

Subject: Non-Emergency Environmental Release - Notification and Reporting	Effective Date: August 22, 2003	Initiated by: Head, ES&H and Infrastructure Support
	Supersedes: ESH-013, Rev 1 Dated 8/10/98	Approved: Director

Applicability

This procedure provides environmental release incident guidelines and instructions for notifying and reporting discharges. This procedure applies to Hazardous Substances (HS), Extremely Hazardous Substances (EHS), or Hazardous Waste (HW) when such a release occurs on PPPL property and the incident is classified as a non-emergency event. Emergency notifications are to be performed according to EPIP-1 *Classification of Emergency Conditions*.

This procedure does not address tritium releases (see procedure OP-AD-79, *Tritium Gaseous Release Permit*), "leaks" as defined by NJAC 7:1E-1.6; parking lot oily-sheen runoff; or Federally Permitted Releases as defined by 40 CFR 355.20, 355.40, and CERCLA sections 101(10), 101(22), and 103(E).

Introduction

There are Local, State and Federal regulations that require the reporting to various State and Federal agencies discharges of substances that are, or may be, environmental hazards. These regulations also establish when and how to prepare the reports. This procedure defines PPPL's actions to ensure that reports on non-emergency environmental releases of Hazardous, Extremely Hazardous, or Hazardous Waste substances are made within the time required and contain the pertinent information.

Reference Documents**PPPL Documents**

Emergency Preparedness Plan (EPP)
 EN-OP-005 Non-Emergency Environmental Release - Notification and Reporting
 EPIP-1 Classification of Emergency Conditions
 ESHD-5012 Environmental Protection
 GEN-006 Occurrence Reporting and Processing of Operations Information
 PPPL Spill Prevention Control and Countermeasure (SPCC) Plan, Supplement 9
 PPPL SBRSA Slug Loading Control Plan

NJ State Documents

NJAC 7:1E Discharges of Petroleum and Other Hazardous Substances
 NJDEP Community Right To Know Survey
 NJDEP Letter J. K. Hamilton to J. R. Stencel (PPPL), Dated 5/29/91

Federal Documents

40 CFR 110 Discharge of Oil

- 40 CFR 112 Oil Pollution Prevention.
- 40 CFR 302 Designation, Reportable Quantities, and Notification
- 40 CFR 355 Emergency Planning and Notification
- 40 CFR 355 Appendices A and B, The List of Extremely Hazardous Substances and their Threshold Planning Quantities
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-To-Know
- 40 CFR 372.65 Subpart D, Specific Toxic Chemical Listings
- 40 CFR 761.120 PCB Spill Cleanup Policy
- EPA 9360.7-06 Guidance for Federal Facilities on Release Notification Requirements Under CERCLA and SARA Title III, November 1990

Local Documents

Stony Brook Regional Sewerage Authority (SBRSA) Rules and Regulations

Definitions

Definitions are provided in Attachment 5. They are as defined in the State of New Jersey Administrative Code, Title 7, Environmental Protection, 7:1E-1.6, *Definitions*; unless otherwise noted.

Procedure

A. Notification

Responsibility

Action

- | | |
|---|--|
| Laboratory Personnel | 1. Call PPPL Emergency Notification Phone Number 3333 upon detection of an environmental release providing details of the release. |
| Communications Officer | 2. Dispatches Emergency Service Unit (ESU) |
| Duty Fire Captain
(Incident Commander) | 3. Assesses and classifies the release according to the Emergency Preparedness Plan (contact ERWM for aid as needed):

If an emergency condition in accordance with EPIP-1, combine with implementation of the Emergency Plan.

If not an emergency, continue with this procedure. |

4. Determines notification requirements using guidance provided in Attachments 1 and 2.

NOTES:

- a. Discharge of a Hazardous Substance requires immediate notification (within 15 minutes of knowledge of the event) to New Jersey Department of Environmental Protection (NJDEP).
- b. Any discharge of a hazardous substance as defined by NJAC 7:1E, Appendix A requires notification to NJDEP.
- c. Any discharge of a hazardous substance as defined by 40 CFR 302.4 and 355, Appendices A and B, in an amount greater than or equal to the Reportable Quantity (RQ) for that substance, requires notification to the National Response Center (NRC).

Duty Fire Captain
(Incident Commander)
(Continued)

5. Delegates, if necessary, the action to notify the required agencies to either the Facility Manager or ERWM personnel.

NOTE: The responsibility for this notification stays with the Incident Commander.

Incident Commander,
or Designee

6. Obtains the agency names and phone numbers for notification from Attachment 3.
7. Makes the notifications.

B. Reporting

Responsibility

Action

Facility Manager

1. Initiates an Occurrence Report per GEN-006, if needed.

Head(s) of Responding
PPPL Organization(s)

2. Sends report to the ERWM Division, on what group members saw and the actions they performed.

ERWM

3. Drafts a confirmation report (Attachment 4).
4. Submits confirmation report to Environmental Review Committee Chairperson.

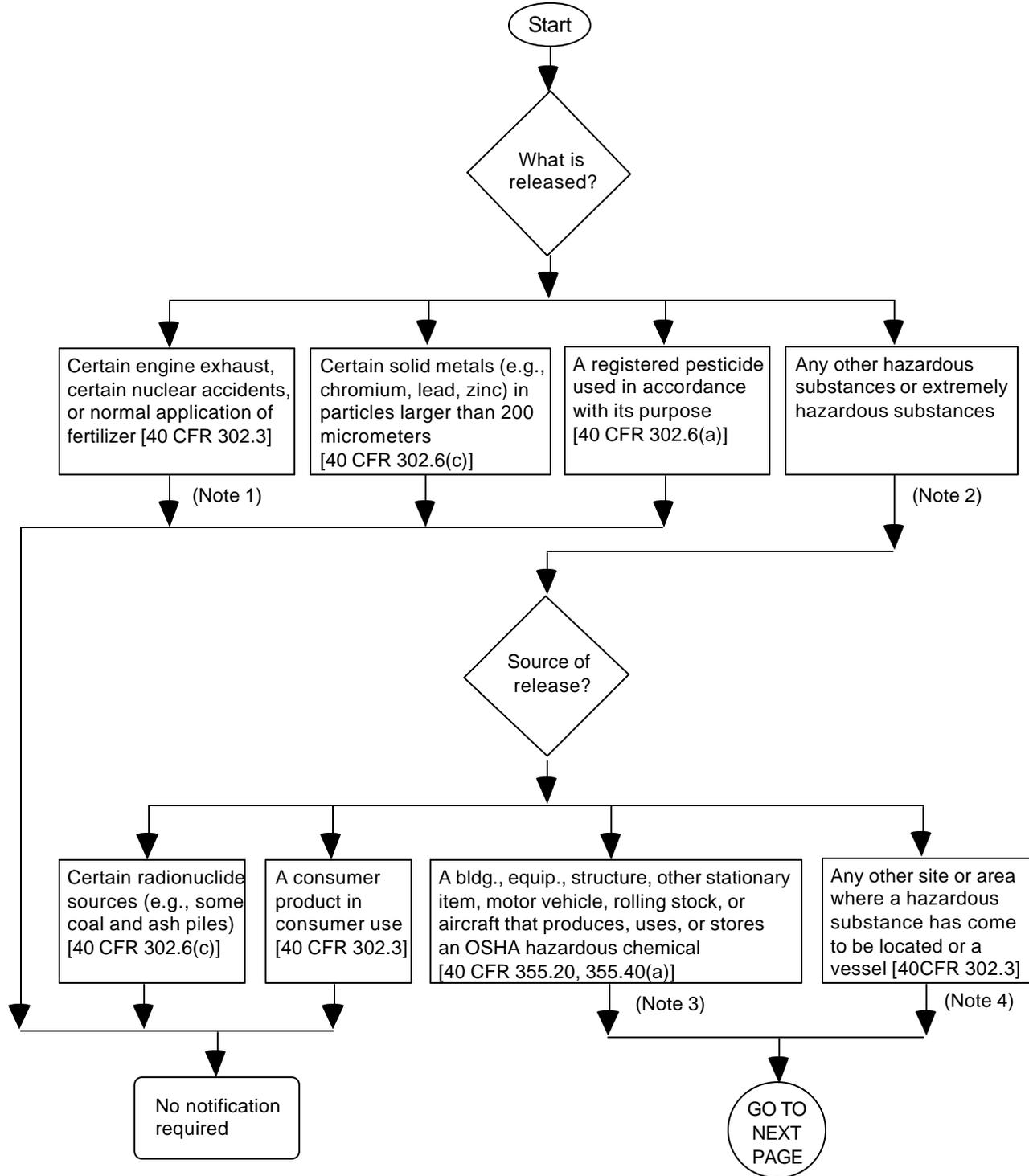
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|---|--|
| Environmental Review
Committee Chairperson | 5. Reviews the confirmation report and approves by signature. |
| ERWM | 6. Sends confirmation report to DOE Princeton Area Office including a list of all the agencies to which the report must be submitted. (This is a list maintained by ERWM and is not part of this procedure.) |
| | 7. Follows internal ERWM procedure EM-OP-35 for reporting of continuous releases and changes thereto. |
| DOE Princeton Area Office | 8. Submits confirmation report to listed agencies. |
| Facility Manager | 9. Prepares and distributes final Occurrence Report, including the cause(s) of the release, follow-up action(s), and preventive action(s) recommendation(s). |

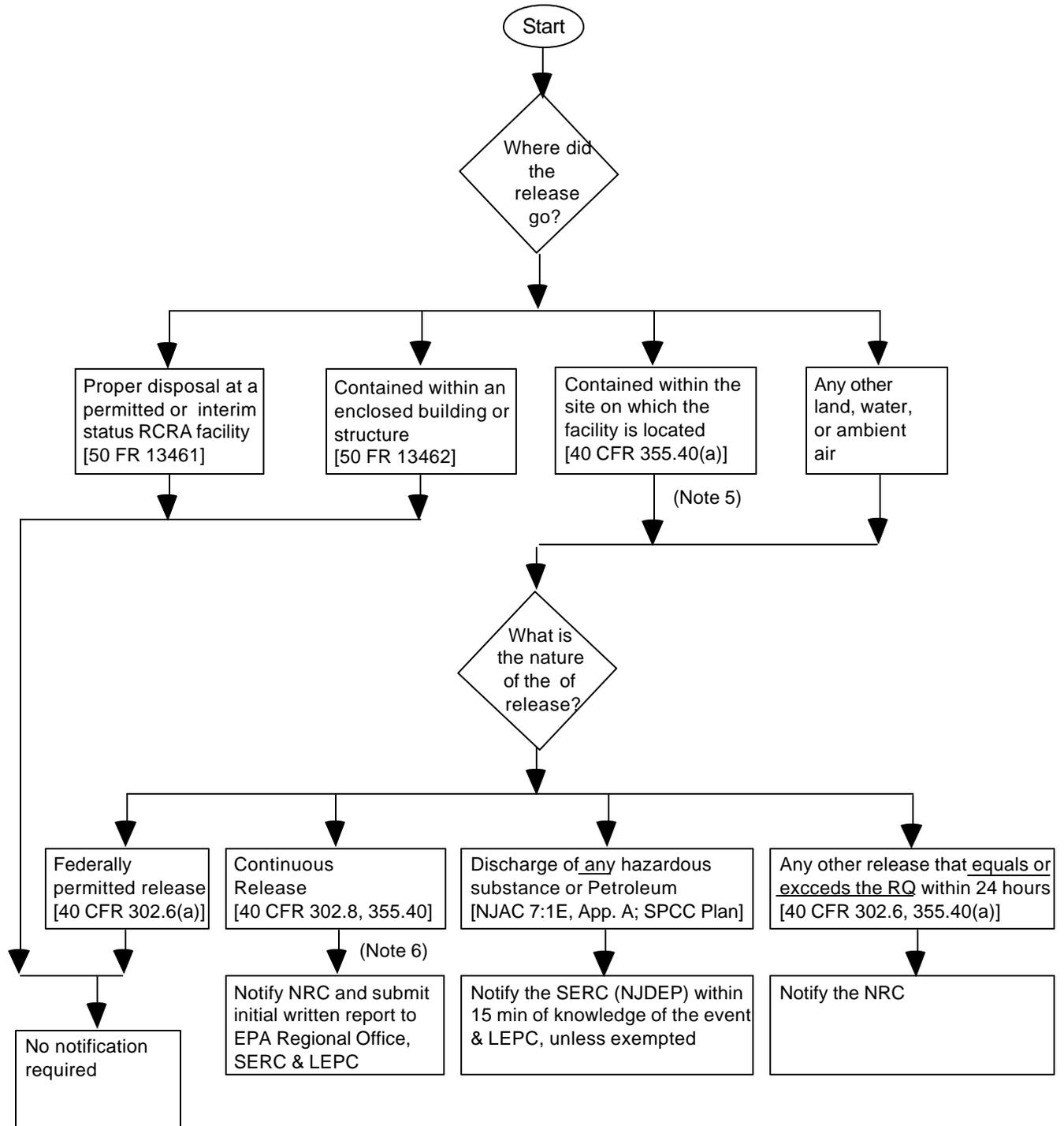
NOTE: This information will be included in the annual site environmental report.

Attachments

1. Flow Chart of Notification Actions
2. Hazardous Substance List
3. Telephone Notification List and Notification Information
4. Confirmation Report (sample)
5. Definitions and Acronyms

This flow chart is provided as a guide for the Incident Commander or Designee to use when determining what agencies need to be notified of releases.





Note: "NRC" is the National Response Center

NOTES:

1. Other than these exemptions, a release is broadly defined to include any spilling, leaking, emitting, or discharging into the environment.
2. The requirements of NJAC include the discharge of any petroleum as a hazardous substance. For a list of hazardous substances or extremely hazardous substances, refer to:
 - a. Material Safety Data Sheet (MSDS).
 - b. Attachment 2 of this procedure.
 - c. Contact the PPPL Industrial Hygienist for information.
 - d. 40 CFR Part 302, Table 302.4, hazardous substances (does not include petroleum, unless otherwise listed, or natural gas).
 - e. 40 CFR Part 355, Appendices A and B, Extremely Hazardous Substances.
 - f. NJAC 7:1E, Appendix A, Hazardous Substances (includes petroleum).
3. Hazardous chemicals are substances defined in OSHA regulations [29 CFR 19101200(c)], excluding the five exceptions in SARA Title III Section 311(e).
4. Such a release is from a facility as defined by CERCLA only and, therefore, reporting is not required to a State Emergency Response Commission (SERC) or Local Emergency Planning Committee (LEPC) under SARA Title III.
5. Although such a release is exempted from reporting to a SERC or LEPC, Federal or New Jersey regulations require notification.
6. Any statistically significant increase in a continuous release must be reported to the NRC, SERC, and LEPC.

SUBSTANCE	CAS No.	RQ	NJ	NRC	NOTES
Asbestos (friable) (visible fiber)	1332214	01	X	X	TC
Acetone	67641	5000	X	X	TC
Fuel Oil	None	Any	X	X	SPCC; DOT 1993
Gasoline	8006619	Any	X	X	SPCC
Lead	7439921	10	X	X	
Methyl Chloroform (Trichloroethane)	71556	1000	X	X	TC
Methylene Chloride	75092	1000	X	X	
Petroleum Oil	None	Any	X	X	SPCC; DOT 1270
Polychlorinated Biphenyls (PCBs)	1336363	Any / 10	X	X	PCB/TC
Sulfuric Acid	7664939	1000	X	X	TC

NOTES: This list includes most of the hazardous substances found at PPPL, but is not all inclusive

CAS Chemical Abstract System

n/a Not applicable

NJ NJ Department of Environmental Protection (NJDEP) or State Emergency Response Center (SERC)

NRC National Response Center is notified when the RQ is exceeded

PCB Polychlorinated Biphenyls - EPA Region II notified for spills where concentrations are greater than 50 ppm or mg/l or exceed 10 pounds by weight, and any spill that directly contaminates water or grazing land.

RQ Reportable Quantity or threshold for reporting

SPCC Spill Containment and Countermeasures Plan (40 CFR Parts 110 and 112)

TC Toxic Chemical (40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know)

TELEPHONE NOTIFICATION LIST AND NOTIFICATION INFORMATION

AGENCY	National Response Center (NRC)	NJDEP (SERC)	DOE/PAO	Plainsboro (LEPC)	EPA Region II Office of Pesticides and Toxic Substances	Stony Brook Regional Sewerage Authority (SBRSA)
TELEPHONE #	1-800-424-8802	1-877-WARN DEP 1-877-927-6337	1-609-243-3706	1-609-799-2333	1-732-321-6669	1-609-924-8881 ext. 217 (H. Bode)
CRITERIA	Oil discharge or release of a HS in an amount <u>equal to or greater than an RQ</u> (40 CFR 302 &355). The NRC is notified only when an amount equal to or greater than an RQ is discharged.	Discharge of <u>any</u> HS (as defined in NJAC 7:1E-Appendix A) which is in such quantity or concentration as may be harmful to public health, welfare or natural resources.	Whenever NRC or NJDEP are notified, notify the DOE/PAO.	Any occurrence reported to the NRC or the NJDEP are to be reported to the Plainsboro Director of Public Safety.	Within 24 hours, PCB spills into water or onto grazing land; PCB spills with concentrations ≥ 50 ppm or exceed 10 pounds PCB's by weight.	When a release occurs and enters the sanitary system (SBRSA), as per the Authority's Rules and Regulations and PPPL's Slug Loading Control Plan.

NOTIFICATION INFORMATION

- Time of discharge
- Identity of the material discharged
- Approximate quantity discharged
- Location and source of discharge
- Cause and circumstances of discharge
- Existing or potential hazards (if any)
- Personal injuries/casualties (if any)
- Corrective actions and timetable to control, contain and clean up discharge
- Name(s) and phone number(s) of individual(s) who discovered and/or reported the incident
- Any other unique or unusual details or information as requested
- NJDEP Spill Report Number

CONFIRMATION REPORT

N. J. A . C. 7:1E-5.8(b)

Facility Name: Princeton Plasma Physics Laboratory**Case No.** _____ **Date** _____

1. Name, address, and phone # of person reported discharge	PPPL, P.O. Box 451, Princeton, NJ 08543
2. Name, address, and phone # of person submitting report	Jerry Wm. Faul, Manager U. S. Department of Energy, Princeton Area Office P.O. Box 102, Princeton, New Jersey 08542 609-243-3706
3. Name, address, and phone # of person subject to provisions of 7:1-5.8(b), if different from #2.	
4. Name, address, and phone # of person(s) responsible for the discharge	The site manager (item #2) is responsible for all site operations.
5. Name, address, phone # of each owner and operator of the facility	Owner:: U. S. Department of Energy, Princeton Area Office P.O. Box 102, Princeton, New Jersey 08542 609-243-3700 Operator: Princeton University Plasma Physics Laboratory P.O. Box 451, Princeton, New Jersey 08543 609-243-2000
6. Source of discharge	

<p>7. <u>Location of discharge.</u> i. Discharge on land: Name of the site; Street address; Tax lot and block; Municipality; County; Dept. or EPA ID #s; Site map with discharge location and area.</p>	<p>Princeton Plasma Physics Laboratory Route 1 North, James Forrestal Campus Lot 3.07, Block 5 Plainsboro Middlesex NJ960011152 See attached map</p>
<p>7. <u>Location of discharge.</u> ii. Discharge on, under, or into water: Name of water body; Latitude & longitude of the place the discharge occurred; Map identifying affected areas.</p>	
<p>8. List of common name and CAS # of each hazardous substance discharged.</p>	
<p>9. List quantities of each substance discharged.</p>	
<p>10. Chronological information: Date & time discharge began; Date & time discharge found; Date & time discharge ended; Date & time discharge reported.</p>	
<p>11. Detailed description of containment/cleanup; Summary of costs incurred; Proof of proper disposal of hazardous substances discharged.</p>	<p>See attached summary See attached manifest</p>

Confirmation Report (sample)

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12. Corrective actions or countermeasures taken or proposed to minimize recurrence.	
13. Additional preventative measures taken or proposed to minimize a recurrence.	
14. Name, address, and phone # of all entities involved in the containment, cleanup, and removal of the discharge.	PPPL, P.O. Box 451, Princeton, New Jersey 08543
15. Sample information: Sample type; Quantity; Location; Date	
16. Sample Results: if samples collected, see attached page for information	
17. For major facilities, ...	Not applicable
18. Supplemental information	
19. Other information requested by NJDEP.	
20. Certification	See attached statement

Facility Name: Princeton Plasma Physics Laboratory

Case No. _____ **Date** _____

7. Site map with discharge location and surrounding area

Facility Name: Princeton Plasma Physics Laboratory**Case No.** _____ **Date** _____**11. Detailed description of containment, cleanup and removal****Summary of costs incurred (estimated Clean-up Costs ~\$)**

Supplies, labor for clean-up work, and disposal costs for drum		\$
Administrative manpower - Facility Manager	\$ 415.00	
" " - Others	\$ 250.00	
TOTAL		\$

Facility Name: Princeton Plasma Physics Laboratory

Case No. _____ **Date** _____

11. Proof of proper disposal of the hazardous substances discharged

(Copy of the manifest)

Facility Name: Princeton Plasma Physics Laboratory

Case No. _____ **Date** _____

20. Certification pursuant to N.J.A.C. 7:1E-4.11

“I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information.”

Jerry Wm. Faul, Manager
DOE, Princeton Area Office

Facility Name: Princeton Plasma Physics Laboratory

Case No. _____ **Date** _____

Environmental Committee Review

Date

Chairperson

Environmental Review Committee

Report Distribution

ES&H Executive Board Members

Environmental Review Committee

Manager, Environment, Safety & Health/Infrastructure Support Department

Head, Site Protection Division

Head, Environment Restoration & Waste Management Division

PPPL Facility Manager

Team Leader, Environment, Safety & Health, DOE-PAO

Environmental Engineer, DOE-PAO

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or "Superfund" [REF: Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III, 11/90].

Continuous Release - A release that is "continuous" and "stable in quantity and rate." The release of a hazardous substance that occurs without interruption or abatement, or that is routine, anticipated, intermittent, and incidental to normal operations. In addition, a release that is "stable in quantity and rate" is a release that is predictable and regular in amount and rate of emission [REF: Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III, 11/90].

Discharge - Any intentional or unintentional action or omission, unless pursuant to and in compliance with a valid and active Federal or State permit, resulting in the releasing, spilling, pumping, pouring, emitting, emptying, or dumping of a hazardous substance into the waters or onto the lands of the State or into the waters outside the jurisdiction of the State when damage may result to the land, waters, or natural resources within the jurisdiction of the State. This term does not include leak.

Environment - Water, air, land, and the interrelationship which exists among and between water, air, and land and all living things [REF: 40 CFR 355.20].

EPA - The U.S. Environmental Protection Agency.

Emergency - A discharge incident which is classified in one of four categories according to the Emergency Preparedness Plan.

Federally Permitted Release [REF: Section 101 (10) CERCLA]:

- a. Discharges in compliance with a permit under Section 402 of the Federal Water Pollution Control Act (FWPCA).
- b. Discharges resulting from circumstances identified, reviewed, and made part of the public record with respect to a permit issued or modified under Section 402, FWPCA and subject to a condition of such permit.
- c. Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section 402, FWPCA, which are caused by events occurring within the scope of relevant operating or treatment systems.
- d. Discharges in compliance with a legally enforceable permit under Section 402, FWPCA.
- e. Releases in compliance with a legally enforceable permit issued pursuant to Section 3004 (a) through (d) of the Solid Waste Disposal Act from a hazardous waste treatment storage or disposal facility when such permit specifically identifies the hazardous substances and makes

such substances subject to a standard of practice, control procedure or bioassay limitation or condition, or other control on the hazardous substances in such releases.

- f. Any release in compliance with a legally enforceable permit issued under Section 102 or 103 of the Marine Protection, Research, and Sanctuaries Act of 1972.
- g. Any injection of fluids authorized under Federal underground injection control programs or State programs submitted for Federal approval (and not disapproved by the Administrator of EPA) pursuant to Part C of the Safe Drinking Water Act.
- h. Any emission into the air subject to a permit or control regulation under Section 111, Section 112, Title I Part D, or State implementation plans submitted in accordance with Section 110 of the Clean Air Act (and not disapproved by the Administrator of EPA), including any schedule or waiver granted, promulgated, or approved under these sections.
- i. Any injection of fluids or other materials authorized under applicable State law (i) for the purpose of stimulating or treating wells for the production of crude oil, natural gas, or water; (ii) for the purpose of secondary, tertiary, or other enhanced recovery of crude oil or natural gas; or (iii) which are brought to the surface in conjunction with the production of crude oil or natural gas and which are reinjected.
- j. The introduction of any pollutant into a publicly owned treatment works when such pollutant is specified in and in compliance with applicable pretreatment standards of Section 307(b) or (c) of the Clean Water Act and enforceable requirements in a pretreatment program submitted by a State or municipality for Federal approval under Section 402 of such Act, and;
- k. Any release of source, special nuclear, or byproduct, as those terms are defined in the Atomic Energy Act of 1954, in compliance with a legally enforceable license, permit, regulation, or order issued pursuant to the Atomic Energy Act of 1954.

Hazardous Substances (HS) - Petroleum, petroleum products, pesticides, solvents, and other substances as set forth in N.J.A.C. 7:1E-1.7 and 40 CFR 302.4 (302.4 does not include petroleum, unless otherwise listed, or natural gas). HS includes Hazardous Waste and Extremely Hazardous Substances.

Hazardous Waste - as defined in the U.S. Department of Transportation (DOT) Hazardous Materials Regulations, Title 49 CFR and the Environmental Protection Agency (EPA) Regulations, Title 40 CFR.

Immediate - (as defined by the State of New Jersey for HS discharge notification) Within 15 minutes of the time that the person responsible for a discharge knew, or reasonably should have known, of the occurrence of a discharge.

Leak or leakage - Any escape of a Hazardous Substance from the ordinary containers employed in the normal course of storage, transfer, processing, or use into a secondary containment or diversion system or onto a surface from which it is cleaned up and removed prior to its escape into the waters or onto the lands of the State.

LEPC - Local Emergency Planning Committee.

Non-Emergency - A discharge incident which is not classified as an emergency according to the Emergency Preparedness Plan.

NRC - National Response Center.

Petroleum or Petroleum Products - Any bituminous liquid that is essentially a complex mixture of hydrocarbons of different types with small amounts of other substances, such as compounds of oxygen, sulfur or nitrogen, or metallic compounds, or any of the useful liquid products obtained from such a liquid by various refining processes, such as fractional distillation, cracking, catalytic reforming, alkylation and polymerization. This term shall include, but not be limited to, gasoline, kerosene, fuel oil, oil sludge, oil refuse, oil mixed with other wastes, crude oils, and hazardous substances listed in NJAC 7:1E Appendix A which are to be used in the refining or blending of crude petroleum or petroleum stock in the State of New Jersey.

Release - Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, infecting, escaping, leaching, dumping, or disposing into the environment (including abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, extremely hazardous substance, or CERCLA hazardous substance [REF: 40 CFR 355.20].

Reportable Quantity (RQ) - an amount (in lbs.) of a Hazardous Substance (HS) or Extremely Hazardous Substance (EHS) released within a 24-hour period. The amount is established by the EPA as follows [REF: 40 CFR 355; 302.4]:

- a. The RQs for EHS are provided in 40 CFR 355, Appendices A and B. The ones that have not been assigned a number by EPA have been given statutory RQs of one pound by Congress.
- b. The RQs for all HS are provided in 40 CFR 302.4. This table has two columns of RQs, the statutory RQ and the Final RQ. The weight in the Final RQ column should be used for determining reportable releases.

SARA - Title III of the Superfund Amendments and Reauthorization Act of 1986, also known as the Emergency Planning and Community Right-to-Know Act (EPCRA).

SERC - State Emergency Response Commission.

SPCC Plan - A Federal Spill Prevention Control and Countermeasure Plan developed and approved pursuant to 40 CFR 110 and 112.

Statistically Significant Increase (SSI) - An increase in the quantity of hazardous substance released above the upper bound of the reported normal range of the release. The normal range is defined to include all estimated quantities of the hazardous substance released during any 24-hour period under normal operating conditions during the previous year [REF: Guidance for Federal Facilities on Release Notification Requirements under CERCLA and SARA Title III, 11/90].

Threshold Planning Quantity - The quantity listed in the column "threshold planning quantity" for that substance in Appendices A and B of 40 CFR 355.

Toxic Chemical - a chemical or chemical category listed in 40 CFR Subpart D, 372.65, Specific Toxic Chemical Listings.

Waters - The ocean and its estuaries to the seaward limit of the State's jurisdiction, and all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of this State.