

TEMPORARY CHANGE REQUEST

TCR NO. **TCR-ESH-015, R1-001**

(e.g., TCR-ENG-021,R0-001)

The Temporary Change Request (TCR) Form is to be used to process urgent or minor changes for PPPL Policies, Organization/Mission Statements and Procedures. The TCR should be used when changes are:
1) urgent, and can not wait the 2-4 week period for Department Head review/comment, or
2) minor, and do not warrant Department Head review.

Person Requesting Change: Dolores Stevenson Phone Ext: 3208

Department Name: Environment, Safety, Health and Security

Document Number: ESH-015, Rev. 1 Revision No.: 1

Document Title: Hazard Assessment by Emergency Response Zone

Reason for change: **Organizational changes since the last revision.**

Change description: (Summarize and attach changed pages, with changes clearly indicated)

Changes address organizational changes since the last revision. Changes mainly address changes from ES&H Department to ESH&S Department, from Maintenance & Operations to Facilities and Site Services, and from Environmental Restoration/Waste Management to Environmental Services.

1. Does this TCR significantly alter the intent or scope of the document? YES: NO: X
2. Does this TCR significantly impact ES&H? YES: NO: X

If 1 or 2 is YES, Explain why the changes should not be routed for Department Head review:

Francis White/Jerry D. Levine
Department/Division Head Approval

3/4/2014
Date

John DeLooper
Head, Best Practices and Outreach/designee

3/7/2014
Date

Release/Effective date of this TCR: 3/7/14

Incorporate this TCR into next revision of this document? YES: X NO:

Subject: Hazard Assessment by Emergency Response Zone	Effective Date: August 15, 2008	Initiated by: Head, Site Protection
	Supersedes: Revision 0 dated July 12, 1999	Approved: Director

Introduction

This procedure describes the protocol for performing hazard assessment of an emergency response zone. The identification of hazards and their potential effect is the technical basis for the Laboratory's ability to safely and successfully respond to any emergency situation. Development of emergency response plans and procedures require that a detailed assessment of the hazards associated with an emergency area or zone be conducted, documented, and maintained current.

PROCEDURE

Responsibility

Action

Head, Site Protection
Division

1. Assigns Emergency Services Unit (ESU) personnel to perform assessment of an area, or to confirm and update a previous assessment.

Assigned ESU Personnel

2. Obtains drawing(s) of the specific emergency response zone (fire zone) to be analyzed.

3. Conducts a room by room inspection of the emergency planning zone utilizing the drawings and the Hazards Assessment by Emergency Zone Checklist. See Attachment 1 for example of completed checklist report. Annotates the drawing with the location of electrical panels, storage location(s) of chemical, flammable and radiological material, and pyrotronic fire panels and sprinkler shutoff valves.

4. Obtains technical support from AC Power, Facilities and Site Services, Building Facility Manager and ESH&S as required to complete the hazards assessment (checklist items).

AC Power, ESH&S, Building
Facility Managers, Facilities
and Site Services

5. Provides information and expertise to complete required information on checklist.

6. Updates records maintained by department (drawings or databases) to reflect any changes required as a result of the hazard assessment.

- | | | |
|--|-----|--|
| Assigned ESU Personnel | 7. | Reviews information on Hazards Assessment by Emergency Zone Checklist with the Building Facility Manager(s). |
| Building Facility Manager | 8. | Confirms the information contained within the checklist. Defines maximum quantities of chemicals, fuels, and gases which could be stored in area so that worst case assessment can be performed (obtaining assistance from IH, ESH&S or Environmental Services as needed). Returns checklist to ESU. |
| Assigned ESU Personnel | 9. | Assures documentation package is completed. Signs and dates checklist. Submits completed package to Head, Site Protection Division |
| Head, Site Protection Division | 10. | Performs a check of the assessment. May, depending on complexity of assessment, elect to have a committee of appropriate personnel review the assessment, especially for the consequence assessment of the hazards. Obtains corrections as necessary and indicates completion by signing and dating checklist. |
| | 11. | Establishes and maintains file of completed assessment. Files original and updated assessment (yearly review) in folders by emergency zone. Maintains copy of approved assessment in ESU Command Vehicle pending completion of step 13. |
| Head, Site Protection Division | 12. | Updates Supplements of the Emergency Preparedness Plan to incorporate the latest hazard assessment data. |
| | 13. | Assures that hazard assessment for each emergency planning zone is reviewed at least annually and updated when required. |
| Building Facility Manager / Cognizant Individual | 14. | Informs ESU whenever known changes occur in the zone that might effect the assessment. |

Reference

DOE Order 151.1C Comprehensive Emergency Management System

Attachments

1- Sample Hazard Assessment Report by Emergency Zone with Completed Checklist

Sample Hazard Assessment Report by Emergency Zone with
Completed Checklist

Iowa

All Information Report

6/19/2008

First Look Pro

Facilities, Engineering & Maint.

Address Fire Zone C8 Princeton Plasma Physics Laboratory **PrePlan ID** FE&M
City Plainsboro **State** NJ **Zip** 08536
Notes O'Brien 2/08

Structural Information

Construction Class FIRE RESISTIVE **Roof Construction** LIGHT WEIGHT STEEL T.
Number of Stories 2 **Roof Covering** RUBBER MEMBRANE
Length, Width, Height L:191.00, W:110.00, H:20.00 **Building Classification**
Fire Flow: Iowa State University Method
25% **50%** **75%** **100%**
1,050.50 2,101.00 3,151.50 4,202.00

Structure Notes BoilerOperator on duty 24 hours in Winter

Fire Access Information

Main Access C Site Roadway
Roof Access Portable Ground Ladder
Lowest Access NA
Lock Box NA
Alarm Panel Boiler Room 1st Floor by Prox Reader
Annunciator Panel
Notes

Water Supply Information

Hydrant Location 1st Potable Hydrant @ FE&M Division "A"
Volume (GPM) 1100 **Pipe Diameter** 10 inch **Hydrant Status** True
Notes
Hydrant Location 1st Canal Hydrant @ FE&M Division "A"
Volume (GPM) 1200 **Pipe Diameter** 10 inch **Hydrant Status** True
Notes

Protection Information

Sprinklers Wet Sprinkler System
FDC Division "A" by Boiler Room
Standpipe NA
Gas Shutoff NA
Electrical Shutoff NA
Water Shutoff
Notes

Sample Hazard Assessment Report by Emergency Zone with
Completed Checklist

Attachment 1

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Hazardous Materials Information

<u>HazMat Type</u>	90 gallon Propane Tank located next to FDC				<u>HazMat ID #</u>
<u>Location</u>	Division "A"				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	25,000 gallon tank Fuel Oil				<u>HazMat ID #</u>
<u>Location</u>	Division "D"				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	3 Flammable Liquids Cabinets				<u>HazMat ID #</u>
<u>Location</u>	Room 123 Carpenter Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Snow Blower w/ Gasoline				<u>HazMat ID #</u>
<u>Location</u>	Room 123 Carpenter Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Wall and Tile Adhesive				<u>HazMat ID #</u>
<u>Location</u>	Room 123 Carpenter Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	40 Gallons Chem Treat Hydro CL 1462				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	50 Gallons Liquid Sulfite B120				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	40 Gallons Phosphate BL 176				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					

**Sample Hazard Assessment Report by Emergency Zone with
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HazMat Type 40 Gallons Polymer BL 1357 **HazMat ID #**
Location Exterior Storage Cabinet
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type Flammable Liquids Cabinet **HazMat ID #**
Location Next to Room # 119
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type Flammable Liquids Cabinet **HazMat ID #**
Location Room # 122
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type 2 Flammable Liquid Cabinets **HazMat ID #**
Location HVAC Shop
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type One Acid Cabinet **HazMat ID #**
Location HVAC Shop
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type Super VAC Oil **HazMat ID #**
Location HVAC Shop
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type Coil Cleaner **HazMat ID #**
Location HVAC Shop
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

HazMat Type 13 Small Acetylene cyls **HazMat ID #**
Location HVAC Shop
Guide # **H2O React** False **I/PD** True **Quantity**
Notes

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<u>HazMat Type</u>	2 Large Nitrogen cyls				<u>HazMat ID #</u>
<u>Location</u>	HVAC Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	1 Large Acetylene cyl				<u>HazMat ID #</u>
<u>Location</u>	Millwrights Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Flammable Liquids Cabinet				<u>HazMat ID #</u>
<u>Location</u>	Room 123A Carpenter Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Seven 10 lb buckets of Water Sealer				<u>HazMat ID #</u>
<u>Location</u>	Room 123A Carpenters Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Rechargeable Batteries				<u>HazMat ID #</u>
<u>Location</u>	Room 123A Carpenters Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 Large cylinders of Argon				<u>HazMat ID #</u>
<u>Location</u>	Welding Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	3 Large cyl of Oxygen				<u>HazMat ID #</u>
<u>Location</u>	Welding Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 small cyl Acetylene				<u>HazMat ID #</u>
<u>Location</u>	Welding Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					

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<u>HazMat Type</u>	Cutting Oil/Flux				<u>HazMat ID #</u>
<u>Location</u>	Welding Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	Cleaners/Inhibisol				<u>HazMat ID #</u>
<u>Location</u>	Welding Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	3 Flammable Liquid Cabinets				<u>HazMat ID #</u>
<u>Location</u>	Across from Welders Shop				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	10 Gallons Universal Cleaner Concentrate				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	55 Gallon Drum Water Dynamics WD 713				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	55 Gallon Drum Water Dynamics WD 708				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	30 Gallon Drum Water Dynamics CL 2871				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	15 Gallons Chemical Treatment CL 2871				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					

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HazMat Type 400 lbs Drum Water Dynamics WD 100 HazMat ID #

Location Exterior Storage Cabinet

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type Flammable Liquids Cabinet HazMat ID #

Location Millwrights Shop

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type 1 Large Oxygen cyl HazMat ID #

Location Millwrights Shop

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type Cleaners HazMat ID #

Location Millwright Shop

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type 2 Flammable Liquid Cabinets HazMat ID #

Location Boiler Room

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type 55 Gallon Drum 1301 Boiler Water Treatment HazMat ID #

Location Boiler Room

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type 50 Bags of Solar Salt -50lbs each HazMat ID #

Location Boiler Room

Guide # H2O React False I/PD True Quantity

Notes

HazMat Type Acid Cabinet HazMat ID #

Location Room 143 Water Treatment Lab

Guide # H2O React False I/PD True Quantity

Notes

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<u>HazMat Type</u>	Hydraulic Oil				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 55 Gallon Drums De-greaser				<u>HazMat ID #</u>
<u>Location</u>	Exterior Storage Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	1 Large Oxygen cyl				<u>HazMat ID #</u>
<u>Location</u>	Across from Room 137 Caged Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	1 Large Helium cyls				<u>HazMat ID #</u>
<u>Location</u>	Across from Room 137 Caged Area				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 Acid Cabinets				<u>HazMat ID #</u>
<u>Location</u>	Nextto Room 137				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	3 Flammable Liquid Cabinets				<u>HazMat ID #</u>
<u>Location</u>	Yellow FLC Behind Fuel Oil Tank				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>	All 3 FLC have a dry sprinkler system. FDC on outside of cabinets				
<u>HazMat Type</u>	1 -55 gallon drum of WD 423				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	1 -33 gallon drum of WD 423				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>		<u>H2O React</u>	False	<u>I/PD</u>	True <u>Quantity</u>
<u>Notes</u>					

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<u>HazMat Type</u>	1 -55 gallon drum of WD 713				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 -55 gallon drums of WD 708				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 -33 gallon drums of CL 2871				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	2 -55 gallon drums of Safety Therm				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	5 -10 gallon drums of DB5				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	5 -10 gallon drums of Enviro Pro				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinets				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	6 -10 gallon drums of Hydraulic Fluid				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					
<u>HazMat Type</u>	1 -10 gallon drum of Zep				<u>HazMat ID #</u>
<u>Location</u>	Haz Storage Exterior Cabinet				
<u>Guide #</u>	<u>H2O React</u>	False	<u>I/PD</u>	True	<u>Quantity</u>
<u>Notes</u>					

<p>Sample Hazard Assessment Report by Emergency Zone with Completed Checklist</p>	<p>Attachment 1</p>
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<u>HazMat Type</u>	1 -10 gallon drum of Acra Lastic	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop room 123	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		
<u>HazMat Type</u>	6 cans of paint	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop room 123	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		
<u>HazMat Type</u>	4 Bags of Sheet Rock Compound	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop room 123	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		
<u>HazMat Type</u>	5 Bags of Cement Finish	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop room 123	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		
<u>HazMat Type</u>	One bag of Grout Mix	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop room 123	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		
<u>HazMat Type</u>	2 Buckets of Stain Remover	<u>HazMat ID #</u>
<u>Location</u>	Carpenters Shop	
<u>Guide #</u>	<u>H2O React</u> False	<u>I/PD</u> True <u>Quantity</u>
<u>Notes</u>		

No Strategy Information for this record

Contact Information

<u>Contact Name and Title</u>	<u>Phone Type</u>	<u>Phone Number</u>	<u>Extension</u>
Shawn Connolly Facility Manager	Office	609-243-3182	
Shawn Connolly Facility Manager	Cell	609-658-1091	
Shawn Connolly Facility Manager	Pager	%655	
Henry Carnevale Facility Manager	Office	609-243-3039	
Henry Carnevale Facility Manager	Cell	609-203-1230	
Henry Carnevale Facility Manager	Pager	%468	

Sample Hazard Assessment Report by Emergency Zone with Completed Checklist

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First Look Pro

Diagram Information

Diagram File Name FE&M 1st&2nd Fl.czd

Diagram File Path C:\Documents and Settings\krhoades\Desktop\AD300 Building Floor Plans\FE&M 1st&2nd Fl.czd

Diagram Notes

