ashford Office Complex (AOC) to keep him/her apprised of emergency situations on site.

All emergency response activities are under the overall direction of the IC, therefore, all activities at the incident scene are coordinated through the IC.

2.0 POSITION DUTIES

- 2.1 Report to the scene of the incident and establish contact with the IC.
- 2.2 Control access and egress at the scene of the emergency. Establish control boundaries around the incident scene(s) and inform the IC that boundaries have been established and are controlled.
- 2.3 With assistance from the EOC and Operations Support Center (OSC) Facilitators account for all personnel on site during an on site relocation.
- 2.4 Maintain access and egress control to and from the site. Control movement of personnel and vehicles throughout the site. If personnel are permitted access to the site be sure that each individual is aware of the current emergency situation and informed of areas which are to be avoided.
- 2.5 Establish a security boundary around evacuated areas. Once a protective action such as sheltering or relocation has occurred, take measures to control and enforce security boundaries.
- 2.6 Maintain contact with the Security Manager. The EOC phone extension for the Security Manager is 4892.
- 2.7 Issue dosimetry to off site personnel when necessary.
 - 2.7.1 Locate the emergency dosimeters stored in the Main Gatehouse in a briefcase marked "Dosimeters for Emergency Medical and Fire Use Only." Issue to off site emergency response personnel. Direct permanently badged radiation workers who did not have time to retrieve their permanent dosimetry to report to the Incident Command Post (ICP) for dosimetry.

- 2.7.2 Issue the emergency dosimetry suitcase to the lead vehicle of the off site response personnel arriving on site when informed by the IC that the emergency is in a controlled area.
- 2.7.3 Instruct the off site emergency response personnel to take one of the emergency dosimetry packages prior to entering a radiological area. Instruct the lead vehicle personnel to distribute dosimetry to other emergency response personnel.
- 2.8 At the direction of the IC, initiate Security Task 5 (Subtask 20), "Emergency Call List Activation" to notify required WVDP emergency responders.
- 2.9 At the direction of the IC, notify the receiving hospital of the intent to transport injured-contaminated personnel. Provide information on the extent of contamination (Levels 1, 2, or 3) and the estimated time of arrival at the hospital.
- 2.10 Upon receipt of an "812" for a drill/exercise or emergency, the Security Alarm Monitoring Station (AMS) operator will disable the site 222 paging system. When the "812" message to terminate the event is broadcasted, security will ensure that the site "222" paging system has been restored when directed to do so by the IC.
- 2.11 Deliver or make available a security vehicle for use as an emergency vehicle to environmental monitoring personnel at the request of the ELAB Manager.

EMERGENCY MEDICAL RESPONSE TEAM (EM211B) N29

1.0 POSITION GUIDELINES

All medical emergencies, regardless of shift, shall be handled with the personnel available on site at the time of the emergency. Additional Emergency Medical Services (EMS) support shall be requested through off site emergency response organizations. Due to the availability of local EMS providers, EMRT members shall not be activated, through a Strict Order of Call or other means, to return to the site for medical emergencies.

The IC is responsible for managing all aspects of the field portion of any emergency response. The EMRT responds under the direction of the IC.

If the EOC is activated, the OSC becomes a standby assembly point for ERO field response teams that have not been activated (with the exception of the EMT, ORT.) Any ERO respondent who is not directed to a scene or staging area should report to the OSC for briefings, possible future activation or release, or support activities as directed by the OSC Facilitator.

The primary concern at any emergency scene is personnel safety. When responding to a scene, EMRT responders should not compromise personal safety attempting to gain access to a victim(s). Care, safety and comfort of injured personnel is the goal of EMRT treatment. In the event of an injury/contamination situation, life threatening conditions have priority over contamination concerns.

All EMRT response activities must comply with the WVNSCO Exposure Control Plan for Bloodborne Pathogens (WVDP-145) which eliminates or minimizes occupational exposure to bloodborne pathogens in accordance with 29 CFR 1910.1030, "OSHA Occupational Exposure to Bloodborne Pathogens." Universal Precautions, as defined in WVDP-145, should be used for all patients, especially in emergency care situations where risk of blood exposure is increased.

WVDP-253, "Emergency Medical Response Team (EMRT) Manual," describes the overall EMRT program at the WVDP. Air ambulance is addressed in EMIP-102, *Mercy Flight Utilization*. The EMRT response actions are described in attachment K of this procedure.

2.0 POSITION DUTIES

Regardless of the type or location of the medical emergency, a basic set of response criteria always apply. Since each member of the EMRT has been trained in the principles of patient care, information related to the management of specific medical emergencies is not included in this attachment.

NOTE No EMRT members will respond to the WVDP from the Ashford Office Complex (AOC) for a medical emergency.

- 2.1 Upon hearing an "812" All Page, available, on site, members of the EMRT shall respond immediately to the scene of the emergency unless directed to an alternate location. The first EMRT member on the scene is the Team Leader and initiates the required care for the patient until relieved by another EMRT responder.

All EMRT activities are under the overall direction of the IC.

3.0 SITE WIDE PROTECTIVE ACTIONS

3.1 Sheltering:

- 3.1.1 EMRT members shall shelter and **NOT** compromise personal safety to respond to a medical emergency during a sheltering order because there may be risks to responder(s).
- 3.1.2 EMRT members should immediately request assistance, via the "812" All Page or other expeditious means, for any medical emergencies occurring in the same area where they are sheltered.
- 3.1.3 EMRT members shall contact Security and provide their location and phone number, at that location.

3.2 Relocation:

- 3.2.1 All personnel, including EMRT members, shall relocate if the work location they are in at the time of an alarm or an announcement is being relocated.
- 3.2.2 During a response, the IC may order emergency responders to relocate, especially if the risks have increased.
- A. EMRT personnel shall immediately leave scene.
- B. If accessible, patients not yet transported off site shall be relocated with EMRT personnel.
- C. The EMRT leader shall establish a new treatment/staging area and report its location to the IC.

ENVIRONMENTAL MONITORING TEAM (EM212B) N30

1.0 POSITION GUIDELINES

The Environmental Monitoring Team (EMT) is composed of several units, each with a team leader and one or more team members. The EMT is directed by the Environmental Laboratory (ELAB) Manager. Reports of the team leaders are forwarded to the ELAB and then onto the Consequence Assessment Manager (CAM) located in the Dose Assessment Center (DAC) in the Technical Support Center (TSC). The ELAB manager is the team leader for the EMT.

Each team leader is an environmental scientist responsible for providing direction and supervision for the collection of radiological and/or non-radiological data. All team members are knowledgeable in sample collection techniques, mapping and communications.

If the EOC is activated, EMT members who have not been directed elsewhere will assemble and standby in Trailer 47 or the Expanded ELAB for briefings, possible future activation or release, or support activities as directed by the EOC.

All EMT activities are under the overall direction of the IC.

2.0 POSITION DUTIES

- 2.1 Assemble and standby in the ELAB, Trailer 47 or the Expanded ELAB.
- 2.2 Prepare support equipment that is stored in the ELAB.
- 2.3 Obtain a minimum of two emergency vehicles for off site response. Contact the Security Supervisor if necessary to obtain a vehicle.
- 2.4 Designate team support members to remain in the ELAB to handle meteorological and field data, communications, and team dispatch.
- 2.5 Perform sampling as directed and report results to ELAB Manager.

TRANSPORTATION EVENT MANAGEMENT ORGANIZATION (EM214B) N31

1.0 TRANSPORTATION EMERGENCY RESPONSE

In the event of a transportation accident involving a WVDP shipment of hazardous/radiological materials, WVDP may provide technical support and assistance to the on-scene responding IC as requested. WVDP will also coordinate with the DOE Transportation Regional Coordinating Office (RCO) in the incident region and the destination region.

Local emergency response personnel are typically the first responders in the event of a transportation accident, and operate under the Incident Command System. The IC (typically the senior fire official responding to the scene) has full authority over all responding organizations.

1.1 Communication:

The WVDP Security Department is the 24 hour point of contact for WVDP shipments. Shipping papers for DOT hazardous materials shipments originating at the WVDP shall contain the telephone number for Security.

1.2 Categorization:

Declaration of an offsite transportation emergency involving a WVDP shipment will be accomplished by evaluating the specific incident with the WVDP shipping papers and the Emergency Action Level (EAL) for transportation events.

Typically, the initial notification will be from the carrier or local response agency to WVDP Security. Security will then transfer the call to the PSOSS. The PSOSS will evaluate the situation using the WVDP shipping package and EAL for transportation events and categorize the event (see Figure I-1). WVDP shipping packages shall include pre-determined potential EAL status for each box being shipped based on contents.

The EAL for categorizing an off-site transportation event as an Operational Emergency is as follows:

EMERGENCY ACTION LEVEL

"Any transportation accident involving a WVDP shipment that:

- 1) requires the WVDP 24-hr. emergency information phone number be provided with the shipping papers, or
- 2) contains radiological waste that meets the definition of DOE radioactive, or
- 3) is a hazardous material that requires response guide information to be included with the shipping papers

AND

Results in an actual or potential release of the material, or actual or potential damage to the structural integrity of the shipping container."

If the event meets or exceeds the EAL, an Operational Emergency shall be declared and the Transportation Event Management Organization (TEMO) shall be activated and the timely notification process shall be initiated.

2.0 WVDP TRANSPORTATION EMERGENCY PLAN (TEP) EMERGENCY RESPONSE ORGANIZATION STAFFING

2.1 The TEMO, a subset of the WVDP ERO, is responsible for monitoring the event and providing assistance to incident responders as requested. The TEMO includes the following ERO personnel and their alternates:

- West Valley Nuclear Services Company (WVNSCO) President
- WVNSCO Regulatory & Compliance Programs (R&CP) Manager
- WVNSCO Site Services Manager
- WVNSCO Technical Services Manager
- Process Plant Decontamination Project Manager
- Notification Officer
- Public Information Director

- 2.2 The OH/WVDP Emergency Management Program Manager (or the OH/WVDP Project Director if the Program Manager is not available), and the WVNSCO Emergency Management Program Manager shall be notified upon activation of the TEMO.

Once assembled in the EOC, the TEMO shall reassess the event.

Upon request, the TEMO will provide assistance to the on-scene response personnel. Support to the on-scene response effort may include technical advice concerning shipment content and suggested mitigation and protective actions. The Transportation Emergency Response Organization (TERO) includes OH/WVDP, HazMat, and radiological control personnel/teams, and others as appropriate for field response and/or to provide information and consultation to on-scene ICs. The TEMO is responsible for determining TERO composition and response actions based on the nature, severity, and location of the event.

- 2.3 The WVDP RAP will provide radiological response if activated by the DOE Region I Regional Coordinating Office (Brookhaven Area Office).

If the event includes a hazardous/radiological release to the environment the WVDP Emergency Director (ED) may implement a full activation of the WVDP EOC. Full activation of the WVDP EOC provides additional resources for events which require elevated attention.

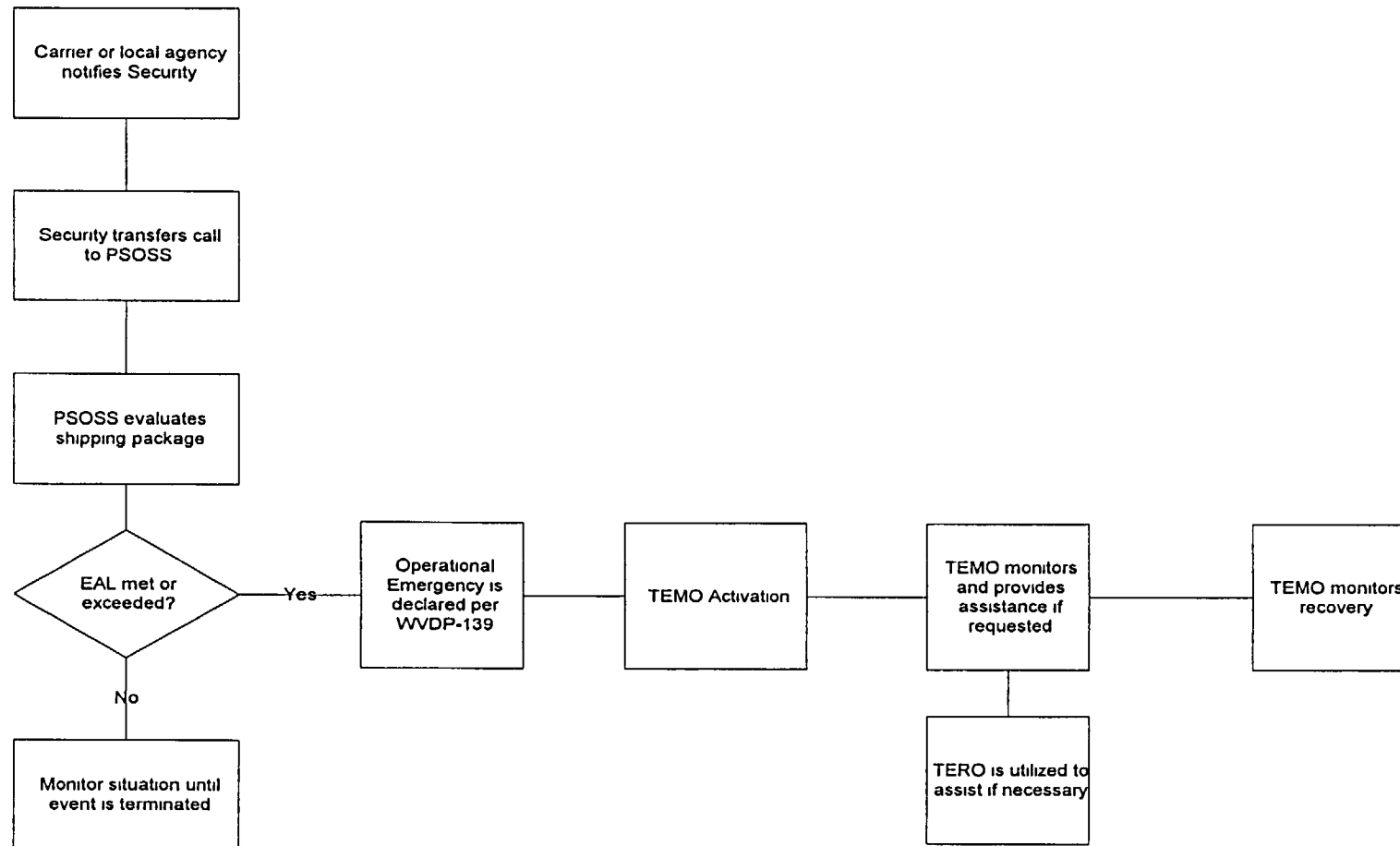
3.0 NOTIFICATION: FEDERAL, STATE, TRIBAL, AND LOCAL AUTHORITIES

All Carriers contracted to carry hazardous materials shipments from WVDP are required to maintain the capability to make notifications required under Federal Regulations.

WVDP will manage DOE notifications in accordance with WVDP 139, Volume I, "WVDP Emergency Management Implementing Procedures."

ATTACHMENT I

Figure I-1 Transportation Event Plan Overview



TIMELY NOTIFICATION OFFICER (TNO) (EM203B) N22

1.0 Position Guidelines

The TNO or designee performs the **initial** call to the DOE-HQ-EOC when directed by the IC. The TNO will establish verbal contact with DOE-HQ-EOC and communicate the initial emergency information. (See Attached TNO, Form WV-3325).

NOTE Once the IC has stabilized emergency conditions, the IC will contact the TNO and direct the TNO to start the Timely Notification Process. At WVDP, this is a 15 minute or less process that starts when the IC categorizes an emergency and completed when the off site authorities acknowledge receipt of the initial notification message.

2.0 Position Duties

- 2.1 When contacted by the IC that an emergency is being declared, record the IC's information on a WVDP TNO Form, Form WV-3325. When all information spaces on the form are filled, go to a power fail telephone.
- 2.2 Dial 9 then 1-202-586-8500 or 9 then 1-202-586-8100. This number will connect the TNO to DOE-HQ-EOC.
- 2.3 Once contact to the DOE-HQ-EOC has been achieved:
 - state the information obtained from the IC as documented on Form WV-3325.
 - **Immediately after the call**, fax the completed WV-3325 form to the WVNSCO EOC Fax #2149, and as soon as practical, submit the original to an Emergency Management Department Representative.
 - EM will submit the original form to Records & Configuration/Document Control Department, AOC-21 and copy to the site RCRA file custodian at WV-VH-5.

Initial Timely Notification Form

TNO Contacted by: _____ Time: _____ Date: _____

TNO: _____ Date: _____
Print Sign

Note: Once contacted by the IC, the TNO must contact DOE-HQ-EOC immediately (there is a 15 minute reporting requirement after the event has been categorized).

1.) Contact the DOE-HQ-EOC at 9 then 1 (202) 586-8500 or 9 then 1 (202) 586-8100. State the following information:

A.) "This is a Timely Notification Officer from the West Valley Demonstration Project, located in West Valley, New York."

B.) "We have an Emergency that commenced on _____ at _____
(Date) Time (E.S.T.)

C.) Categorized: YES _____ (Operational Emergency) NO _____

D.) Type of Event: (circle all that apply):

RADIOLOGICAL HAZARDOUS MATERIALS FIRE SECURITY NATURAL PHENOMENON

ON-SITE TRANSPORTATION

OFF-SITE TRANSPORTATION

E.) Classified: NO _____
YES _____ (Full EOC activation required), as:

(circle one)

ALERT

SITE AREA EMERGENCY

F.) EOC activated? YES _____, Partial _____ Full _____
NO _____, we have not activated the EOC at this time

G.) Release in progress? RADIOLOGICAL Yes _____ No _____
HAZARDOUS MATERIALS Yes _____ No _____
UNKNOWN Yes _____ No _____

H.) Protective actions taken:

Sheltering _____ Relocating _____ None at this time _____

Event Description:

If the EOC is activated, state: "I have no additional information at this time. Once the EOC is operational, you will be contacted and given additional information."

Immediately after the call, fax the completed WV-3325 form to the WVNSCO EOC Fax #2149.

EOC - Review, verification and initials of:

Emergency Director _____ DOE Project Director _____

The Data Coordinator will submit this approved form to the CDDS input.

MERCY FLIGHT UTILIZATION

- 1.0 This attachment describes the process for utilizing Mercy Flight at the WVDP and applies to all WVDP emergency responders who may be utilized to support the response of Mercy Flight to the WVDP.
 - 2.0 If Mercy Flight is requested and will land onsite, the responding WVVHC chief officer will coordinate the landing. All landings will be coordinated by offsite emergency response personnel.
 - 2.1 EMRT personnel shall:
 - 2.1.1 Utilize the Western Regional Emergency Medical System (WREMS) Pre-hospital Trauma Triage Guidelines to determine the need for Mercy Flight.
 - 2.1.2 Request Mercy Flight through the IC.
 - 2.1.3 Completely secure each patient to a backboard using straps and full head and neck immobilization in the event of trauma.
 - 2.1.4 Keep the patient warm. Helicopter rotor wash produces lower temperatures due to increased wind chill factors.
 - 2.2 The IC shall:
 - 2.2.1 Contact a responding WVVHC officer by radio, as WVVHC Chief 5, and request Mercy Flight.
 - 2.2.2 If unable to contact responding WVVHC personnel by radio, direct Security to contact 911, by phone, to request Mercy Flight.
 - 2.2.3 Direct Operations Response Team personnel and Security to prepare the Main 2 Warehouse landing site. The landing site does not have to be permanently maintained. If an onsite helicopter response is requested, the landing site should be established in accordance with the following required Mercy Flight guidelines:
 - A. Level area: 100 ft. X 100 ft.
 - B. Clear of obstructions: 30 ft. surrounding the site, including wires, trees, vehicles, trash, and debris.
 - C. The 100 ft. X 100 ft. area is to be plowed in winter, and should not contain: snow banks, dry sand, gravel, salt, or muddy patches.
 - D. Keep any responding emergency vehicles with flashing emergency lights outside the landing site.
- NOTE** DO NOT use white lights as markers.
- E. Remove all vehicles parked on the north side of the Main 2 Warehouse landing site.
 - F. At the Main 2 Warehouse lighting panel, LP-1, turn off Breaker #25 to shut off the north and east outside lights.

- 2.2.4 Contact a responding WVVHC chief officer if the landing zone must be established offsite.
- 2.2.5 Abort the landing, if for any reason it is believed the safety of the air ambulance crew or ground personnel may be compromised, until the site is deemed safe or an alternate, offsite landing site can be recommended.
- 2.2.6 During on- and offsite landings, offsite responders will act as Ground Contact and Tail Rotor Guard under the direction of a responding offsite chief officer or designee.
- 2.3 Security shall:
 - 2.3.1 Request an ambulance.
 - 2.3.2 Supervise perimeter control for on site landings.
 - 2.3.3 Confirm with the IC that the request for Mercy Flight has been made through WVVHC, if IC requested Security to make notifications.
 - 2.3.4 Secure transportation to the scene for Mercy Flight personnel if the landing site is remote from the patient location.
- 2.4 Radiological Controls Personnel shall:
 - 2.4.1 Report to the scene of the emergency and determine the need to implement radiological controls.
 - 2.4.2 Provide initial decontamination of injured personnel.
 - A. Cover patient to prevent spread of contamination.
 - 2.4.3 Dispatch a minimum of two (2) radiological control technicians to Erie County Medical Center (ECMC) when the IC requests Mercy Flight assistance.
 - B. One technician will assist medical personnel with contamination controls.
 - C. One technician will survey Mercy Flight helicopter and release or decontaminate as necessary at ECMC.
- 2.5 Security Personnel assigned to secure the landing perimeter shall:
 - 2.5.1 Conduct all communications utilizing plain language.
 - 2.5.2 Keep all ground personnel back 100 ft. from landing site.
 - 2.5.3 Wear appropriate protection from noise and rotor wash debris (i.e., safety glasses and ear plugs).
 - 2.5.4 Watch the perimeter of the landing site.
 - 2.5.5 Not approach the aircraft for any reason until instructed to do so by Mercy Flight personnel. When approaching, maintain eye contact with Mercy Flight personnel for further instructions.

- 2.6 No responder shall smoke anywhere inside the 100 ft. X 100 ft. landing site.
- 2.7 No running or vehicular motion shall be permitted inside the 100 ft. X 100 ft. landing site during landing or takeoff.
- 2.8 No white lights should be used during landing or takeoff.
- 2.9 Responding emergency vehicles with flashing emergency lights are to remain outside of the landing site.
- 2.10 All responders shall keep portable radios up to ear when the aircraft is running so that Mercy Flight personnel or the Ground Contact can be heard.

WVNS RECORD OF REVISION

<u>Rev. No.</u>	<u>Description of Changes</u>	<u>Revision On Page(s)</u>	<u>Dated</u>
11	Major Revision. Changed MPOSS and MPOSOS references to PSOSS and PSSOS. Deleted Vit Liaison and VOSS references. Changed TNO responsibility to TNO qualified PSO personnel. Omitted information pertaining to Ammonia and NOx from EAL tables (attachment C). Revised TNO form WV-3325. Revised and incorporated information from canceled Document EMIP-106, Mercy Flight Utilization. Mercy Flight text (as attachment K.) Changes to this document impact EM, PSO, Security, EMRT and RPO personnel.	All	01/20/03