

OCCURRENCE REPORT (OR) TEMPLATE SAND2015-6838R UPDATED 1/1/12 FOR DOE O 232.2

DOE O 323.2, Occurrence Reporting and Processing Operations Experience for Operational Emergency (OE) and Significance Category (SC) R, 1, 2, 3, and 4 Reports

The instructions included at the end of the template will assist you in entering the appropriate data in each field.

- This template is a Word template. Save it as you would any other Word file.
- Use the tab key or your mouse to navigate within the template. Clicking on the gray areas will activate the pull-down menus.
- Instructions for this template are included at the end of the document.
- When you are ready to submit this Occurrence Report, please e-mail it to the [Occurrence Reporting Representatives](#).

*Remember to have a Derivative Classifier (DC) review your
Occurrence Report prior to submission*

*Print the first page of the template, have a DC sign and date on lines
14A and 14B, and fax to 845-2391 or email to jjroger@sandia.gov*

THE OCCURRENCE MANAGEMENT TEAM

NEW MEXICO:

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Occurrence Report for OE, SC 1, R, 2, 3, and 4

Notification Update Final

Those fields highlighted in yellow are required for Notification reports.

Both yellow and blue are required for Final reports.

The shaded fields do not require input.

1. Occurrence Report Number: (This field is populated by DOE ORPS.)

2. Facility Name: (This field is populated by DOE ORPS.)

3. Facility Function Code: Please See Next Drop Down for More Selections
99G - Balance-of-Plant - Infrastructure (Other)

4. Site Name: Sandia National Laboratories - SS

5. Facility Manager/Designee: (Name) Margie Marley

6. Telephone No.: 5058457600

7. Job Title: Center 4800 ES&H and S&S Coordinator

8. Originator/Transmitter: (This field is populated by DOE ORPS.)

9. Originator Phone #: (This field is populated by DOE ORPS.)

10. Originator Title: (This field is populated by DOE ORPS.)

11. Division NMFAC

11A. Project NMFAC/858K Sump

11B. Senior Manager of Org. Owning the Occurrence Anthony M. Baca Org. 4840

12. Secretarial Office: (This field is populated by DOE ORPS.)

13. System/Equipment: Building Mechanical System - Sump

13A. Building: 858K

13B. Room Number: Sump

13C. Additional Location Description:

13D. EOC Event Number: 38366

14. Derivative Classifier: (Print Name) John Norwalk

14A. Derivative Classifier Signature:

14B. Classification Date: Click here to enter a date.

15A. Classification Level: Unclassified ***The classification level must be unclassified.***

16. UCNI? Yes No ***Per 2003 DOE OR Requirements, ORs must not contain UCNI.***

17. Tech Area (Plant Area): Tech Area I

18. Discovery Date/Time: 8/12/2015 (mm/dd/yyyy) Time: 05:32 (hhmm)

19. Categorization Date/Time: 8/12/2015 (mm/dd/yyyy) Time: 1148 (hhmm)

20. Subject/Title of Occurrence: Sump Overflowed at Building 858K

20A. Is this project/activity funded by the American Recovery and Reinvestment Act (ARRA)?

Yes No

21. Reporting Criteria – Select up to 3:

An asterisk (*) beside the Reporting Criteria denotes [Prompt Notification](#).

Please refer to the [OR Criteria Matrix](#) for reporting criteria definitions.

(SigCat – Significance Category)

GROUP 1. OPERATIONAL EMERGENCIES		
GROUP 2. PERSONNEL SAFETY AND HEALTH		
SUBGROUP A – OCCUPATIONAL INJURIES	SUBGROUP B – OCCUPATIONAL EXPOSURE	SUBGROUP C – FIRES
SUBGROUP D – EXPLOSIONS	SUBGROUP E – HAZARDOUS ELECTRICAL ENERGY CONTROL	SUBGROUP F – HAZARDOUS ENERGY CONTROL (OTHER THAN ELECTRICAL)
GROUP 3. NUCLEAR SAFETY BASIS		
SUBGROUP A – TECHNICAL SAFETY REQUIREMENT AND OTHER CONTROL VIOLATIONS	SUBGROUP B – DOCUMENTED SAFETY ANALYSIS INADEQUACIES	SUBGROUP C – NUCLEAR CRITICALITY SAFETY CONTROL VIOLATIONS
GROUP 4. FACILITY STATUS		
SUBGROUP A – SAFETY STRUCTURE/SYSTEM/ COMPONENT DEGRADATION (NUCLEAR FACILITIES)	SUBGROUP B – OPERATIONS	SUBGROUP C – SUSPECT/ COUNTERFEIT AND DEFECTIVE ITEMS OR MATERIAL
GROUP 5. ENVIRONMENTAL		
SUBGROUP A – RELEASES (4) - SigCat 4	SUBGROUP B – ECOLOGICAL AND CULTURAL RESOURCES	
GROUP 6. CONTAMINATION/RADIATION CONTROL		
SUBGROUP A – LOSS OF CONTROL OF RADIOACTIVE MATERIALS	SUBGROUP B – SPREAD OF RADIOACTIVE MATERIALS	
SUBGROUP C – RADIATION EXPOSURE	SUBGROUP D – PERSONNEL CONTAMINATION	
GROUP 7. NUCLEAR EXPLOSIVE SAFETY	GROUP 8. TRANSPORTATION	
GROUP 9. NONCOMPLIANCE NOTIFICATIONS	GROUP 10. MANAGEMENT CONCERNS/ISSUES	

22. Significance Category (SigCat): Significance Category 4

23. (For Occurrence Management Use Only)

Recurring Event Yes No

24. SNL Subcontractor?: Yes No

24A. If Subcontractor, list company name: Not Applicable

24B. Regulatory non-compliance (If Reporting Criteria Group 9 is selected)

- i. List the amount of the initial assessed fine: Not applicable
- ii. List the amount of the final fine if different from the initial fine: Not applicable

25. Description of Occurrence: At approximately 0515 hours on Wednesday, August 12, an employee observed water flowing on the pavement adjacent to the 858K sump. The worker notified the Emergency Operations Center Incident Commander at 0532 hours. Within one hour of the notification Mechanical Maintenance isolated the problem and stopped the flow. The actual time the sump began to overflow is not known. However, the last time the equipment was observed operating properly was at 1700 hours the previous day, Tuesday, August 11. Using this data point as the earliest possible start time, a total release volume was conservatively estimated to be ##### gallons. The overflow included CW-8800, a scale inhibitor, at a concentration of ##### ppm and SAFETYBROM 6300, a biocide, at a concentration of ##### ppm.

Overflow discharge likely made it into the storm drainage system, as there is a storm drain located northwest of the cooling towers. The composition and concentrations of the water treatment chemicals in the overflow discharged to the drainage system, did not pose a hazard to surface water, ground water or the environment. The decision to report this incident to NMED is based on information that the water released to the environment contained these standard water treatments. The groundwater level at the site is in excess of three hundred feet and there are no wells, public or private, in the vicinity of the release. There is no threat to surface water and no evidence of any threat to ground water, human health and safety, plant and/or animal life or the environment.

It is possible the water level sensor on the sump may have failed because the alarm was not activated when the water level exceeded the intended operational level. Further analysis of the reason for the sensor failing is being completed.

26. & 27. DOE/HQ, NNSA/SSO, and Other Notifications:

Once event occurs, two calls must **immediately** be made:

1. DOE SSO Facility Representative (FR). Speak to the FR **in person** and inform them of a potential occurrence that has not yet been categorized. This notification must be made person-to-person, not via voice message. If you cannot reach your FR, contact another FR (DOE FR [Contact List](#)).
2. Call 911 or 311. Document the event number, and then contact 311 after the event is under control and inform them of the event status.

Once categorized, again contact the SSO FR and inform them of the categorization criteria.

Also ensure the following individuals are notified: Management involved, ES&H Coordinator, OR Representative.

Date	Time	Person Notified	Organization
8/12/2015		FR (must be verbal contact, NOT e-mail or voice message) Name:	
Click here to enter a date.		EOC	4136
Click here to enter a date.			
Click here to enter a date.			
Click here to enter a date.			
Click here to enter a date.			
Click here to enter a date.			

28. Operating Conditions of Facility at Time of Occurrence: Normal Operations

29. Activity Category: 03 - Normal Operations

30. Immediate Actions Taken and Results: The EOC notified FMOC Mechanical Maintenance and a Facilities team member responded immediately to isolate the problem and shut the make up water off.

30A. Critique/Fact Finding Performed: 8/13/2015

39. Corrective Actions

Attach additional sheets as needed.

1. Target Completion Click here to enter a date.	Actual Completion Click here to enter a date.	Owning Dept:	Owner:
Corrective Action Description:			

2. Target Completion Click here to enter a date.	Actual Completion Click here to enter a date.	Owning Dept:	Owner:
Corrective Action Description:			

3. Target Completion Click here to enter a date.	Actual Completion Click here to enter a date.	Owning Dept:	Owner:
Corrective Action Description:			

4. Target Completion Click here to enter a date.	Actual Completion Click here to enter a date.	Owning Dept:	Owner:
Corrective Action Description:			

5. Target Completion Click here to enter a date.	Actual Completion Click here to enter a date.	Owning Dept:	Owner:
Corrective Action Description:			

Verification of Corrective Action Completion <i>(Required for SC2 and above)</i>	
Verification of CA Completion Date:	Verified by:
Verification Records Retained by:	Validation Records Location:
Verification Description:	

Instructions for Filling out an Occurrence Report

Following are instructions for fields required for Notification and Final Reports. The **yellow** fields are required for Notification Reports; both **yellow** and **blue** are required for Final Reports.

FIELD 3 - Facility Function

Use the pull-down menu to select the Facility Function code that best describes the activity/function.

FIELDS 5 - 7 - Facility Manager/Designee; Telephone No.; Job Title

Field 5: Enter the name of the Facility Manager or Designee (FM/D) who has direct line responsibility for operation of the facility and who will own this occurrence report through completion.

Field 6: Enter the FM/D's phone number.

Field 7: Enter the FM/D's job title

FIELDS 11, 11A, 11B – Division, Project, and Senior Manager

Field 11: Select the division number of the organization owning the event.

Field 11A: Identify the project or the contractor organization title responsible for the facility at where the occurrence took place (e.g., Explosive Projects & Diagnostics, Decommissioning Facility).

Field 11B: Enter the name and organization of the Senior Manager of the organization owning the event.

FIELDS 13, 13A, 13B, 13C, and 13D - System/Equipment; Building; Room No.; Additional Location Description; EOC Event Number

FIELD 13: 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. Provide any additional information in Field 13C, "Additional Location Description".

Field 13A: Please list the building(s) where the event occurred, including events that take place in the outside area near the building.

Field 13B: If applicable, note the room number for further clarification.

Field 13C: A description field is available to provide additional system/equipment/location information, as appropriate.

Field 13D: If the Emergency Operations Center (e.g., 311 or 911) was contacted, enter the EOC event number.

FIELDS 14 - 15A - Derivative Classifier

Field 14: Derivative Classifier Name (Printed) - Enter the name of the Derivative Classifier (DC) who determined that the report and its contents is unclassified.

Field 14A: Derivative Classifier Name (Signature) - The DC must sign the form. After signature, fax to the Occurrence Management office at (505) 845-2391.

Field 14B: Classification Date - The DC must enter the date of determination of classification.

- The DC's name should be on the SNL Classification Office's list of approved [DCs](#).
- The draft report must be DC'd prior to submission to OR Representative.
- The DC signature (page one of OR template) must be received by the OR Representative prior to e-mailing the OR template. Fax (845-2391) or hand carry (Bldg. 823, Room 1503) to the OR Representative.

FIELD 17 - Tech Area

Use the pull-down menu to select the specific Tech area (e.g., Tech Area I, Tech Area II, off-site, etc.) that most accurately reflects where the occurrence took place.

FIELD 18 - Discovery Date/Time

Enter the date and time when the facility staff discovered the event or condition being reported. Dates should be entered mm/dd/yyyy (e.g., 06/03/2003), and times should be entered in military format: hhmm (e.g., 0630 for 6:30 AM and 1830 for 6:30 PM).

Discovery is defined as when an abnormal condition is first observed and the FM/D has sufficient information to evaluate against the reporting criteria.

FIELD 19 - Categorization Date/Time

Enter the date and time when the FM/D determined that the event or condition constituted a reportable occurrence and determined its category. Dates should be entered mm/dd/yyyy (e.g., 06/032003), and times should be entered in military format: hhmm (e.g., 0630 for 6:30 AM and 1830 for 6:30 PM).

Categorization must take place within 2 hours of discovery.

FIELD 20 - Subject/Title of Occurrence

Enter a brief title or description that best details the nature, cause, location, and result of the occurrence. The title should be brief, descriptive, and able to stand alone, as it will show up in DOE summary reports without the description information in Field 25. If the occurrence involved an Un-reviewed Safety Question, the acronym "USQ" should be placed at the end of the Subject or Title of the Occurrence. The text may not exceed 140 characters in length.

Examples of a descriptive title:

- Subcontractors Performed Work with Carcinogen(s) with Expired and Inadequate Procedure in Light Lab, TA-IV
- Low Voltage Electrical Shock to Tool Representative Working on the MESA Retooling Project at the MDL
- System Warranty Work by Subcontractor Activates Fire Alarm System in Specialty Gas Bunker of Bldg. 858

FIELD 20A – American Recovery and Reinvestment Act (ARRA)-Funded Project/Activity

Select the appropriate box to indicate whether this occurrence is related to a project/activity funded via the ARRA. For assistance in determining if ARRA funding is involved in this activity, or for further information regarding the ARRA, contact your organization's financial analysis staff.

FIELD 21 - Reporting Criteria

Use the pull-down menus to select up to three reporting criteria. Note that the selection of reporting criteria automatically selects the significance category (noted as SigCat). If more than one reporting criteria is selected, the report should be submitted at the level of the highest significance category selected. Descriptions for the Reporting Criteria may be found on the OM [website](#).

FIELD 22 - Significance Category

Input the Significance Category, which may be obtained from Field 21.

FIELDS 24 - 24A – SNL Subcontractor

FIELD 24 – If the individual involved in the occurrence is a subcontractor, select yes. Otherwise, select no.

FIELD 24A - If a subcontractor, enter the company name (e.g., Acme Company) in this field.

FIELD 24B - Regulatory Noncompliance Notifications

If Reporting Criteria Group 9 is selected, complete this set of fields:

- 1) Enter the dollar amount of the initial assessed fine.
- 2) Once the total revised fine is known, enter that information.

FIELD 25 - Description of Occurrence

Enter a clear, concise, objective description of what happened and what was observed. Use active voice rather than passive voice. For example, write "the electrician severed the conduit" rather than "the conduit was severed." The information should be clearly understood by a reader who is unfamiliar with the site and the subject matter. To the extent possible, avoid the use of plant-specific terms and acronyms. When used, such terms should be clearly defined. Spell out acronyms in the initial use. Ensure the narrative is gender neutral (e.g., "employee tripped and fell" rather than "she tripped and fell").

The first paragraph (Introduction) should always include the following: date, time, site of the occurrence, whether an SNL employee or subcontractor was involved, and a short descriptive statement. The first sentence should always map clearly to the title and the nature of occurrence.

Example:

"At approximately 09:30, 6/17/2003, Z Facility operations personnel reported an oil spill to the pavement on the west side of Bldg. 983. The spill originated from the storage tank of a mobile oil coalescing unit, which had been in use to reclaim contaminated transformer oil (Shell Diala AX) from secondary containment facilities. Spill volume was initially estimated to be approximately 50 -100 gallons."

In the body of the description, include the following details:

- The method of discovery;
- Any component failures, the failure modes, and duration of failures;
- Any personnel errors involved, including the type and result of the error;
- Any procedure problem encountered;
- The response of any automatic or manual safety system(s) and the signal(s) which initiated and terminated their operation;
- Operator action(s) that affect the course of events;
- The loss of any safety equipment;
- For contamination events, the information described in the OR Categorization Matrix, [Group 6](#)
- Any illness or injuries;
- Environmental impact.
- Data/test results;
- Regulatory/permits violations;
- Relevant historical information;
- Potential program/mission impacts;
- Other relevant clarification information to assist the reader.

If the occurrence report does not meet established timelines, include a final paragraph explaining why:

1. An event is categorized more than 2 hours after discovery.
2. Why the discovery date may differ from when the event actually happened. (This is the time taken to acquire information for determination of reportability.)
3. Why the notification is submitted after the deadline:
 - OE and SC 1 ORs - Close of next business day, not to exceed 80 hours
 - SC R – Close of next business day
 - SC 2 – Close of next business day
 - SC 3 – No later than two business days following discovery
 - SC 4 – No later than two business days following discovery

If the event is to report a Suspect/Counterfeit Item (SC/I), include as much of the following information as possible:

- Manufacturer/supplier/vendor (if available, include contacts, phone numbers, and websites)
- Model/part numbers
- Size of item
- Quantity of item
- Suspect or counterfeit and why
- Usage application
- How the item was found
- When the item was found (e.g., during inspection, before installation, in-service, failure, etc.)
- Final disposition of item(s)
- Photos, if available

The SNL Corporate Suspect Counterfeit Item (S/CI) Coordinator will ensure DOE OIG receives notification of S/CI related Occurrence Reports. SC/I items will be held by the line organization (unless impounded by an SME or other authority) prior to destruction for at least 10 calendar days in a “hold” status awaiting a) release from DOE OIG per DOE G 414.1-3 or b) OIG’s response in writing as to its intent on opening an investigation within 10 calendar days. Both of the above will be coordinated through the Corporate S/CI Coordinator. For further information on the S/CI program, see the S/CI [website](#).

FIELDS 26 & 27 – DOE/HQ, NNSA/SSO, and Other Notifications

Notification must be made to the SSO Facility Representative (FR) and to either 311 or 911 as soon as possible. If you are unable to make direct contact with your FR, call 311 and ask the operator for the number for the SSO Duty Officer.

Enter the name, organization, date, and time of notification of each person who was contacted. Other entries typically include notification to the FM/D, line management, Center and Division ES&H Coordinators, and the OR Representative. Dates should be entered mm/dd/yyyy (e.g., 06/03/2003), and times should be entered in military format: hhmm (e.g., 0630 for 6:30 AM and 1830 for 6:30 PM).

DOE–HO/OC Prompt Notification is required for the following types of notifications:

- *Operational Emergency*
- *Significance Category (SC) 1*
- *SC 2, if directed by the DOE/FR*
- *Any events that have an Asterisk (*) by the significance category on the OR Categorization Matrix*

FIELD 28 - Operating Conditions of Facility at Time of Occurrence

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 either “Normal operations” or “Does not apply.”

FIELD 29 - Activity Category

Use the pull-down menu to select the activity that best describes the ongoing activity at the time of the occurrence.

FIELD 30 - Immediate Actions Taken and Results

Describe the immediate or remedial actions taken to return the facility, system, or equipment item to stable condition, normal 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 effected. For contamination events, include the information described in the OR Reporting Criteria, [Group 6](#).

FIELD 30A – Critique/Fact Finding Performed

A Critique/Fact Finding session must be performed as soon as possible, but no later than five business days after the event is discovered. It is preferred that the Critique/Fact Finding session be performed within two business days of discovery. Make sure to contact your FR, inform them you are performing the initial Critique/Fact Finding, and invite them to attend.

FIELD 31 - Cause Codes

Select the cause code(s) from the [Causal Analysis Tree](#) (CAT) that best represents the apparent causes of the occurrence. **If you select A3 (Human Factors) as the cause code, you must also select a cause code from one of the other cause nodes (this is known as a couplet).**

FIELD 31A - Cause Codes for Type A or B Investigations ONLY

For occurrences resulting in an accident investigation, all causes (direct, contributing, and root) identified in the accident investigation must be included in the Final Report.

FIELD 32 - Description of Cause and Causal Analysis Methodology

Description

Do not repeat a description of the occurrence, but discuss the results of the causal analysis in the causal description field. Discuss the causes of the occurrence including all causes and the corrective actions 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.

Methodology

Indicate the causal analysis method used on this occurrence. Examples:

- Systemic Factors
- Timeline
- Critique
- Barrier Analysis
- Events and Causal Factor Analysis
- Change Analysis
- Management Oversight and Risk Tree (MORT)
- Kepner-Tregoe Problem Solving and Decision Making

FIELD 33 - Evaluation by Facility Manager/Designee

1. Complete this field if response to Field 34A, "Before Further Operation" is Yes.

2. This field is required for all Update and Final Reports.

With the information available, the Facility Manager/Designee should provide his or her evaluation of the occurrence and its effect or possible effect on the plant, system, program, etc. The Facility Manager/Designee may later supplement this evaluation with additional entries in Update reports or in the Final report.

FIELDS 34 - 34A - Further Evaluation Required?

Field 34: Check the yes box if further evaluation is required.

Field 34A: If “further evaluation” is required prior to resuming operation, check this box.

- If the answer to 34A is yes, then complete field 33, “Evaluation by FM/D.”

FIELD 35 - ISM

Use the pull-down menu to select one or more Integrated Safety Management (ISM) codes.

FIELD 36 - Lesson Learned (Optional for SC 3 and 4 occurrences)

Include any lesson learned from the occurrence that could be of importance to other facility operators with similar operations or hazards.

Title: Title of the lesson learned.

Lesson Learned Statement: Summary of the lesson that was learned for the activity.

Discussion of Activities: Brief description of the facts that resulted in the initiation of the lesson learned.

Analysis: Results of any analysis that was performed, if available.

Recommended Actions: A brief description of management-approved actions that were taken, or will be taken, in association with the lesson learned.

Originator: Name of the originating organization and person submitting the lesson learned.

Contact: Name, organization, and phone number of individual to contact for additional information.

Priority Descriptor: A descriptive code that assigns a level of significance to the lesson Options Include: Red/Urgent, Yellow/Caution, Blue/Information, Green/Good Work Practice.

SNL Hazard Category: Use the pull-down menu to select the hazard category(ies).

Keywords: Word(s) used to convey related concepts or topics stated in the lesson.

FIELD 37 - Similar Occurrence Report Numbers

Review the similar ORs provided to you by the OR Representative. List the numbers for any ORs that are similar to your event. The purpose of this item is to identify, if recognized, occurrences that might suggest a generic problem. It also serves to identify generic problems that may result in single or common lessons learned.

FIELD 39 - Corrective Actions

Enter the target completion date, actual completion date (as appropriate), the owning department number, and owner's name. The target completion date is one that has been negotiated upon and agreed to by the owning department. When determining the target completion date, be sure to allow a reasonable amount of time to complete the corrective action.

List all actions identified to correct the problem that, when completed, will prevent recurrence of the causes identified in Fields #31-31A. At the end of the description, **list the associated Cause Code(s) in parenthesis.**

Example:

Update and clarify terminology in the SOP for maintenance of radiological monitoring equipment. (A1B3C02, A5B2C05)

There should be a corrective action to satisfy every cause code that was selected. One corrective action may satisfy more than one cause code, as shown in above example. For occurrences resulting in a Type A or B accident investigation, all corrective actions developed in response to the judgments of need must be included in the Final Report.

Corrective Action Verification

OE, SC 1, and SC R ORs require independent verification of completion of corrective actions. See OM [guidance](#). SC 2 level Occurrence Reports require verification of corrective actions by sampling (see the sampling process in the OM [guidance](#)). In these related fields, provide:

- The date the verification took place.
- The name of the person verifying that the corrective action has been completed.
- The name of the person retaining the verification report.
- The location where the verification report is being retained.
- A brief description of your verification process.