

Subject: Occurrence Reporting and Processing of Operations Information	Effective Date: Dec. 18, 2003	Initiated by: (Head, Site Protection Division)
	Supersedes: GEN-006, Rev.4 1/23/98	Approved: Director

Applicability

This procedure applies to activities conducted at PPPL's C and/or D Sites, including those activities performed by PPPL employees, subcontractors and visitors. For purposes of this procedure, responsibility includes Designees.

Introduction

This procedure establishes and maintains a system for reporting operations information related to PPPL facilities and the processing of information to identified events or conditions and appropriate actions taken to stabilize or place the Laboratory in a safe condition. The Laboratory shall conduct Apparent Cause Analysis, or Root Cause Analysis, where appropriate, and document and implement corrective actions in accordance with the requirements of DOE M 231.1-2, Occurrence Reporting and Processing of Operations Information [ORPS].

In addition, the Laboratory is subject to the requirements of the Price Anderson Amendment Act (PAAA). This Act requires the reporting of non-compliance occurrences, which have potential to be nuclear safety significant, including radiological incidents. The PAAA Committee for determination of PAAA reportability shall review occurrences that may be non-compliance.

The notifications required by this procedure, while important, are subordinate to stabilizing the event, communications and notifications directly related to control of the event, and support of the Incident Command requirements (i.e. calls requesting additional assistance, recalling personnel, and activation of the Emergency Operations Center).

This procedure has been developed to ensure that occurrences and potential PAAA non-compliances are consistently reported to the DOE and Laboratory Management so that they are fully informed of events which could adversely effect the health and safety of workers and/or the public, have potential safety significance, seriously impact the intended purpose of the facility, and/or have a noticeable adverse effect on the environment.

Reference Documents

DOE Order 231.1A	Environment, Safety and Health Reporting
DOE/M 231.1-2	Occurrence Reporting and Processing of Operations Information
DOE/G 231.1-1	Occurrence Reporting and Performance Analysis Guide
DOE/G 231.1-2	Occurrence Reporting Causal Analysis Guide
QA-019	Root Cause Analysis
10 CFR 820, Appendix A	Code of Federal Regulations, General Statement of Enforcement Policy
GEN – 004, Rev 0	Price Anderson Amendment Act Noncompliance Determination & Reporting Process

Occurrence Reporting and Processing of Operations Information

Definitions

Apparent Cause	The most probable cause of an event or condition.
Business Day	The administrative days (08:00–17:00) during which normal work activities are conducted. It is not intended to encompass the 24 hour day even when thought the facility is operated 24 hours per day.
Condition	Any "as found" state, whether or not resulting from an event, which may have adverse safety, health, quality assurance, security, operational, or environmental implications. A condition that is programmatic in nature (examples: an error in analysis or calculation, an anomaly associated with design or performance, or an item indicating a weakness in the management process are all conditions).
Discovery	The discovery date, and time when a facility staff member discovers, or becomes aware of an event or condition.
Events	Real-time occurrences such as a pipe break, a loss of power, a fire, etc.
Facility	Any PPPL equipment, structure, system, process, or activity that fulfills a specific purpose.
Facility Manager	The PPPL individual(s) assigned the responsibility of providing response to events or conditions, which have the potential to have ORPS or PAAA implications. The Facility Manager has the authority to direct changes, recall and assign personnel, and/or commit resources to stabilize or mitigate the event or condition and to implement corrective actions.
Notification Report	The initial documented report to the Department of Energy of an event or condition the meets the reporting criteria of DOE M 231.1-2.
Occurrence	One or more (i.e. recurring) event(s) or conditions that adversely affect, or may adversely affect, DOE or contractor personnel, the public, property, the environment, or the DOE mission. Events or conditions meeting the criteria thresholds identified in this procedure or determined be recurring through performance analysis are occurrences.
Occurrence Report	A documented evaluation of an event or condition that is prepared in sufficient detail to enable the reader to assess its significance, consequences, or implications and to evaluate the actions being proposed or employed to correct the event or condition and/or to avoid recurrence.

Occurrence Reporting and Processing of Operations Information

Prompt Notification Timely reporting of an occurrence (with in two hours of discovery) to the DOE Field Office and DOE Headquarters Operations Center in accordance with the Significance Category and the reporting criteria of the occurrence.

General Requirements**A. Event or Condition Identification**

1. PPPL may identify an occurrence by direct observation of equipment or process malfunctions, log or record reviews, operator/worker recognition of their own or others errors or other means.
2. PPPL must take appropriate immediate action to stabilize and/or place the facility/operation in a safe condition and ensure that any potential environmental effects are stabilized and injured workers are treated for injuries sustained.
3. PPPL must, upon identification of an abnormal or suspected abnormal event or condition, promptly notify the appropriate line management of the event or condition and the actions taken to stabilize or place the facility/operation in a safe condition.

B. Categorization

PPPL shall categorize all occurrences, except Operational Emergencies, within two (2) hours of discovery. Reportable occurrences shall be categorized in accordance with the Significance Categories described in Attachment 2.

C. Reporting

The PPPL Facility Manager must E-Mail DOE HQ OC when an occurrence requiring DOE HQ OC prompt notification is required as described in Attachment 2.

The PPPL Facility Manager shall submit a written report for entry into the ORPS Processing System. Notification Reports shall be submitted in accordance with the schedule in Attachment 2.

Occurrence Reporting and Processing of Operations Information**D. Written Notifications**

PPPL's Final Report must be submitted within 45 calendar days from the date of initial categorization. If the report cannot be completed within 45 calendar days an update report must be submitted.

A Short Form Report shall be submitted for all Significance Category 4 Occurrences. This report satisfies all written reporting requirements for these occurrences.

E. Corrective Actions

PPPL shall track ORPS corrective actions in its PPPL QA Tracking System until closure, including verification, or sampling of corrective actions to prevent recurrence at the facility level.

F. Performance Analyses and Identification of Recurring Occurrences

The Head, Site Protection Division shall conduct at least quarterly an analyses of events during the past 12-month period to determine if trend exist. The analysis shall be conducted for all significance categories, plus PPPL non-reportable events in order to prevent more serious events from occurring. The Head, Site Protection shall report identified trends to PPPL and Local DOE Management.

Occurrences categorized as recurring must be submitted by PPPL as a new Occurrence Report. The report will be submitted under Significance Category R.

Procedure**A. Occurrence Reporting****Responsibility****Action**

- | | |
|----------------------|--|
| Cognizant Individual | 1. Notifies PPPL Communications Officer or their supervisor of an emergency, event, or condition upon recognition or discovery (fire, personnel injury, procedure deficiency, etc.). |
| Supervisor | 2. If notified, confirm potential concern, condition, or event and notify PPPL Communications Officer. The supervisor may consult with specialized organizations [e.g., ES&H, Site Protection, etc.] for assistance. |

Occurrence Reporting and Processing of Operations Information

Security
(Communications
Officer)

- 3. Receives notification of event and/or condition. Dispatches Emergency Services Unit [ESU], as appropriate.
- 4. Notifies PPPL Facility Manager of potential occurrence. If the PPPL Facility Manager does not respond within fifteen (15) minutes, notifies alternate PPPL Facility Manager.

PPPL Facility
Manager

- 5. Calls Communications Officer and obtains briefing of the potential occurrence. (Note: in some cases direct communication with the Incident Commander/Planning Section Chief is required, provided it does not distract from the incident.) As required, contacts the ESU Incident Commander to obtain the necessary information to categorize the occurrence, assist in stabilization of the incident and briefs the DOE.
- 6. Uses Attachment 1, to determine if occurrence is reportable, and if so, it's probable significance category.
- 7. Uses Attachment 2, to Categorize the event and determine Prompt Notification Requirements.
- 8. Contacts the Princeton Group DOE Facility Representative, Attachment 4. (Note: If the DOE Facility Representative does not respond within fifteen minutes, notifies the alternate DOE Facility Representative).

PPPL Facility
Manager

- 9. Categorizes the occurrence within 2 hours of discovery, in accordance with guidelines in Attachment 2. In the event of disagreement regarding categorization, the Facility Manager has final responsibility to determine the occurrence classification. Upon categorization, the clock starts for the reporting times specified below:
 - a) All Emergency events are required to be reported in accordance with DOE O 151.1A "Comprehensive Emergency Management System". If an event is classified as an emergency, it shall be reported in accordance with PPPL's Emergency Plan within fifteen (15) minutes.
 - b) If classified as meeting a significance category make prompt notification within two (2) hours of categorization as described in section "C Prompt Notification"

Occurrence Reporting and Processing of Operations Information

- 10. Verbally notifies the Deputy Director, Head, Head Site Protection Division, and the cognizant Department/ Project/Division Manager of the occurrence. In the absence of any of these individuals, the cognizant designee is to be notified.
- 11. Informs the DOE Facility Representative that E-Mail and phone notifications to the DOE EOC have been made, (if the DOE Facility Representative was not present at the time of notification.)
- 12. Informs the PPPL Public Information Officer, as soon as reasonably possible, of an Emergency or Significance Category 1 or 2 occurrence when media interest may occur.
- Public Information Officer 13. Determines in conversations with the Director and/or Deputy Director whether a news release is required. If it is determined that a news release is required, the prepared news release shall be submitted to the DOE Facility Representative for review and approval.
- PPPL Facility Manager 14. Determines if other Laboratory Managers or individuals should be notified of the occurrence. Completes notifications by telephone.
- PPPL Facility Manager 15. Completes the required notification report and forwards it to the Head, Site Protection Division.
- Head, Site Protection 16. Inputs information from the Notification Report into the "Occurrence Reporting and Processing System" (ORPS).
- 17. Reviews Notification Report for potential PAAA implications. If required, in accordance with GEN – 0004, convenes PAAA Review Committee. Distributes the Occurrence and/or PAAA Report to applicable Laboratory managers as soon as possible.
- 18. If determined to be PAAA regulated, completes PAAA report within 20 days of PAAA determination.

B. Occurrence Reporting Investigative Requirements

Responsibility

Action

- Individuals Involved 1. Provides the PPPL Facility Manager a chronology of the events that describes the cause(s) of the occurrence and actions taken by Laboratory personnel to correct the situation.

Occurrence Reporting and Processing of Operations Information

- | | |
|-----------------------|---|
| PPPL Facility Manager | <p>2. Collects information and performs interviews of personnel, as applicable, to understand the event, including why it occurred as well as what should be done to prevent the specific problem from recurring. An Apparent Cause Analysis shall be conducted in accordance with DOE G 231.1-2 Occurrence reporting Causal Analysis Guide, and the apparent causes shall be documented on the Occurrence Report specifying corrective actions to resolve or to prevent reoccurrence. In addition, corrective actions shall be documented in the PPPL QA tracking system. (Note: In some cases, the Deputy Director or Facility Manager may designate special teams to investigate the occurrence. The team selection should include consideration of the need for ES&H professionals. Investigation results are reported to the Facility Manager).</p> <p>3. Completes remainder of the Occurrence Report within forty-five (45) calendar days of the occurrence, in accordance with the requirements of Attachment 2. [The report shall include sufficient detail to clearly identify apparent causes, root cause(s), where required, corrective actions and lessons learned from the event.] Discusses corrective action assignments with responsible individual(s). Reviews report with the Head, Site Protection Division prior to submittal to the reviewers</p> |
| Reviewers | <p>4. Review and comment on the report. Assess the applicability of generic implications beyond the specific area in which the occurrence took place. Provide comments to the Facility Manager.</p> |
| PPPL Facility Manager | <p>5. Resolves comments and signs the Final Report within 45 calendar days of categorization of the occurrence. If a Final Report cannot be prepared within 45 days, an update Notification Report shall be prepared which includes an explanation of the delay and an estimated date for submittal of the Final Report.</p> |
| Head, Site Protection | <p>6. Inputs information from 'Final' Occurrence Report into the ORPS. Informs the Deputy Director of any disagreements on content of the report identified by the DOE Facility Representative.</p> <p>7. If PAAA reportable, enters data into Noncompliance Tracking System (NTS) within 20 days of PAAA categorization.</p> <p>8. Distribute Final Reports. Ensure that individuals assigned action items are provided copies of the report.</p> |

Occurrence Reporting and Processing of Operations Information

- | | |
|-----------------------|---|
| PPPL Facility Manager | 9. If the Final Report is disapproved by the DOE, revises and re-submits the Final Report within 21 days of disapproval. |
| Assigned Individuals | 10. Take appropriate corrective action(s) as identified in report and informs the Head, Site Protection when action(s) has been completed. |
| Head, Site Protection | <p>11. Tracks all open Occurrence Reports and outstanding corrective actions required as a result of the reports. Notifies QA representative when corrective actions are completed.</p> <p>12. Conducts, at least quarterly, a performance analysis for the last 12-month period and initiate a Significance Category R Occurrence Report if a negative trend of recurring concerns is identified.</p> <p>13. Maintains an electronic copy of each PPPL Occurrence Report (minimum retention period of five years).</p> <p>14. Assures that appropriate indoctrination of Laboratory personnel and training of PPPL Facility Managers is performed.</p> |
| Quality Assurance | <p>15. Includes Occurrence Reports in the periodic trend analysis of PPPL ES&H related items conducted to determine if generic issues or indications of deteriorating conditions exist.</p> <p>16. Documents identified trends in the Tracking and Trending Report.</p> <p>17. Performs surveillance/audits to verify conformance with this procedure and DOE Order 232.1A. The Quality Assurance Manager, in conjunction with the Head, SPD, determines frequency of audits.</p> <p>18. Verifies adequate completion of corrective actions for Occurrence Reports related to the Price Anderson Amendment Act.</p> |

Attachments

1. PPPL Guidelines for Categorization Occurrences
2. Reporting and Documentation Criteria
3. Instructions for Completing Occurrence Reports
4. Telephone Number Call List

GROUP 1 – OPERATIONAL EMERGENCIES

SIGNIFICANCE CATEGORY

CRITERION

*OE	An Operational Emergency not needing further classification. (Defined in DOE 151.1A, Chapter 5, Paragraph 2)
*OE	An Alert (Defined in DOE 151.1A, Chapter 5, Paragraph 3a)
*OE	A Site Area Emergency. (Defined in Doe 151.1A, Chapter 5, Paragraph 3b)
*OE	A General Emergency. (Defined in DOE 151.1A, Chapter 5, Paragraph 3c)

GROUP 2 – PERSONNEL SAFETY AND HEALTH

SUBGROUP A - OCCUPATIONAL ILLNESSES/INJURIES

SIGNIFICANCE CATEGORY

CRITERION

*1	Any occurrence due to DOE operations resulting in a fatality or terminal injury/illness. For fatalities caused by overexposures, the intent of this criterion is to report those caused by acute rather than chronic effects
*1	Any single occurrence requiring in-patient hospitalization of three or more personnel.
2	Any single occurrence resulting in three or more personnel having Days Away, Restricted or Transferred (DART) cases. (Per 29 CFR Part 1904.7)

<p>*2</p>	<p>Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists, whichever is lower, and that required the administration of medical treatment beyond simple first aid on the same day as the exposure. (29 CFR 1904. 7 (b) (5) (i) and (ii) define “medical treatment” and “first aid.”)</p>
<p>3</p>	<p>Personnel exposure to chemical, biological or physical hazards above limits established by the Occupational Safety and Health Administration (refer to 29 CFR Part 1910) or American Conference of Governmental Industrial Hygienists.</p>
<p>3</p>	<p>Any single occurrence resulting in a serious occupational injury. A serious occupational injury is an occupational injury that:</p> <ul style="list-style-type: none"> a) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; b) Results in fracture of any bone (except simple fractures of fingers, toes, or nose, or a minor chipped tooth); c) Causes severe hemorrhages or severe damage to nerves, muscles, or tendons; d) Damages any internal organ; or e) Causes second – or third degree burns, affecting more than five percent of the body surface.

SUBGROUP B - FIRE/EXPLOSIONS

SIGNIFICANCE CATEGORY

CRITERION

<p>*1</p>	<p>Any unplanned fire or explosion within primary confinement/containment boundaries for nuclear or hazardous material within a facility.</p> <p>Note: PPPL specific documents define what constitutes the primary confinement/containment boundary.</p>
<p>*2</p>	<p>Any unplanned fire or explosion in a nuclear facility that activates a fire suppression system (e.g., halon discharge, sprinkler heads activating), is extinguished by a fire department, or disrupts normal facility operations.</p>
<p>*3</p>	<p>Any unplanned fire or explosion in a non-nuclear facility that:</p> <ul style="list-style-type: none"> a) Activates a fire suppression system, b) Takes longer than 10 minutes to extinguish following the arrival of fire protection personnel, or c) Disrupts normal operations in a high hazard facility.
<p>*4</p>	<p>Any wild land fire (e.g., forest fire, grassland fire) or other fire outside of a DOE facility that has the potential to threaten the facility.</p>

SUBGROUP C – HAZARDOUS ENERGY CONTROL

SIGNIFICANCE CATEGORY

CRITERION

2	Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.
3	Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line pressurized gas). The criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.

GROUP 3 – NUCLEAR SAFETY BASIS

SUBGROUP A - TECHNICAL SAFETY REQUIREMENT VIOLATIONS

SIGNIFICANCE CATEGORY

CRITERION

*1	<p>Any violation of a Hazard Category 1,2, or 3 nuclear facility’s Technical Safety requirement (or Operational Safety Requirement) Safety Limit.</p> <p>Note: Safety Limits are high-level Technical Safety Requirement controls, used infrequently across the DOE Complex. A safety Limit is a limit on process variables associated with those safety class physical barriers, generally passive, that are necessary for the intended facility function and that are required to guard against the uncontrolled release of radioactive materials. (Reference – 10CFR 830,3)</p>
-----------	--

2	<p>Any violation or noncompliance of a Hazard Category 1,2,or 3 nuclear facility’s Technical Safety Requirement (or Operational Safety Requirement) Limiting Control Setting, Limiting Condition for Operation, Administrative Control, or Surveillance Requirement.</p> <p style="padding-left: 40px;">Exception: An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function. (See separate criterion for late surveillance tests below).</p>
3	<p>Any violation or noncompliance of a hazard control specified in a Hazard Category 1,2, or 3 nuclear facility’s DOE approved Documented Safety Analysis (issued pursuant to 10 CFR 830.204 and including Basis for Interim Operation (BIO), etc.), or DOE issued Safety Evaluation Report that are not addressed by Criteria 3A (1) and 3A (2).</p> <p>Exceptions:</p> <ul style="list-style-type: none"> a) An event consisting solely of a violation of a safety management program (e.g., quality assurance, personnel training) cited in the Documented Safety Analysis. b) An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function. (See separate criterion for late surveillance tests below).
4	<p>An event consisting solely of a surveillance test performed after the prescribed surveillance period, and in which the equipment was found to be capable of performing its specified safety function.</p>

SUBGROUP B – DOCUMENTED SAFETY ANALYSIS INADEQUACIES

SIGNIFICANCE CATEGORY

CRITERION

2	<p>Determination of a positive Unreviewed Safety Question (USQ) that reveals a currently existing inadequacy in the documented safety analysis (e.g., Safety Analysis Report (SAR) or Basis for Interim Operation (BIO)).</p>
3	<p>Declaration of a potential inadequacy of the documented safety analysis (a potential positive USQ). (Per 10 CRF 830.203 (g)).</p>

SUBGROUP C – NUCLEAR CRITICALITY SAFETY**SIGNIFICANCE CATEGORY****CRITERION**

*1	A loss of multiple nuclear criticality process-condition controls, where processes include operation, transport, and storage of fissionable materials, such that no valid controls are available to prevent a criticality accident.
2	A loss of one or more nuclear criticality process-condition controls such that an accidental criticality is possible from the loss of an additional process-condition control, where processes include operation, transport, and storage of fissionable materials.

GROUP 4 – FACILITY STATUS

(Note: The criteria below apply to both nuclear and non-nuclear facilities, where applicable.)

SUBGROUP A – SAFETY STRUCTURE/SYSTEM/COMPONENT DEGRADATION**SIGNIFICANCE CATEGORY****CRITERION**

3	Performance degradation of any Safety Class or Safety Significant Structure, System or Component (SSC) that prevents satisfactory performance of its design function when it is required to be operable.
4	Performance degradation of any Safety Class SSC when not required to be operable.

SUBGROUP B – OPERATIONS

SIGNIFICANCE CATEGORY

CRITERION

*2	A Stop Work Order issued by a DOE office.
2	Actuation of a Safety Class Structure, System, or Component (SSC), or its alarms, resulting from an actual unsafe condition. Spurious alarms (e.g., due to electronic noise, radon/thoron decay) should not be reported.
3	Actuation of a Safety Significant Structure, System, or Component (SSC), or its alarms, resulting from an actual unsafe condition. Spurious alarms (e.g., due to electronic noise, radon/thoron decay) should not be reported.
3	Any facility evacuation, not including a precautionary evacuation, in response to an actual event. If the event fell under another reporting criterion, then evacuation should be reported as well by noting multiple reporting criteria for the single occurrence.
4	A facility operational event caused by deviating from a written procedure or using an inadequate procedure resulting in an adverse effect on safety, such as: an inadvertent facility or operations shutdown (i.e., a change of operational mode or curtailment of work or processes), facility or operations shutdown due to alarm response procedures, inadvertent process liquid transfer, or inadvertent release of hazardous material from its engineered containment.
*4	A facility or operations shutdown (i.e., a change of operational mode or curtailment of work or processes) directed by management for safety reasons.
4	A facility or site stand-down resulting from safety reasons reportable as an occurrence or occurrences. Note: This is a secondary reporting criterion, and does not require a separate occurrence report.
4	Any event or condition that would prevent immediate facility or offsite emergency response capabilities.

SUBGROUP C - SUSPECT/COUNTERFEIT AND DEFECTIVE ITEMS OR MATERIALS**SIGNIFICANCE CATEGORY****CRITERION**

3	<p>Discovery of any suspect/counterfeit item or material found in a Safety Class or Safety Significant Structure, System, or Component (SSC).</p> <p>A suspect item or material is one whose documentation, appearance, performance, material, or other characteristics may have been misrepresented by the vendor, supplier, distributor, or manufacturer. A counterfeit item or material is one for which sufficient evidence exists that deliberate misrepresentation has occurred.</p>
4	<p>Discovery of any suspect/counterfeit item or material other than office supplies, office equipment, or household products.</p>
4	<p>Discovery of any defective item or material other than a suspect/counterfeit item or material, in any application whose failure could result in a loss of safety function, or present a hazard to public or worker health and safety</p> <p>A defective item or material is any item or material that does not meet the commercial standard or procurement requirements as defined by catalogues, proposals, procurement requirements as defined by catalogues, proposals, procurement specifications, design specifications, testing requirements, contracts, or like. It does not include parts or services that fail or are otherwise found to be inadequate because of random failures or errors within the accepted reliability level.</p>

GROUP 5 - ENVIRONMENTAL

SUBGROUP A – RELEASES

SIGNIFICANCE CATEGORY

CRITERION

*2	Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility that is about permitted levels and exceeds the reportable quantities. (See specifications in 4- CFR 302 or 40 CFR 355).
2	Any discharge that exceeds 100 gallons of oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. For operations involving oil field crude or condensate, any discharge of 100 barrels or more is reportable under this criterion.
4	Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility that is above permitted levels and exceeds 50 percent of the reportable quantities. (See specifications in 40 CFR 302 or CFR 355)
4	Any release (onsite or offsite) of a hazardous substance, material, waste, or radionuclide from a DOE facility that must be reported to outside agencies in a format other than routine periodic reports. (However, oil spills of less than 10 gallons and with negligible environmental impact need not be reported in ORPS.)

SUBGROUP B – ECOLOGICAL AND CULTURAL RESOURCES

SIGNIFICANCE CATEGORY

CRITERION

2	Any occurrence causing significant impact to any ecological resource for which DOE is a trustee (e.g., destruction of a critical habitat, damage to an historic/archeological site, damage to wetlands.)
---	--

GROUP 6 – CONTAMINATION/RADIATION CONTROL**SUBGROUP A – LOSS OF CONTROL OF RADIOACTIVE MATERIALS****SIGNIFICANCE CATEGORY****CRITERION**

2	Identification of radioactive material offsite due to DOE operation/activities that exceeds applicable DOE-approved authorized limits (see DOE 0 5400.5). This applies to items/areas consisting of radioactive material. This does not apply to items with surface radioactive contamination. See Criterion 6B(1) below for criteria for identification of items with surface radioactive contamination.
2	Loss of radioactive material that exceeds 100 times the specified quantities (see specifications in 10 CFR Part 835, Appendix E) (excluding consumer products such as smoke detectors), or loss of accountability of such material for more than 24 hours. The 24-hour time period begins when the loss of accountability is discovered.
3	Loss of radioactive material which exceeds 1 times and no greater than 100 times the specified quantities [see specifications in 10 CFR Part 835, Appendix E] (excluding consumer products such as smoke detectors) or loss of accountability of such material for more than 24 hours. The 24-hour time period begins when the loss of accountability is discovered.

SUBGROUP B – SPREAD OF RADIOACTIVE CONTAMINATION

SIGNIFICANCE CATEGORY

CRITERION

<p style="text-align: center;">2</p>	<p>Identification of radioactive contamination offsite due to DOE operations/activities that exceeds applicable DOE-approved authorized limits. (See DOE Order 5400.5, if there are none, the values found in 10 CFR Part 835, Appendix D)</p> <p style="text-align: center;">Note: All releases of property containing or potentially containing residual radioactivity are subject to requirements in DOE Order 5400.5. Compliance with 10 CFR Part 835, Appendix D values does not necessarily satisfy the requirements in DOE Order 5400.5.</p>
<p style="text-align: center;">2</p>	<p>Identification of onsite radioactive contamination greater than 100 times the total contamination values (see 10 CFR 835 Appendix D) and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, and controlled areas (see 20 CFR 835.1102 (c)). For tritium, the reporting threshold is 100 times the removable contamination values. (See 10 CFR Part 835, Appendix D)</p> <p>Notes:</p> <ul style="list-style-type: none"> a) This does not apply to contamination from residual radioactive material meeting applicable DOE-approved authorized limits. b) This also does not apply to legacy radioactive contamination, which will be reported under a separate criterion below. c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99

<p style="text-align: center;">3</p>	<p>Identification of onsite radioactive contamination greater than 10 times the total contamination values (see 10 CFR 835 Appendix D) and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, and controlled areas [see 10 CFR 835.1102 (c)]. For tritium, the reporting threshold is 10 times the removable contamination values. (See 10 CFR Part 835, Appendix D)</p> <p>Notes:</p> <ul style="list-style-type: none"> a) This does not apply to contamination from residual radioactive material meeting applicable DOE-approved authorized limits. b) This also does not apply to legacy radioactive contamination, which will be reported under a separate criterion below. c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99.
<p style="text-align: center;">4</p>	<p>Identification of onsite legacy radioactive contamination greater than 10 times the total contamination values (see 10 CFR 835 Appendix D) and that is found outside of the following locations: Contamination Areas, High Contamination Areas, Airborne Radioactivity Areas, Radiological Buffer Areas, and controlled areas (see 10CFR 835.1102 (c)). For tritium, the reporting threshold is 10 times the removable contamination values. (See 10 CFR Part 835, Appendix D)</p> <p>Notes:</p> <ul style="list-style-type: none"> a) Legacy radioactive contamination is radioactive contamination resulting from historical operations that are unrelated to current activities. b) This does not apply to contamination from residual radioactive material meeting applicable DOE- approved authorized limits. c) The exclusion from reporting contamination in a Radiological Buffer Area applies only when the area has been established next to a Contamination Area, High Contamination Area or Airborne Radioactivity Area and its exit requirements have adopted guidance from Article 338.2 of DOE-STD-1098-99.

SUBGROUP C – RADIATION EXPOSURE**SIGNIFICANCE CATEGORY****CRITERION**

*1	Determination of a dose that exceeds the specified limits. [See specifications in 10 CFR Part 835, Subpart C, Occupational Radiation Protection or DOE 0 5400.5, Chapter II, Item 1 (i.e., 100 mrem Total Effective Dose Equivalent (TEDE) for offsite exposures to a member of the public)].
2	Any unmonitored exposure that exceeds the values for providing personnel dosimeters and bioassays. [See 10 CRF 835.402 (a) or 10 CFR 835.402 (c)]
3	Any single occupational exposure that exceeds an expected exposure or dosimetry result by: (1) 500 mrem Effective Dose Equivalent (CEDE), or (2) the greater of 10% or 100-mrem effective dose equivalent due to external exposure.
3	Determination of an estimated annual does that exceeds 10 mrem Total Effective Dose Equivalent (TEDE) for offsite exposures to a member of the public from air pathways only.

SUBGROUP D – PERSONNEL CONTAMINATION**SIGNIFICANCE CATEGORY****CRITERION**

*2	Any occurrence requiring offsite medical assistance for contaminated personnel, including transporting a person to an offsite medical facility or bringing offsite medical personnel onsite to perform treatment or decontamination.
2	Identification of personnel or clothing contamination offsite due to DOE operations that exceeds the values for total contamination. (See 10 CFR Part 835, Appendix D).
4	Any onsite contamination of personnel or clothing (excluding site-provided protective clothing) that exceeds 10 times the values for total contamination (see 10 CFR Part 835, Appendix D). The contamination level must be based on direct measurement and not averaged over any area. This criterion does not apply to tritium contamination.

GROUP 7 – NUCLEAR EXPLOSIVE SAFETYNot Applicable

GROUP 8 – TRANSPORTATION

SIGNIFICANCE CATEGORY

CRITERION

<p>*1</p>	<p>Any offsite transportation incident involving hazardous materials that would require immediate notice (See 49 CFR Part 171.15), namely:</p> <ul style="list-style-type: none"> a) As a direct result of hazardous materials: <ul style="list-style-type: none"> (i) A person is killed, (ii) A person received injuries requiring hospitalization, (iii) Estimated property damage exceeds \$50,000, (iv) An evacuation of the general public occurs lasting 1 hour or more, (v) One or more transportation arteries or facilities are closed or shut down for 1 hour or more, or a) Fire, breakage, spillage, or suspected radioactive contamination occurs involving shipment of radioactive materials, or b) Fire, breakage, spillage, or suspected contamination occurs involving shipment of infectious substances (etiologic agents), or c) There has been a release of a marine pollutant in a quantity exceeding 450 liters (119 gallons) for liquids or 400 kilograms (882 pounds) for solids, or d) The operational flight pattern or routine of an aircraft is altered.
<p>3</p>	<p>Any offsite transport of hazardous material, including radioactive material, whose quantity or nature (e.g., physical or chemical composition) is different than intended, such that the receiving organization’s operations were impacted/disrupted or the transport resulted in the initiation of corrective actions by the originating organization.</p>
<p>4</p>	<p>Any offsite transport of hazardous material, including radioactive material, whose quantity or nature (e.g., physical or chemical composition) is different than intended, such that the receiving organization’s operations were impacted/disrupted or the transport resulted in the initiation of corrective actions by the originating organization.</p>
<p>4</p>	<p>Any packaging or transportation activity involving the onsite release of radioactive materials, etiologic agents, hazardous substances, hazardous waste, or marine pollutants.</p>

GROUP 9 – NONCOMPLIANCE NOTIFICATIONS**SIGNIFICANCE CATEGORY****CRITERION**

3	<p>Any enforcement action (other than associated with the Price Anderson Amendment Act) involving 10 or more cited violations, and/or an assessed fine \$10,000 or more</p> <p>Note: This criterion applies to the enforcement action as initially received from the regulator. Thus the enforcement action would still be reportable even if the fine is later reduced below \$10,000 or the number of violations reduced below 10.</p>
4	<p>Any written notification from an outside regulatory agency that a site/facility is considered to be in noncompliance with a schedule or requirement (e.g., Notice of Violation, Notice of Intent to Sue, Notice of Noncompliance, Warning Letter, Finding of Violation, Finding of Alleged Violation, Administrative Order, or a similar type of notification or enforcement action).</p>

GROUP 10 – MANAGEMENT CONCERNS/ISSUES

SIGNIFICANCE CATEGORY

CRITERION

<p>2</p>	<p>Any event resulting in the initiation of a Type A or B accident investigation. (See DOE 0 225,1A, <i>Accident Investigation</i>)</p> <p>Note: This reporting criterion may raise the significance category of an occurrence already reported under separate criteria. Multiple reporting criteria should be noted when appropriate.</p>
<p>1-4†</p>	<p>An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken.</p> <p>†Note: AN SC 1 occurrence report required Prompt Notification.</p>
<p>1-4†</p>	<p>A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken.</p> <p>†Note: AN SC 1 occurrence report required Prompt Notification.</p>
<p>*4</p>	<p>Any occurrence that may result in a significant concern by affected state, tribal, or local officials, press, or general population; that could damage the credibility of the Department; or that may result in inquiries to Headquarters</p>
<p>*4</p>	<p>Any occurrence of such significant immediate interest to offsite personnel and organizations that it warrants prompt notification to the DOE Headquarters Operations Center (DOE HQ OC), and which is not already designated elsewhere in this set of reporting criteria to have prompt notification [denoted by having an asterisk (*) next to the significance category].</p>

SECTION 3. INFORMATION SECURITY REQUIREMENTS

Occurrence Reports containing any classified information, Unclassified Controlled Nuclear Information (UCNI), or other controlled information must not be entered the ORPS database. Contractors must ensure that a review is performed prior to ORPS data entry to preclude contamination of the database with classified, UCNI, official use only, or other controlled information.

Any ORPS report determined to be classified or controlled by current classification or control guidance must be submitted using the appropriate secure transmission means. However, with the exception of entry into the ORPS database, all other reporting requirements identified in the Manual must be met. In addition, an unclassified version of the Occurrence Report that has been sanitized of all controlled information must be submitted to ORPS with the required time frames specified in Section 1.

Implementing procedure should identify the requirements for distribution of reports containing classified or controlled information. In those instance where UCNI data may still be present in the ORPS database, appropriate security procedures related to the handling of such data need to be followed.

<p>PRINCETON PLASMA PHYSICS LABORATORY</p>	<p>PROCEDURE</p>	<p>No. GEN-006 Rev 5 Attachment 2</p>
<p>Reporting and Documentation Criteria</p>		<p>Page 1 of 3</p>

REPORTING AND DOCUMENTATION CRITERIA

Categorization

PPPL shall categorize all occurrences, except Operational Emergencies, within two (2) hours of discovery. Reportable occurrences shall be categorized in accordance with the significance categories described in attachment 2.

1. Operational Emergencies (OE) Operational Emergencies are the most serious occurrences and must be reported in accordance with DOE O 1515.1a, *Comprehensive Emergency Management System* and the prompt notification requirements. Written Occurrence Reports, however must be completed in accordance with this procedure.
2. Significance Category 1. Occurrences in this category are those that are not Operational Emergencies and that have *significant impact* on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interest.
3. Significance Category 2. Occurrences in this category are those that are not Operational Emergencies and that have *moderate impact* on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interest
4. Significance Category 3. Occurrences in this category are those that are not Operational Emergencies and that have *minor impact* on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interest.
5. Significance Category R. Occurrences in this category are those identified as recurring, as determined from the periodic performance analysis of occurrences across the Laboratory.

Prompt Notification

The PPPL Facility Manager shall notify the DOE in accordance with the requirements below as soon as practical, but no later than two (2) hours after categorization:

1. Category 1 - require prompt notification to DOE HQ OC and Facility Representative.
2. Category 2 - require prompt notification to the Facility Representative and to DOE HQ OC if directed by the Facility Representative.
3. Category 3 - require prompt notification to the Facility Representative.
4. Category 1*-4* - require prompt notification to the DOE HQOC and the Facility Representative.

PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No. GEN-006 Rev 5 Attachment 2
Reporting and Documentation Criteria		Page 2 of 3

Reporting

The PPPL Facility Manager must E-Mail DOE HQ OC when an occurrence requiring DOE HQ OC prompt notification is required. The E-Mail will be followed up by a phone call to DOE HQ OC to ensure receipt of the notification and respond to questions concerning the E-Mail. The prompt notification must include:

- a) Occurrence Significance Category
- b) Location and description of the event
- c) Date and time of discovery
- d) Damage and/or casualties
- e) Impact of the event on other activities and operations
- f) Protective actions taken or recommended
- g) Weather conditions at the scene
- h) Level of media interest at scene/facility/site
- i) Other notifications made

Written Notifications

The PPPL Facility Manager shall submit a written report for entry into the ORPS Processing System. Notification Reports shall be submitted in accordance with the following schedule:

1. Operational Emergencies and SC1 Occurrences, before the close of the next business day from the time of categorization but not to exceed 80 hours.
2. Significance Category 2 and Significance Category R Occurrences, before the close of the next business day from the time of categorization.
3. Significance Category 3 Occurrences, no later than close of business on the second business day from the time of categorization.
4. Significance Category 4 Occurrences. Only a short form report is required by close of the second business day from the time of categorization.

Occurrence Report Closure

PPPL's Final Report must be submitted within 45 calendar days from the date of initial categorization. If the report cannot be completed within 45 calendar days an update report must be submitted. The update must detail the reason for delay and an estimated date for final submittal.

A Short Form Report shall be submitted for all Significance Category 4 Occurrences. This report satisfies all written reporting requirements for these occurrences.

PRINCETON PLASMA PHYSICS LABORATORY	PROCEDURE	No. GEN-006 Rev 5 Attachment 2
Reporting and Documentation Criteria		Page 3 of 3

Corrective Actions

PPPL shall track ORPS corrective actions in its PPPL QA Tracking System until closure, including verification, or sampling of corrective actions to prevent recurrence at the facility level.

Performance Analyses and Identification of Recurring Occurrences

PPPL shall conduct at least quarterly analyses of events during the past 12-month period to determine if trend exist. The analysis shall be conducted for all significance categories, plus PPPL non-reportable events in order to prevent more serious events from occurring. PPPL shall report identified trends to PPPL and Local DOE Management.

Occurrences categorized as recurring must be submitted by PPPL as a new Occurrence Report. The report will be submitted under Significance Category R.

Training

Facility Managers are required to complete the training requirements for PPPL ORPS program. The training shall include:

- a. Indoctrination in the objectives of the process for reporting occurrences,
- b. Identification of reportable occurrences and their categorization, notification and associated reporting requirements; analysis, determination, and coding of causes; identification of implications; management of corrective actions.
- c. Utilization of ORPS, including impute of occurrence reports and obtaining information from the database.
- d. Utilization of the Causal Analysis Tree.

**Occurrence Reporting Fields
ORPS Report**

Field Name	Instructions
Facility/Personnel Information	
*1. Occurrence Report Number	<p>The occurrence report number is automatically generated by the system. It consists of the following:</p> <ul style="list-style-type: none"> • DOE Field Office • Area Office (if applicable) • DOE contractor • Facility • Calendar Year the occurrence was first reported • Sequential number of the occurrence by facility <p>Items are separated from each other by a dash.</p> <p>A temporary number is assigned when a Notification Report is first created. When the Notification Report is successfully transmitted, a permanent number will be automatically generated by the ORPS system, and may not be modified.</p>
*2. Facility Name	<p>Select the Facility Name from the drop-down menu. Note, only facilities that you have authority with will show up in this drop-down menu.</p>
*3. Facility Function Code	<p>Select the Facility Function code from the drop-down menu that best describes the activity/function performed at the facility selected. Only one selection is allowed.</p> <p>Facility Functions are listed below:</p> <ul style="list-style-type: none"> 01 - Plutonium Processing and Handling 02 - SNM Storage 03 - Explosive 04 - Uranium Enrichment 05 - Uranium Conversion/Processing and Handling 06 - Irradiated Fissile Material Storage 07 - Reprocessing 08 - Nuclear Waste Operations/Disposal 09 - Tritium Activities 10 - Fusion Activities 11 - Environmental Restoration Operations 12 - Category "A" Reactors 13 - Category "B" Reactors 14 - Solar Activities 15 - Fossil and Petroleum Reserves

Field Name	Instructions
	16 - Accelerators 17 - Laboratory (For search only) 17A - Laboratory - Analytical 17B - Laboratory - Research & Development 18 - Power Marketing Administration 99 - Balance-of-Plant (For search only) 99A - Balance-of-Plant - Offices 99B - Balance-of-Plant - Machine shops 99C - Balance-of-Plant - Site/outside utilities 99D - Balance-of-Plant - Safeguards/security 99E - Balance-of-Plant - Storage (except SNM) 99F - Balance-of-Plant - Laundries 99G - Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
*4. Site Name	This field is automatically generated by the system, and indicates the logged users' site. This field may not be modified.
*5. Manager/Designee	Enter the name, title, and phone number of the responsible facility manager or designee who approved this report. This field is required for all reports.
*6. Manager Phone	Enter a telephone number, including area code, for the Facility Manager. Phone numbers are displayed as (AAA) PPP-NNNN. Example: 208/555-1212 This field is required for all reports.
*7. Job Title	Enter the specific job title of the Facility Manager.
*8. Originator/Transmitter	This field is automatically generated by the system, and displays the user ID of the logged in user.
*9. Originator Phone	This field is automatically generated by the system, and displays the telephone number of the logged in user.
*10. Originator/Title	This field is automatically generated by the system, and displays the title of the logged in user.
*11. Division/Project	Identify organization responsible for the facility at which the occurrence took place. This field is required for all reports.

<p>*12. Secretarial Office</p>	<p>Select the DOE Secretarial/Power Administration Office to which this facility is operationally responsible from the drop-down menu.</p> <p style="padding-left: 40px;"> BV – Bonneville Power Administration EE - Energy Efficiency and Renewable Energy EH - Environment, Safety & Health EI - Energy Information Administration EM - Environmental Management FE - Fossil Energy ME – Management, Budget and Evaluation NA – National Nuclear Security Administration NE - Nuclear Energy, Science and Technology NP - New Production Reactor (no new reports) RW - Civilian Radioactive Waste Management SC - Science SE – Southeastern Power Administration SO - Security SW – Southwestern Power Administration UE - Uranium Enrichment (no new reports) WA – Western Area Power Administration </p> <p>Only one Secretarial Office/Power Administration may be selected. This field is required for all reports.</p>
<p>*13. System/Building/Equipment</p>	<p>Identify all systems, equipment, or structural items involved in the occurrence, as applicable. In addition, in the case of component failures or defective parts or materials, provide such information as the manufacturer, model number, and size.</p>
<p>#14. Authorized Classifier/ Reviewing Official</p>	<p>N/A</p>
<p>#15. Classification Date</p>	<p>N/A</p>
<p>*16. UCNI</p>	<p>When required and when appropriate UCNI guidance is available, a reviewing official needs to make a final determination that the report contains (enter "Y" for Yes) or does not contain (enter "N" for No) UCNI. Where appropriate guidance is not available, a reviewing official should make a preliminary review determination that the report may contain UCNI (enter "Y" for Yes) or does not contain UCNI (enter "N" for No).</p>

*17. Plant Area	Indicate the name of the site-specific plant area (e.g., D-Site Mock-Up) where the occurrence took place. This field is required for all reports.
Important Date and Time Information	
*18. Discovered Date/Time	Enter the date and time when the facility discovered the event or condition being reported. Date format is MM/DD/YYYY. Example: June 3, 1996 --> 06/03/1996 The time format is military time: hhmm, with midnight represented as 0000 on the second day. These fields are required for all reports.
*19. Categorized Date/Time	Enter the date and time when the Facility Manager determined that the event or condition constituted a Reportable Occurrence and determined its category (Significance Category OE or 1-4). These fields are required for all reports.
Occurrence Description	
*20. Subject/Title of Occurrence	Enter a brief title or description (140 characters or less) that best details the nature, cause, and result of the occurrence. This field is required for all reports.
*21. Reporting Criteria	Select one or more Reporting Criterion/Criteria. All of the specific reporting criteria applicable for an occurrence should be identified. NOTE: The Significance Category field will contain the highest significance category associated with the selected criteria. For example, if criteria with significance categories 4, 3, and 1 were selected, then the significance category would be 1.
*22. Significance Category	This field is automatically assigned by the system and is dependent on the Reporting Criterion/Criteria. Significance Categories include OE (emergency), 1, R, 2, 3, and 4, with OE being the most significant and 4 the least significant. The Significance Categories are defined as follows: Category OE: Operational Emergency Occurrences are the most serious occurrences and require an increased alert status for onsite personnel and, in specified cases, for offsite authorities. Category 1: Occurrences in this category are those that are not Operational Emergencies and that have a <i>significant impact</i> on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interests Category R: Occurrences in this category are those identified as <i>recurring</i> , as determined from the periodic performance analysis of occurrences across a site.

	<p>Category 2: Occurrences in this category are those that are not Operational Emergencies and that have a <i>moderate impact</i> on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interests.</p> <p>Category 3: Occurrences in this category are those that are not Operational Emergencies and that have a <i>minor impact</i> on safe facility operations, worker or public safety and health, regulatory compliance, or public/business interests.</p> <p>Category 4: Occurrences in this category are those that are not Operational Emergencies and that have <i>some impact</i> on safe facility operations, worker or public safety and health, public/business interests.</p>
<p>23. Recurring Event</p>	<p>If this is a recurring event, check this box. Otherwise leave it blank. When this box is checked, the significance category will be set to “R” automatically regardless of what significance category is derived from the selected reportable criteria.</p>
<p>*24. Subcontractor Involved</p>	<p>If a subcontractor is involved in this occurrence, choose <i>Yes</i>. Otherwise choose <i>No</i>. If <i>Yes</i> is selected, enter the name of the subcontractor(s). This field is required for all reports.</p>
<p>*25. Description of Occurrence</p>	<p>The following instructions should be followed when entering the description of the occurrence:</p> <ul style="list-style-type: none"> a. The first paragraph of the Occurrence Description should relay the essential nature of the event (i.e., a summary of the occurrence in newspaper style). b. All information should be clear and succinct. Avoid redundant and unnecessary text, and lengthy “log book” accounts, unless a discussion of the event in chronological order is considered essential to understanding the event. c. Complex and more significant occurrences should warrant a greater level of detail. Significance Category 4 occurrences would likely need only a short paragraph under Occurrence Description. However, all reports should present enough information so that the general reader understands why the event needs to be reported and what the effect is. d. If used, acronyms should be initially spelled out.

- e. Unless necessary to record and explain the event (e.g., suspect/counterfeit items or material), use general descriptions of equipment, procedures, etc., rather than presenting lengthy detailed titles and the numbers and letters assigned to those items.
- f. Quantify the level of contamination, dose, release, and damage (e.g., estimate the acres of wild land burned) when possible, instead of merely stating a reportable limit was exceeded.

The type of information to be provided in the description includes, but is not limited to, the following:

- The method of discovery;
- Any component failures and the failure mode;
- Any personnel errors involved, including the type and result of the error;
- Any procedural problem encountered;
- The response of any automatic or manual safety systems and the signals which initiated and terminated their operation;
- The duration of any failures;
- Operator actions that affected the course of events; and
- The loss of any safety equipment.

This field is required for all reports.

Notifications Made	
#26. DOE HQ OC Notifications	Enter the date and time when the DOE HQ Operations Center was notified and the name and organization of the person notified. These fields are required for all reports that are categorized as Operational Emergencies and Significance Category 1 occurrences. The field is also required for Significance Category 2 occurrences as directed by the Field Office. In addition, the field is required for specific Significance Category 2, 3, and 4 occurrences identified with an asterisk next to the reporting criterion.
#27. Other Notifications	Enter the date(s) and time(s) of notification of state and local officials or other agencies and the name(s) and organization(s) of the individual(s) notified.
Facility Information at Time of Occurrence	
*28. Operating Conditions	Describe the operational status of the facility or equipment at the time of the occurrence including, for example, pertinent temperatures, pressures, or other parameters necessary for evaluation of the occurrence and its consequences. If said information is not applicable, enter "Does not apply". This field is required for all reports.
*29. Activity Category	Select the activity that best describes the ongoing activity at the time of the occurrence. This field is required for all reports. 01 - Construction 02 - Maintenance 03 - Normal Operations (other than Activities specifically listed in this Category) 04 - Start-up 05 - Shutdown 06 - Facility/System/Equipment Testing 07 - Training 08 - Transportation (For search only) 08A - Transportation Onsite 08B - Transportation Offsite 09 - Emergency Response 10 - Inspection/Monitoring 11 - Facility Decontamination/Decommissioning 12 - Research

<p>*30. Immediate Actions Taken</p>	<p>Describe the immediate or remedial actions taken to return the facility, system, or equipment item to service; to correct or alleviate the anomalous condition; and to record the results of those actions. These may include temporary measures to keep the facility in a safe standby condition or to permit continued operation of the facility without compromising safety until a more thorough investigation or permanent solution can be affected. This field is required for all reports.</p>
<p>Cause Information</p>	
<p>#31. Causes</p>	<p>Select all of the codes from the Causal Analysis Tree that best represent the causes of the occurrence. If you select A3 (Human Factors) as the Cause Code, select any associated causes (couplets) from the couplet selection list or choose a better couplet for the associated occurrence. This field is required for Final</p>
<p>#32. Description of Cause</p>	<p>Discuss the causes of the occurrence to include all causes and the corrective actions identified, including causal analysis contributing to a recurring event. Do not repeat a description of the occurrence, but discuss the results of the causal analysis. The root cause analysis methodology used should be identified. A detailed description of the corrective actions is required to demonstrate that the identified actions will adequately address the cause(s) of the problem. This field is required for all Final reports, except Short Form Reports.</p>
<p>Evaluations</p>	
<p>#33. Evaluation by Facility Manager</p>	<p>With the information available, the Facility Manager should provide his or her evaluation of the occurrence and its effect or possible effect on the plant, system, program, etc. The Facility Manager may later supplement this evaluation with additional entries in Update reports or in the Update/Final report. This field is required for all Notification reports where "Further Evaluation Required" is "Yes" and "Before Further Operation" is "Yes". It is also required for all Update and Final reports, but it is optional for Short Form Reports.</p>

<p>*34. Further Evaluation Required</p>	<p>If this occurrence will require further evaluation, choose "Yes". Otherwise choose "No". For Cancelled and Update/Final Reports, "Further Evaluation Required" should be "No". This field is required for Notification, Update, Final, and Short Form Reports.</p> <p>If further evaluation is required, specify if this occurrence will require further evaluation before further operation. For Cancelled and Update/Final Reports, "Before Further Operation?" should be "No". This field is required for all reports where "Further Evaluation Required" is "Yes".</p> <p>If further evaluation is required before further operation, enter the name of the person who will perform further evaluation on this occurrence and the date when the further evaluation will be completed.</p>
<p>Deficiencies, Lessons Learned, and Corrective Actions</p>	
<p>#35. Integrated Safety Management (ISM)</p>	<p>Enter one or more ISM codes from the following list to identify an observed weakness(es) in the facility's implementation of the ISM program (e.g., failure to properly define the work scope, or failure to perform an adequate activity level hazards analysis). Available ISM codes are:</p> <ul style="list-style-type: none"> 1 – Define Scope of Work - Missions are translated into work, expectations are set, tasks are identified and prioritized, and resources are allocated. 2 – Analyze the Hazards - Hazards are associated with the work identified, analyzed, and categorized. 3 – Develop and Implement Hazard Controls - Applicable standards and requirements are identified and agreed-upon, controls to prevent/mitigate hazards are identified, the safety envelope is established, and controls are implemented. 4 – Perform Work Within Controls - Readiness is confirmed and work is performed safely. 5 – Provide Feedback and Continuous Improvement - Feedback information on the adequacy of controls is gathered, opportunities for improving the definition and planning of work are identified and implemented, line and independent oversight is conducted, and, if necessary, regulatory enforcement actions occur. 6 – N/A (Not applicable to ISM Core Functions as determined by management review) - Items that do not fall into the realm of ISM Core Functions; e.g., Natural Phenomena, Wild Fires, Counterfeit/Suspect Parts, Notifications of non-compliance (Federal, State, Local), Legacy Issues that could not have been

	<p>anticipated, End of Life equipment failures where maintenance is not an issue, etc.</p> <p>This field is required for all Final reports, including Short Form Reports.</p>
#36. Lessons Learned	<p>Describe what lessons can be learned from this occurrence, in order to help prevent similar events from happening.</p> <p>This field is required for Final reports and optional for Short Form Reports.</p>
#37. Similar Occurrence Reports	<p>Indicate by their report numbers any similar occurrence(s) of which you are aware for this facility or other facilities, including similar occurrences contributing to a recurring event.</p> <p>This field is required for Final reports and optional for Short Form Reports.</p>
#38. User Defined Fields (two of them)	<p>These optional fields can be used to store facility-specific information They cannot exceed 124 characters in length for each field.</p>
#39. Corrective Actions	<p>PPPL Facility Manager shall notify the QA Representative of the corrective actions designed to resolve the issues identified in the ORPS. A complete description of the CA and the target date when completion of the CA is anticipated shall be entered into the Corrective Action System. A complete list of corrective actions should be included in the report to ensure it can stand on its own (i.e., reviewers do not have to search for other reports, etc).</p> <p>Corrective Actions are required for Final reports and optional for Short Form Reports.</p>

Line Management Comments	
<p>#40. Facility Representative Comments</p>	<p>The Facility Representative or designee can provide his or her evaluation of the occurrence, including an evaluation of the initial and proposed corrective actions and any follow-up by the facility personnel, and can describe any other actions that DOE has taken since the occurrence. The Facility Representative may supplement such information with subsequent additional entries, as appropriate. After completing the input, the Facility Representative's name and date will be automatically entered by ORPS. If a Final Report is being rejected, the Facility Representative should use this space to indicate why. This field is optional on all occurrence report types except for reports that are already Final, including Short Form Reports. This field is required only on Final Reports rejected by the Facility Representative.</p>
<p>#41. Program Manager Comments</p>	<p>The Program Manager or designee can provide his or her evaluation of the occurrence, including an evaluation of the initial and proposed corrective actions and any follow-up, and can describe any other actions that DOE has taken since the occurrence. The Program Manager may include additional information, as appropriate. After completing the input, the Program Manager's name and date will be automatically entered by ORPS. If a Final Report is being rejected, the Program Manager should use this space to indicate why. This field is optional on all occurrence report types except for reports that are already Final, including Short Form Reports. This field is required only on Final Reports rejected by the Program Manager.</p>

ORPS CONTACT NUMBERS:

- | | | |
|---|-----------------------|--------------------|
| 1. Duty Facility Manager | <u>1-800-759-7243</u> | PIN Number 8675334 |
| 2. Alternate Facility Manager | <u>1-800-759-7243</u> | PIN Number 5407834 |
| 3. Deputy Director | <u>1-800-759-7243</u> | PIN Number 2381950 |
| 4. DOE Facility Representative
Leif Dietrich | <u>1-888-596-7002</u> | Direct Dial |
| 5. Alternate DOE Facility Rep
Jeff Makiel | <u>1-800-759-7243</u> | PIN Number 1350666 |

DOE Headquarters Emergency Operations Center

E-MAIL	doehqeoc@oem.doe.gov
Operational Emergencies	1-202-586-8500
ORPS Notifications	1-202-586-8100

OTHER KEY NUMBERS

Greg Pitonak DOE	1- 800-759-7243	PIN Number 2374317
Jerry Faul DOE, Manager	1- 609-658-2471	Cell Phone
PPPL Emergency Number	3333	
PPPL Communications Officer	609-243-2536 or 2537	
ESU Command Van	609-658-1309	
Shift Supervisor	2193, 2198 1-800-759-7243	PIN Number 2179512