



# **CORRECTIVE ACTION TRACKING SYSTEM (CATS) DATABASE USER MANUAL**

**OIA-OCA-0001, Rev. 0**

**Effective Date: September 11, 2007**

**Ernest Orlando Lawrence  
Berkeley National Laboratory**

### RECORD OF REVISION

Revision Number	Date Approved	Description of Revision

## TABLE OF CONTENTS

1.0 Introduction.....	4
2.0 Functional Requirements and System Limitations, Including Hardware .....	4
3.0 User Interaction with the CATS Database.....	6
4.0 Training Requirements.....	17
5.0 Input and Output Specifications.....	18
6.0 Input and Output Formats .....	18
7.0 Mathematical Models/Derivation of Numerical Methods .....	25
8.0 Troubleshooting .....	25
9.0 User and Maintenance Support.....	26
10.0 User Documentation Development.....	26
Attachment 1 – CATS Database Entry Fields .....	27

## 1.0 Introduction

The Lawrence Berkeley National Laboratory (LBNL) Issues Management Program encompasses the continuous monitoring of work programs, performance and safety in order to promptly identify issues, their risk and significance, and their causes, and to identify and effectively implement corrective actions to ensure successful resolution and prevent the same or similar problems from recurring. Issues that are governed by this program include program and performance deficiencies or nonconformances that may be identified through employee concerns, internal or external oversight assessment findings, suggested process improvements and associated actions that require formal corrective action.

Issues that are found as a result of management walk-arounds or workspace inspections that can be immediately corrected or fixed are exempt from the reporting requirements.

All LBNL personnel are responsible for the identification of issues that may require correction, improvement, or management attention and the submission of an Issues Management form via the CATS database. The CATS database is an online tool, accessible from anywhere in the world, that enables LBNL employees to identify, track, and resolve issues and their associated corrective actions as well as to determine the effectiveness of those corrective actions. The CATS database is designed with extensive reporting capabilities so that the data may be used to gauge effectiveness and implementation

This User Manual and the CATS database are to be used in conjunction with the requirements outlined in LBNL/PUB-5519 (1).

## 2.0 Functional Requirements and System Limitations, Including Hardware

### 2.1 Functional Requirements

The database was designed to achieve the following:

- Identification, documentation, review and approval, and tracking of issues and associated corrective action(s)
- Automatic generation of issues numbers for each issue
- Ability to have multiple corrective actions for each issue
- Automatic generation of CATS numbers for each corrective action associated with an issue
- Automatic link between the issue and multiple corrective actions
- Automatic assignment of task numbers to each corrective action associated with an issue
- Automatic identification of Originator and Reviewer names
- Status indicators for each Reviewer
- Automatic enforcement of required fields prior to submitting the form for review and approval
- Automatic dynamic fields that show/hide certain fields depending on specific fields selected by Users
- Automatic routing to pre-designated personnel for review and approval
- Manual route capability

- Ability to add additional Reviewers
- Browse and attach capability for multiple documents and file types
- Save capability for all entries in various stages of development or modification
- Email notifications of issue approval and denial to the Originator, Cognizant Manager, and/or Responsible Person
- CATS and MAXIMO interface that allows:
  - Work requests associated with deficiencies and nonconformances to be initiated in the CATS database and created in Maximo
  - Back population of Work Order Number from Maximo into the CATS database
  - Back population of revised Project IDs from Maximo into the CATS database
  - Back population of the Facilities Supervisor responsible for Work Order completion from Maximo into the CATS database
  - Back population of Work Order Status from Maximo into the CATS database
- Built-in document control features such as restricted or limited modifications, review and approval by original Reviewer(s) if modifications to an already-approved issue is made.
- Email notification to the Responsible Person and Cognizant Manager for corrective actions at 15 and 30 days prior to the due date
- Email notification to the Cognizant Manager, Responsible Person and/or Deputy Division Director at 15, 30 and 45 days overdue
- Ability to calculate the number of days to close an issue
- Ability to calculate time an issue and associated corrective action is overdue
- Ability to show the number of times an extension request was requested and approved
- Maintenance of all data entered into the database
- Establish and maintain access controls
- Format output of printed CATS entries as follows:
  - Font: Arial
  - Size: 11pt
  - Text Color: Black
  - Section Titles: Bold
  - Text Sections: Non-Bold
- Various reporting capabilities
- Search and sort capabilities on all fields, by specific date(s) and/or date range(s), and key words or combinations of key words
- Export capabilities into Microsoft Excel
- Drill-down Completion Report pie chart

## 2.2 System Limitations

Users must have internet access and a valid LDAP username and password in order to access the CATS Database.

## 3.0 User Interaction with the CATS Database

The Database may be accessed from the LBNL Homepage A-Z Listing under “Corrective Action Tracking System (CATS) Database”; the Office of Contract Assurance (OCA) webpage; or the BLIS Portal. To use this database, the user must sign in using the appropriate LDAP Login and password.

### 3.1 Creating a New Issue

---

#### NOTE

Issues should be entered into the CATS database after consultation with appropriate line or cognizant management and Subject Matter Experts (SMEs), as necessary.

Steps 3.1.1 – 3.1.28 are performed by the Originator.

---

#### 3.1.1a



- 3.1.1 To identify and document a new Issue, click on the “Add New Issue” link and complete the fields as required. See *Attachment 1 – Creating Issues* for details on what is required for each field.

---

**NOTE:**

Based on the Issue Type selected by the Originator, only relevant fields will be visible.

---



## CATS Database

LAWRENCE BERKELEY NATIONAL LABORATORY

Use this screen to enter a new issue into the CATS database or update an existing one. Fields marked with an asterisk (\*) indicate required fields. When finished, click the Save button at the bottom of the screen.

Entered By: Dong,Michael C    Entry Date: 08/20/2007    Division: Facilities

\* Issue Type:

- Select--
- Adverse Condition
- Best Practice
- Ethics
- Worker Safety & Health

- 3.1.2 Select the Issue Type from the drop down menu.
- 3.1.3 Select the Division from the drop down menu that is responsible for the issue.
- 3.1.4 If known, identify the Discovery Date of the Issue by typing in the date, or clicking on the calendar symbol and selecting the appropriate date.
- 3.1.5 If applicable, select the Building in which the Issue was identified and/or resides.
- 3.1.6 If applicable, select the Room from the drop down menu that correlates to the Building selected.
- 3.1.7 If applicable, select additional locations by clicking the “Add Locations” button.
- 3.1.8 Select the appropriate Issue Category from the drop down menu.

---

**NOTE:**

The Risk Level, de minimis, is selected only when the level of risk is too small to be concerned with. For Worker Safety and Health issues de minimis is selected when there is no direct or immediate relationship to the environment, safety, or health.

---

- 3.1.9 Select the appropriate Risk Category from the drop down menu in accordance with LBNL/PUB-5519 (1).

3.1.10 If “de minimis” is selected as a Risk Level, enter a detailed justification for the “de minimis” classification.

---

**NOTE:**

When Significance Codes PAAA NTS (10CFR851) or PAAA Internal (10CFR851) are selected, the applicable OSHA Reference is identified in the “OSHA Reference” field.

---

3.1.11 Select the appropriate Significance Code(s), if applicable, in accordance with LBNL/PUB-5519 (1).

3.1.12 Select the appropriate Assessment Type from the drop down menu, if applicable

3.1.13 Document the Issue in sufficient detail so it is clear to any user what the issue is and so that the appropriate corrective action may be developed to mitigate or remove the issue.

3.1.14 Select the appropriate Trend Code from the drop down menu in accordance with LBNL/PUB-5519 (3), *Data Monitoring and Analysis Program Manual*.

3.1.15 Identify the person who initiated the issue by typing in the last name and selecting the appropriate name.

3.1.16 If additional reviews are needed, click the “Add Reviewer” button, and identify the additional Reviewers by typing in the first or last name and/or selecting the appropriate name.

3.1.17 Click the “Save” button to save the Issue and have an Issue Number generated.

3.1.17a

\* Issue Description:

\* Trend Code:

\* Initiator:

---

Corrective Action(s):

  Add corrective actions to this issue by clicking the Add button

View	Void	Task	CATS	Status	Responsible	CM	CM	Due	Completed	Closure	WO	WO	WO	Inst	Project
No.	ID	Person	Div.	Date	Date	Date	#	Status	ID						

3.1.18 Add a Corrective Action by clicking on the “Add” icon.

3.1.18a

 **Corrective action added successfully.**

CATS ID: 10036 Task No.: 1 Status: New Entry

Entered By: Entry Date: 08/02/2007

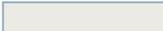
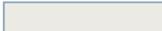
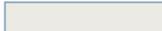
\* Corrective Action: Perform an air pressure and/or leak test to determine the reason why the 15 PSIG flow rate is not being met.

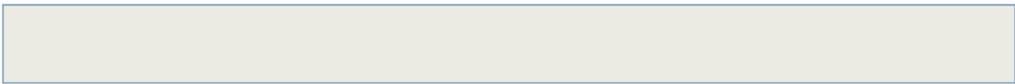
\* Due Date: 08/24/2007  Completed Date:  Closure Date: 

\* Responsible Person: Dong, Michael C 

Cognizant Manager: Ohearn, Jerome Division: Facilities

Work Request Req'd?:  Institutional WR?:  Project ID: WW3690

Work Order Number:  WO Status:  Facilities Contact: 

Notes: 

- 3.1.19 Upon display of Corrective Action screen, clearly identify the corrective action to be taken to mitigate or remove the issue, and ensure that it is verifiable.
- 3.1.20 Enter the appropriate Due Date for the corrective action by typing in the date, or clicking on the calendar symbol and selecting the appropriate date.
- 3.1.21 In the Responsible Person field, identify the appropriate person responsible for completing the corrective action item by typing the first or last name and/or selecting the appropriate name.
- 3.1.22 If a work request is required to perform this work, click on the “Work Request Required” check box.
- 3.1.23 If the work request is considered to be institutional work, click on the “Institutional WR” checkbox.
- 3.1.24 If the work request is not institutional, skip the “Institutional WR” checkbox, and type in the appropriate Project ID number in the Project ID field.
- 3.1.25 Select the “Save” button to save the corrective action and generate a CATS ID number for this action.
- 3.1.26 Select the “Exit” button to exit from the Corrective Action screen.

3.1.27 If additional corrective actions associated with the same issue are required to be taken, GO TO Step 3.1.17 to add a new corrective action.

3.1.28 Once all corrective actions have been entered, click the “Route” button to route to the appropriate Reviewers.

## 3.2 Reviewing and Approving Issues and Associated Corrective Actions

---

### **NOTE**

Upon approval or denial of an issue and/or associated corrective action(s), the Initiator is automatically notified via email.

Steps 3.2.1 – 3.2.7 are performed by the Reviewer.

---

3.2.1 Upon receipt of the email notification, click on the link within the email.

3.2.2a



## CATS Database

LAWRENCE BERKELEY NATIONAL LABORATORY

Use this screen to enter a new issue into the CATS database or update an existing one. Fields marked with an asterisk (\*) indicate required fields. When finished, click the Save button at the bottom of the screen.

Issue No.: 17    Status: New Entry  
 Entered By: Wells,Willard H    Entry Date: 08/02/2007    Division: Environment, Health & Safety

\* Issue Type:

\* Division:

\* Discovery Date:     Closure Date:

\* Issue Category:     \* Risk Level:

Significance Code (check all that apply):  
 PAAA NTS 10CFR851     PAAA Internal 10CFR851     ORPS CAT 1/2     Significant Adverse Condition  
 PAAA NTS 10CFR835     PAAA Internal 10CFR835     ORPS CAT 3/4

\* Assessment Type:

\* Issue Description: 

The air pressure in the pneumatic conveyor system is less than 15 PSIG , which is required to move powdered and/or granular bulk materials. A minimum of 15 PSIG is required to move these materials through the convey line.

\* Trend Code:

\* Initiator:

Corrective Action(s):

View	Task No.	CATS ID	Status	Responsible Person	CM	CM Div.	Due Date	Completed Date	Closure Date	WO #	WO Status	Inst. ID	Project ID
	1	10036	New Entry	Dong,Michael C	O	Ohearn,Jerome FA	08/24/2007			Y		N	WV3690

Review/Approval:

Reviewer	Status	Review Date	Comments
Kelly,Richard J			

\*Comments:

- 3.2.2 Review the Issue to ensure that it is valid, clearly identified and all associated information is accurate and correct.
- 3.2.3 Review the associated corrective action(s) for applicability, accuracy, completeness and correctness.
- 3.2.4 If additional reviews are needed, click the “Add Reviewer” button, and identify the additional Reviewers by typing in the first or last name and/or selecting the appropriate name.
- 3.2.5 To approve an Issue, select the “Approve” button.
- 3.2.6 To deny an Issue, type in the reasons for denial in the comments field and select the “Deny” button.
- 3.2.7 Resolve any issues with the Originator.

- 3.2.8 Originator, upon email notification that an issue or associated corrective action was denied, resolve the issues identified.
- 3.2.9 Originator, upon resolution of the issues identified by the Reviewer(s), re-route it to all of the original Reviewer(s) by clicking the “Route” button to initiate the review and approval process.

### 3.3 Extension Requests

---

#### NOTE

Requests for extension of due dates for corrective actions requires the approval of all original Reviewers of the issue. Extension requests may only be requested for approved Corrective Actions.

Steps 3.3.1 – 3.3.9 are performed by either the Originator or the Responsible Person.

---

- 3.3.1 If an extension request is needed, click on “My Issues”, and from the list provided, click “View” to open the appropriate issue.
- 3.3.2 From the corrective action list, click on the corresponding “View” to open the appropriate corrective action.

Figure 3.3.3a

The screenshot shows a web form for requesting an extension. It includes a dropdown for 'Extension Requested By' (Ruggieri, Michael R), a date field for 'Extension Due Date' (10/31/2007) with a calendar icon, a text area for '\*Justification:' (Due to a reduction in budget, the pressure and/or leak tests cannot be performed until 10/31/07.), a dropdown for 'Review/Approval:', and an 'Add Reviewer' button. Below these is a table of reviewers.

Delete	Reviewer	Status	Review Date	Comments
	Kelly, Richard J	Pending Approval		
	Wells, Willard H	Pending Approval		

- 3.3.3 Identify the person requesting the extension by typing in the first or last name and/or selecting the appropriate name.
- 3.3.4 Enter the new Due Date for the corrective action by typing in the date, or clicking on the calendar symbol and selecting the appropriate date.
- 3.3.5 In the Comments Field, type in the justification for the extension request.

---

#### NOTE

When the “Save” button is selected, the issue’s original reviewers will be populated in the “Review/Approval” field.

---

- 3.3.6 Click the “Save” button to save the information.

- 3.3.7 If additional reviews are needed, click the “Add Reviewer” button, and identify the additional Reviewers by typing in the first or last name and/or selecting the appropriate name.
- 3.3.8 Click the “Exit” button to exit the corrective action screen.
- 3.3.9 Click the “Route” button to route to the original Reviewer(s) for approval of the extension request.
- 3.3.10 Reviewer, upon email notification that an extension request has been made, review the request.
- 3.3.11 Reviewer, resolve any issues with the Originator.
- 3.3.12 Reviewer, approve the request by clicking on the “Approve” button.
- 3.3.13 Reviewer, deny the request by typing in the reasons for denial in the comments field and clicking the “Deny” button.

### 3.4 Completing and Closing Issues and Associated Corrective Actions

---

#### NOTE

The steps in this section are performed by the Responsible Person.

---

- 3.4.1 Ensure that all appropriate reviews of the objective evidence are performed prior to documenting corrective action completion.
- 3.4.2 When a corrective action is completed, verify that the objective evidence of closure is complete, accurate and satisfies the corrective action(s) identified.

---

#### NOTE

As appropriate, objective evidence of closure may be uploaded to become part of the electronic issue record, or hard-copies may be maintained.

---

Figure 3.4.3a

Upload Objective Evidence:

Delete	File Name	Uploaded By	Uploaded Date
	<a href="#">Alert Crosby_Shackles_Safety[1].pdf</a>	Dong,Michael C	08/16/2007

- 3.4.3 Upload the objective evidence by clicking the “Browse” button to search for the document(s) to be uploaded and when the document(s) has/have been selected, click on the “Upload file” button.

Figure 3.4.4a

CATS ID: 10036 Task No.: 1 Status: Open  
Entered By: Wells,Willard H Entry Date: 08/02/2007

\* Corrective Action: Perform an air pressure and/or leak test to determine the reason why the 15 PSIG flow rate is not being met.

\* Due Date: 08/24/2007  Completed Date: 08/31/2007  Closure Date:  

\* Responsible Person: Dong,Michael C 

Cognizant Manager: Ohearn,Jerome Division: Facilities

3.4.4 Enter the appropriate Completed Date for the corrective action by typing in the date, or clicking on the calendar symbol and selecting the appropriate date.

Figure Note a

CATS ID: 10036 Task No.: 1 Status: Closed  
 Entered By: Wells,Willard H Entry Date: 08/02/2007

\* Corrective Action: Perform an air pressure and/or leak test to determine the reason why the 15 PSIG flow rate is not being met.

\* Due Date: 08/24/2007 Completed Date: 10/17/2007 Closure Date: 10/17/2007

\* Responsible Person: Dong,Michael C  
 Cognizant Manager: Ohearn,Jerome Division: Facilities

Figure Note b

Issue No.: 17 Status: Closed  
 Entered By: Wells,Willard H Entry Date: 08/02/2007 Division: Environment, Health & Safety

\* Issue Type: Worker Safety & Health  
 \* Division: MS - Materials Sciences

\* Discovery Date: 07/29/2007 Closure Date: 10/17/2007

\* Issue Category: Engineering \* Risk Level: Low

Significance Code (check all that apply):  
 PAAA NTS 10CFR851  PAAA Internal 10CFR851  ORPS CAT 1/2  Significant Adverse Condition  
 PAAA NTS 10CFR835  PAAA Internal 10CFR835  ORPS CAT 3/4

\* Assessment Type: Surveillance \* Assessment No.: \* Finding No.:

\* Issue Description: The air pressure in the pneumatic conveyor system is less than 15 PSIG , which is required to move powdered and/or granular bulk materials. A minimum of 15 PSIG is required to move these materials through the convey line.

\* Trend Code: E. Equipment/Design NI/LTA  
 \* Initiator: Gravois,Melanie C

View	Task No.	CATS ID	Status	Responsible Person	CM	CM Div.	Due Date	Completed Date	Closure Date	Total Time	WO #	WO Status	WO Inst.	Project ID
	1	10036	Closed	Dong,Michael C	Ohearn,Jerome	FA	08/24/2007	10/17/2007	10/17/2007	54 days late	Y		N	WW3690

Reviewer	Status	Review Date	Comments
Kelly,Richard J	Approved	08/13/2007	
Wells,Willard H			

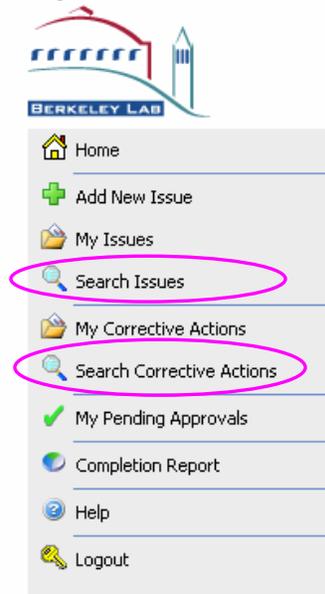
**NOTE**

Issues and associate corrective actions will be closed collectively and will reflect the date that the last corrective action was completed.

Corrective actions associated with a “Worker Safety” issue that required a Work Request will be closed automatically when Maximo is updated to reflect completion of the work. Objective evidence for verification of completion for these corrective actions is considered the Work Request and Maximo database entries.

### 3.5 Searching for Issues and Associated Corrective Actions

Figure 3.6.1a



- 3.5.1 User, to search all or selected fields from existing issues and/or corrective actions, click on the “Search Issues” or “Search Corrective Actions” link on the left hand side of the screen.

---

#### NOTE

Any field or combination thereof may be selected for this search. If a specific field is not required, a specific date or date range may be selected.

---

- 3.5.2 User, search, select the fields of interest and/or type in keywords in a text field, and click the “Submit” button.

### 3.6 Statusing Reviews of Issues and Corrective Actions

Figure 3.6.1a

View	Void	Issue No.	Division	Discovery Date	Issue Type	Issue Cat.	Risk Level	Initiator	Entered By	Entry Date	Status
		9	AF	07/05/2007	Worker Safety & Health	Accounting	High	Abell,Daniel A	Abell,Daniel A	07/24/2007	Closed
		12	AF	07/11/2007	Adverse Condition	Biological	High	Abell,Daniel A	Abell,Daniel A	07/30/2007	Open
		13	FA	07/02/2007	Worker Safety & Health	Construction Safety	Medium	Gravois,Melanie C	Gravois,Melanie C	07/31/2007	Pending Approval
		14	AF	07/11/2007	Adverse Condition	Accounting	High	Abell,Daniel A	Wells,Willard H	07/31/2007	New Entry
		15	AF	08/08/2007	Best Practice	Accounting	High	Abell,Daniel A	Abell,Daniel A	08/01/2007	Open
		16	FA	07/29/2007	Adverse Condition	Electrical	High	Abell,Daniel A	Wells,Willard H	08/02/2007	Pending Approval
		17	MS	07/29/2007	Worker Safety & Health	Engineering	Low	Gravois,Melanie C	Wells,Willard H	08/02/2007	Open
		18	AL	08/05/2007	Worker Safety & Health	Lasers	High	Dong,Michael C	Kelly,Richard J	08/13/2007	Pending Approval

Sorted by: Entry Date *Ascending* Records Found: 8

3.6.1 For general information, User, search the database in accordance with Section 3.5, which produces a list of issues or corrective actions that shows status.

3.6.2 User, to export this data that is presented as a result of the search, select the appropriate “Export to Excel” button.

Figure 3.6.3a

Corrective Action(s):

View	Task No.	CATS ID	Status	Responsible Person	CM	CM Div.	Due Date	Completed Date	Closure Date	WO #	WO Status	Inst. ID	Project ID
	1	<u>10036</u>	Open	Dong,Michael C	Ohearn,Jerome	FA	08/24/2007			Y		N	VW3690

---

Review/Approval:

Reviewer	Status	Review Date	Comments
Kelly,Richard J	Approved	08/13/2007	

\*Comments:

3.6.3 For detailed information, User, select “View” for the desired issue or corrective action to see the list of the Reviewers and the associated review status.

## 4.0 Training Requirements

There is no mandatory training requirement or program to use the CATS Database. It is recommended that LBNL personnel who enter, review and approve, or are responsible for resolution of issues and/or completion of corrective actions; or search for information in this database attend the training sessions offered by the Office of Contract Assurance at various periodicities prior to using this database.

## 5.0 Input and Output Specifications

### 5.1 Issues and Associated Corrective Actions Input/Output Specifications

#### 5.1.1 Issues and Associated Corrective Actions Input Specifications

The table outlined in Attachment 1 identifies the data entry fields, the individual responsible for entering data, and what the field is used for.

#### 5.1.2 Issues and Associated Corrective Actions Output Specifications

The data entered in to the fields described in Attachment 1 and may be displayed in the following formats:

- Electronically

## 6.0 Input and Output Formats

### 6.1 Issues and Corrective Actions Input/Output Formats

#### 6.1.1 Issues and Corrective Actions Input Format

Input formats may contain alphanumeric, numeric and date fields that can accommodate from five hundred to four thousand characters. In addition, photographs and document files may be uploaded to the database.

<b>Field</b>	<b>Input Format</b>
Issue No.	Automatically generated by the database. The format is a series of four numeric characters, generated in sequential order.
Entered by	Automatically generated by the database based on the initial login date of the person entering the issue. Numeric Characters in the format: (mo/day/full year) XX/XX/XXXX.
Entry Date	Automatically generated by the database based on the initial login of the person entering the issue. The format is a series of Alpha-numeric characters that identifies the name of the person entering the issue.
Originator's Division	Automatically generated by the database based on the initial login of the person entering the issue. The format is a series of alpha-numeric characters that identifies the Division of the person entering the issue.
Issue Type	One of four values may be selected:

<b>Field</b>	<b>Input Format</b>
	<ul style="list-style-type: none"> <li>• Adverse Condition</li> <li>• Best Practice</li> <li>• Ethics</li> <li>• Worker Safety &amp; Health</li> </ul>
Division	One of twenty three values may be manually selected: <ul style="list-style-type: none"> <li>• Accelerator &amp; Fusion Research</li> <li>• Advanced Light Source</li> <li>• Office of Chief Finance Officer</li> <li>• Chemical Sciences</li> <li>• Computational Research Division</li> <li>• Environmental Energy Tech</li> <li>• Engineering</li> <li>• Environment, Health &amp; Safety</li> <li>• Earth Sciences</li> <li>• Facilities</li> <li>• Genomics Division</li> <li>• Human Resources</li> <li>• Information Technology Div</li> <li>• Laboratory Directorate</li> <li>• Life Sciences</li> <li>• Materials Sciences</li> <li>• NERSC</li> <li>• Nuclear Sciences</li> <li>• Operations Division</li> <li>• Public Affairs</li> <li>• Physical Biosciences</li> <li>• Physics</li> </ul>
Discovery Date	The Discovery Date is manually entered in numeric characters when the final corrective action is completed. The numeric characters are displayed in the format: (mo/day/full year) XX/XX/XXXX.
Closure Date	For “Worker Safety” issues, the Closure Date is automatically generated by the database when the final corrective action or work order is completed in MAXIMO. The numeric characters are displayed in the format: (mo/day/full year) XX/XX/XXXX.  For all other issues, the Closure Date is manually entered in numeric characters when the final corrective action is completed. The numeric characters are displayed in the format: (mo/day/full year) XX/XX/XXXX.
Building	One value may be selected from a dropdown menu.

<b>Field</b>	<b>Input Format</b>
Room	One value may be selected. The selection of rooms identified in the dropdown menu is based on the Building chosen.
Selected Locations	This is a dynamic field, which becomes visible to the User if there is more than one room identified for the selected Building and the “Add Location” button is selected. As many locations (or rooms) may be added that are equal or less to the number of rooms identified for a selected building.
Issue Category	<p>One of forty-nine values may be selected:</p> <ul style="list-style-type: none"> <li>• Accounting</li> <li>• Biological</li> <li>• Bus Services</li> <li>• Cafeteria Services</li> <li>• Chemical</li> <li>• Construction Safety</li> <li>• Cranes and Hoists</li> <li>• Cryogenics</li> <li>• Custodial Services</li> <li>• Cyber</li> <li>• E-Commerce</li> <li>• Electrical</li> <li>• Emergency Preparedness</li> <li>• Emergency Response</li> <li>• Engineering</li> <li>• Environmental</li> <li>• Ergonomics</li> <li>• Ethics</li> <li>• Excess Property</li> <li>• Financial Management</li> <li>• Fire</li> <li>• Fleet</li> <li>• Garbage Services</li> <li>• General HR</li> <li>• Health &amp; Wellness</li> <li>• Industrial Hygiene</li> <li>• Inspection</li> <li>• Inventory</li> <li>• IT</li> <li>• Lasers</li> <li>• Maintenance</li> <li>• Pest Management</li> <li>• Planning &amp; Architecture</li> <li>• Preventive Maintenance</li> <li>• Project Management – Planning Design/Construction</li> <li>• Project Management – Scheduled Work</li> </ul>

<b>Field</b>	<b>Input Format</b>
	<ul style="list-style-type: none"> <li>• Radiological</li> <li>• Respiratory Protection</li> <li>• Seismic</li> <li>• Sensitive Items</li> <li>• Shipping/Receiving</li> <li>• Shops Safety</li> <li>• Slips, Trips, Falls</li> <li>• Subcontracting</li> <li>• Traffic Safety</li> <li>• Transportation</li> <li>• Warehousing</li> <li>• Waste Management</li> <li>• Work Requests</li> </ul>
Risk Level	One of four values may be selected: <ul style="list-style-type: none"> <li>• High</li> <li>• Medium</li> <li>• Low</li> <li>• de minimis</li> </ul>
Justification	This is a dynamic field, which becomes visible to the User if the Risk Level “de minimis” is selected. This is an alpha numeric field that is manually populated by the User that can hold up to 4,000 characters.
Significance Code	As many as are applicable of the eight values may be selected by clicking the appropriate checkbox(es): <ul style="list-style-type: none"> <li>• PAAA NTS (10CFR851)</li> <li>• PAAA NTS (10CFR835)</li> <li>• PAAA Internal (10CFR851)</li> <li>• PAAA Internal (10CFR835)</li> <li>• ORPS Cat 1/2</li> <li>• ORPS Cat 3/4</li> <li>• Type A/B Accident</li> <li>• Significant Adverse Condition</li> </ul>
Assessment Type	One of five values may be selected: <ul style="list-style-type: none"> <li>• Self-Assessment</li> <li>• Internal Independent Review</li> <li>• External Review</li> </ul>

<b>Field</b>	<b>Input Format</b>
	<ul style="list-style-type: none"> <li>• Safety Walk-around</li> <li>• N/A</li> </ul>
Assessment #	This is a dynamic field, which becomes visible to the User if the Assessment Type of “Internal Independent Review” or “External Review” is selected by the User. This is an alpha numeric field that is manually populated by the User that can hold up to 30 characters.
Finding #	This is a dynamic field, which becomes visible to the User if the Assessment Type of “Internal Independent Review” or “External Review” is selected. This is an alpha numeric field that is manually populated by the User that can hold up to 30 characters.
Issue Description	Up to 4000 alpha-numeric characters may be manually entered.
Trend Code	One of fourteen values may be manually selected: A. Policies/Procedures/Instructions Not Used B. Policies/Procedures/Instructions Used Incorrectly C. Policies/Procedures/Instructions NI D. Communication NI/LTA E. Equipment Design NI/LTA F. Maintenance NI/LTA G. Training NI/LTA H. Work Planning NI/LTA I. Work Processes/Packages NI/LTA J. Material/Equipment Deficiency K. Vendor Deficiency L. Data NI/LTA M. Technical Proficiency Deficiency N. Process/Task Design Deficiency O. Broke/Fix
Requirement(s) Violated	Up to 4000 alpha-numeric characters may be manually entered.
Requirement(s) Reference	Up to 4000 alpha-numeric characters may be manually entered.
Immediate Actions Taken	Up to 4000 alpha-numeric characters may be manually entered.
CATS ID	Automatically generated by the database. The format is a series of four numeric characters. The ID numbers are generated in sequential order.
Task No.	Automatically generated by the database. The format is a series of four numeric characters.

<b>Field</b>	<b>Input Format</b>
Entered By	Automatically generated by the database based on the initial login of the person entering the issue. The format is a series of Alpha-numeric characters that identifies the name of the person entering the issue.
Entry Date	Automatically generated by the database based on the initial login date of the person entering the issue. Numeric Characters in the format: (mo/day/full year) XX/XX/XXXX.
Corrective Action	Up to 4000 alpha-numeric characters may be manually entered.
Due Date	The due date is selected from a “calendar” or numeric characters may be manually entered in the format: (mo/day/full year) XX/XX/XXXX.
Completed Date	<p>For “Worker Safety” issues, the database will automatically generate the completed date based on the “complete date” identified in the MAXIMO database.</p> <p>For all other issues, the User will manually generate the completed date using numeric characters entered in the format: (mo/day/full year) XX/XX/XXXX.</p>
Closure Date	<p>For issues with associated work requests, the database will automatically generate the closure date based on the “complete date” of the last or only Corrective Action (or work order) identified in the MAXIMO database.</p> <p>For all other issues, the User will manually generate the completed date using numeric characters entered in the format: (mo/day/full year) XX/XX/XXXX.</p>
Responsible Person	This is an auto-complete drop-down field which returns all the relative matches for the currently typed text when the user starts to manually type in the name of the Responsible Person assigned to a specific corrective action. The format is a series of Alpha-numeric characters that identifies the name of the Responsible Person.
Cognizant Manager	Automatically generated by the database based on the Responsible Person identified. The format is a series of Alpha-numeric characters that identifies the name of the CM.
CM Division	Automatically generated by the database based on the CM name that is entered by the User. The format is a series of Alpha-numeric characters that identifies the Division of the CM.

<b>Field</b>	<b>Input Format</b>
Work Request	A single checkbox may be selected.
Institutional	A single checkbox may be selected.
Project ID	This is a dynamic field, which becomes visible to the User if the “Institutional?” checkbox is selected.  Alpha numeric characters up to 50 characters may be entered.
Work Order No.	Automatically generated by the Database based on the MAXIMO Work Order No. assigned.
Work Order Status	Automatically generated by the Database based on the MAXIMO Work Order Status field.
Facilities Contact	Automatically generated by the Database based on the MAXIMO Facilities Supervisor field.
Notes	Up to 4000 alpha-numeric characters may be manually entered.
Extension Requested by	This is an auto-complete drop-down field which returns all the relative matches for the currently typed text when the user starts to manually type in the name of the person requesting the extension. The format is a series of Alpha-numeric characters that identifies the name of the person requesting the extension.
Extension Due Date	The extended due date is selected from a “calendar” or numeric characters may be manually entered in the format: (mo/day/full year) XX/XX/XXXX.
(Extension ) Justification	Up to 4000 alpha-numeric characters may be manually entered.
Review/Approval	This is an auto-complete drop-down field which returns all the relative matches for the currently typed text when the user starts to manually type in the name of the Reviewer for a specific issue and associated corrective action. The format is a series of Alpha-numeric characters that identifies the name of the Reviewer.
Status	Automatically generated by the Database. Three statuses may be identified: <ul style="list-style-type: none"> <li>• Pending Approval</li> <li>• Approved accompanied by the Date of Approval</li> <li>• Denied accompanied by the Date of Denial</li> </ul>
Comments	Up to 4000 alpha-numeric characters may be manually entered.

### 6.1.2 Issues and Associated Corrective Actions Output Format

Output formats are electronic.

## 7.0 Mathematical Models/Derivation of Numerical Methods

N/A

## 8.0 Troubleshooting

<b>Problem</b>	<b>Potential Cause</b>	<b>Resolution</b>
Software is not launching or is timed out	<ul style="list-style-type: none"><li>• LBNL Network is down or timed out</li><li>• User computer is not working or lacks memory</li></ul>	<ul style="list-style-type: none"><li>• Wait a few moments and try again</li><li>• Exit the program and restart it</li></ul>
User is unable to enter data in a field.	<ul style="list-style-type: none"><li>• All required fields may not be completed</li><li>• If the field is grayed out, the user does not have access or the issue is closed and therefore read-only.</li></ul>	<ul style="list-style-type: none"><li>• Enter data in required field</li><li>• Verify that the user has permissions to update the record.</li></ul>

<b>Problem</b>	<b>Potential Cause</b>	<b>Resolution</b>
Save buttons not visible when trying to make changes	Only the Originator can make changes and view the save buttons. Otherwise, the fields will be grayed out and the save button will not be shown.  <b>Note:</b> In certain situations, Users other than the Originator may make and save changes to various fields, such as the Significance Codes.	Initiator, if briefing is not “Active” contact <a href="mailto:iss-ia@lbl.gov">iss-ia@lbl.gov</a> to report the bug
Links are not working	LBNL Network is down or timed out	<ul style="list-style-type: none"> <li>• Wait a few moments and try again</li> <li>• Exit the program and restart it</li> </ul>
Cannot open attached documents	LBNL Network is down or timed out	Wait a few moments and try again
Cannot preview document	LBNL Network is down or timed out	Wait a few moments and try again
Cannot print document	LBNL Network is down or timed out Connections between user computer and printer are not working properly	<ul style="list-style-type: none"> <li>• Wait a few moments and try again</li> <li>• Check connection between computer and printer</li> </ul>

For troubleshooting issues not listed, contact [iss-ia@lbl.gov](mailto:iss-ia@lbl.gov).

## 9.0 User and Maintenance Support

The CATS Database code is managed by the Office of Contract Assurance (OCA) and maintained by the LBNL IT Division. Users may contact the OCA for guidance on how to complete the fields in the database or request guidance on database protocol. Users may contact IT with problems they have regarding database operability.

## 10.0 User Documentation Development

Melanie Gravois, LBNL Office of Contract Assurance (OCA)

**Attachment 1 – CATS Database Entry Fields**

<b>Field</b>	<b>Responsible Party</b>	<b>Description of Information to be Entered</b>
<b>ISSUE FIELDS</b>		
Issue No.	Database	The database automatically generates a sequential number when the Originator (the individual who enters the information into the database) saves the entry.
Entered By	Database	The database automatically identifies who entered the information into the database. This is the same as Originator.
Entry Date	Database	The database automatically identifies the date the entry was made into the database. This is the same as Originator.
Originator's Division	Database	The database automatically identifies Division to which the Originator belongs.
Division	Originator	Select the Division to which the issue is applicable.
*Issue Type	Originator	Select the most appropriate type of issue.
Discovery Date	Originator	Type or select the date the issue was discovered.
Closure Date	Database	The database automatically closes issues and associated corrective actions collectively and will reflect the date that the last corrective action was completed.  Corrective actions associated with a "Worker Safety" issue that required a Work Request will be closed automatically when Maximo is updated to reflect completion of the work.
Building	Originator	Select the Building in which the issue was discovered.
Room	Originator	Select the room in which the issue was discovered.
Add Location	Originator	Select additional rooms in which the issue was discovered.
*Issue Category	Originator	Select the most appropriate category that the issue fits into.
*Risk level	Originator	Select the appropriate risk level for the issue.
*(de minimis) Justification	Originator	Enter the reason(s) why a de minimis risk level is acceptable for the issue.

**Attachment 1 – CATS Database Entry Fields**

<b>Field</b>	<b>Responsible Party</b>	<b>Description of Information to be Entered</b>
Significance Code	Originator	In conjunction with the SME or cognizant or line management, select the appropriate significance code(s) for the issue.
*Assessment Type	Originator	Select the type of assessment that was performed during which the issue was discovered.
*Issue Description	Originator	Manually enter a complete and accurate description of the issue so that it is evident what the corrective action must address in order to resolve the issue.
*Trend Code	Originator	In conjunction with the SME or appropriate line or cognizant management, select the trend code that is most applicable to the issue.
*Requirement(s) Violated	Originator	This is not applicable to Workspace Safety Issues.  Enter the specific requirement that was not conformed with.
*Requirement(s) Reference	Originator	This is not applicable to Workspace Safety Issues.  Enter the Requirement #, Title, Section, Subsection, or paragraph of the requirement that was not conformed with.
Immediate Action(s) Taken	Originator	This is not applicable to Workspace Safety Issues.  Enter the actions that were immediately taken to mitigate an issue.
<b>CORRECTIVE ACTION FIELDS</b>		
CATS ID	Database	The database automatically assigns each corrective action a sequential number.
Task No.	Database	The database automatically assigns each corrective action a unique sequential task number based on the number of corrective actions an issue may have associated with it.
Entered by	Database	The database automatically identifies the Originator of the corrective action.

**Attachment 1 – CATS Database Entry Fields**

<b>Field</b>	<b>Responsible Party</b>	<b>Description of Information to be Entered</b>
Entry Date	Database	The database automatically identifies the date the Originator entered the corrective action.
*Corrective Action	Originator	Enter the specific corrective action that will be taken to mitigate or remove the cause of the issue to prevent recurrence.
*Due Date	Originator	In conjunction with the SME or appropriate line or cognizant management, identify the most realistic due date for the corrective action.
Completed Date	Responsible Person/ Maximo	For corrective actions with no Work Request: Upon verifying the objective evidence of completion of the corrective action, enter or select the date of verification and completion.  For corrective actions with associated Work Requests: Upon completion of the field work and entry into Maximo, Maximo will back populate this field into CATS.
Closure Date	Database	Upon completion of the last corrective action associated with an issue, the database automatically enters the closure date for the issue and associated corrective actions with this date.
*Responsible Person	Originator	In conjunction with the SME or appropriate line or cognizant management, identify the person who will be responsible for performing the corrective action.
CM	Database	The database automatically identifies the CM of the Responsible Person.
CM Division	Database	The database automatically identifies the Division of the CM.
Work Request Required	Originator	If a work request is required, the checkbox must be manually checked.
Institutional WR	Originator	This is a dynamic field that becomes visible to the Originator only if the Work Request checkbox is checked. If a work request is considered institutional, the checkbox must be manually checked.

**Attachment 1 – CATS Database Entry Fields**

<b>Field</b>	<b>Responsible Party</b>	<b>Description of Information to be Entered</b>
Project ID	Originator	This is a dynamic field that becomes visible to the Originator only if the Institutional checkbox is not checked. The appropriate project ID to be billed for the work must be manually entered. Do not include dashes or spaces.
Work Order No.	Maximo	This field is back populated by Maximo into CATS and is not modifiable from the CATS interface.
Work Order Status	Maximo	This field is back populated by Maximo into CATS and is not modifiable from the CATS interface.
Facilities Contact	Maximo	This field is back populated by Maximo into CATS and is not modifiable from the CATS interface.
Notes	Maximo	This field is back populated by Maximo into CATS and is not modifiable from the CATS interface.
Extension Requested by	Originator or Responsible Person	Identify the individual requesting the extension.
Extension Due Date	Originator or Responsible Person	Select or type in the new extended due date.
*(Extension ) Justification	Originator or Responsible Person	The reasons justifying the extension request are required to be entered.
*Review/Approval	Originator/ Database	On the Issue screen: Identify the name of the person(s) who will review the issue and associated corrective actions. The database automatically assigns certain reviewers based on the Issue Type or significance code(s) selected.  On the Corrective Action screen: The database automatically identifies the same Reviewers as on the Review/Approval Screen.
Status	Database	The database automatically identifies the status of an issue and associated corrective actions.
*Comments	Reviewer	If an issue and/or associated corrective actions are denied, the reason(s) for the denial must be identified in this field.

\* = Required fields