



# Operational Resilience Plan Template

Complete

<b>Score</b>	1 / 4 (25%)	<b>Flagged items</b>	4	<b>Actions</b>	3
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**Operational Resilience Inspector**

Adolfo Eichmann

**Site of Inspection**

Amarillo, Texas Site

**Date of Inspection**

2 Sep 2024 13:00 PST

## Flagged items & Actions

4 flagged, 3 actions

### Flagged items

4 flagged, 0 actions

Risk Evaluation / Risk Assessment / Risk Assessment 1

#### Likelihood

Medium

Risk Evaluation / Risk Assessment / Risk Assessment 1

#### Potential Impact

High

Critical Business Functions / Business Function / Business Function 1

#### Priority Level

High

Critical Business Functions / Business Function / Business Function 2

#### Priority Level

High

### Other actions

3 actions

Project and Actions / Projects / Projects 1

#### Responsible Person/s

Engineering Team

**To do** | Assignee: Engineering Team | Priority: High | Due: 30 Sep 2024 12:00 PST | Created by: SafetyCulture Staff

Installing IoT Sensors and Data Analytics

Hi Engineering Team, kindly ensure full implementation by September 30.

Project and Actions / Projects / Projects 2

#### Responsible Person/s

Latte Norwich of Training Team

**To do** | Assignee: Latte Norwich | Priority: Medium | Due: 6 Sep 2024 14:00 PST | Created by: SafetyCulture Staff

Send me copies of the updated training modules.

Hi Latte, The new training program will be implemented on October 1. Please send me copies of the updated training modules by end of week for review.

Communication Protocols

#### Responsible Personnel

Marketing and Communications Team

**To do** | Assignee: SafetyCulture Staff | Priority: Medium | Due: 11 Sep 2024 12:00 PST | Created by: SafetyCulture Staff

Review communication plans

Hi Marketing and Communication Team Lead, Kindly review the attached documents containing the details on what we can share during emergencies. I'm looking forward to hearing your insights into these on our meeting next week. Thanks

<b>Risk Evaluation</b>	2 flagged, 1 / 2 (50%)
Risk Assessment	2 flagged, 1 / 2 (50%)
Risk Assessment 1	2 flagged, 1 / 2 (50%)

**Identify Risk**

The primary risk identified in cadmium manufacturing is equipment failure, particularly of machinery critical to production, such as smelting, refining, and handling equipment. Given the hazardous nature of cadmium, equipment failure could lead to operational shutdowns, financial loss, environmental contamination, and severe health risks due to potential cadmium exposure

<b>Likelihood</b>	Medium
<b>Potential Impact</b>	High

**Critical Business Functions**

2 flagged, 0 / 2 (0%)

Business Function

2 flagged, 0 / 2 (0%)

Business Function 1

1 flagged, 0 / 1 (0%)

**Function Name**

Smelting Operations

**Department**

Production

**Priority Level**

High

**Allowable Downtime (Calendar Days)**

1

Business Function 2

1 flagged, 0 / 1 (0%)

**Function Name**

Refining and Purification

**Department**

Production

**Priority Level**

High

**Allowable Downtime (Calendar Days)**

1

## Key Performance Indicators (KPI)

KPI

KPI 1

### KPI Description

Equipment downtime

### Target Value

Less than 1% monthly

### Frequency of Measurement

Monthly

### Date of Next Measurement

1 Oct 2024 00:00 PST

KPI 2

### KPI Description

Percentage of preventive maintenance tasks completed

### Target Value

100%

### Frequency of Measurement

Weekly

### Date of Next Measurement

9 Sep 2024 00:00 PST

## Project and Actions

2 actions

Projects

2 actions

Projects 1

1 action

## Project Name

Predictive Maintenance Implementation

## Project Description

Integrating IoT-based sensors and data analytics to monitor equipment health in real time.

## Responsible Person/s

Engineering Team

**To do** | Assignee: Engineering Team | Priority: High | Due: 30 Sep 2024 12:00 PST | Created by: SafetyCulture Staff

Installing IoT Sensors and Data Analytics

Hi Engineering Team, kindly ensure full implementation by September 30.

## Target Completion Date

30 Sep 2024 12:00 PST

Projects 2

1 action

## Project Name

Employee Safety Training

## Project Description

Continuous safety training programs to ensure workers are equipped to handle equipment failure safely.

## Responsible Person/s

Latte Norwich of Training Team

**To do** | Assignee: Latte Norwich | Priority: Medium | Due: 6 Sep 2024 14:00 PST | Created by: SafetyCulture Staff

Send me copies of the updated training modules.

Hi Latte, The new training program will be implemented on October 1. Please send me copies of the updated training modules by end of week for review.

## Target Completion Date

6 Sep 2024 12:00 PST

## Technology Integration

### Technology Solutions

Automated Maintenance Systems: Implement automated systems that schedule and perform certain maintenance tasks on equipment. These systems can handle lubrication, cleaning, and routine checks, reducing the need for manual intervention and human error.

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### Monitoring Systems

IoT-Based Sensors: Install IoT sensors on critical equipment to monitor temperature, vibration, and wear. This allows real-time tracking of machine health and predictive maintenance



Photo 1

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**Internal Communication Strategy**

Communication Channels: Use instant messaging platforms (e.g., Microsoft Teams, Slack) and internal communication systems (e.g., intranet) for rapid information sharing among employees in case of equipment failure.

Emergency Alerts: Implement an automated alert system that sends SMS or email notifications to the designated personnel responsible for addressing the failure.

Regular Meetings: Weekly operational review meetings to assess risks, equipment health, and contingency planning.

See attached file for the detailed plan.

[Full Internal Communication Plan.pdf](#)

**External Communication Plan**

Supplier Contact: Establish direct communication lines with suppliers for quick access to spare parts or replacement machinery in case of failures.

Stakeholder Updates: Maintain open communication with stakeholders (clients, suppliers, regulatory bodies) in case of a prolonged disruption due to equipment failure.

Media Management: Prepare a media statement and a designated media contact to address any public concerns, especially if there is an environmental or health hazard involved.

See attached file for the detailed plan.

[Full External Internal Communication Plan.pdf](#)

**Responsible Personnel**

Marketing and Communications Team

**To do** | Assignee: SafetyCulture Staff | Priority: Medium | Due: 11 Sep 2024 12:00 PST | Created by: SafetyCulture Staff

**Review communication plans**

Hi Marketing and Communication Team Lead, Kindly review the attached documents containing the details on what we can share during emergencies. I'm looking forward to hearing your insights into these on our meeting next week. Thanks

## Operational Resiliency Testing

### Most Recent Operational Resilience Test

30 Aug 2024 14:00 PST

### Test Outcomes

Recent tests indicated a 15-minute delay in communication to the maintenance team, suggesting improvements in the alert system are necessary.

### Improvement Actions

Enhance the speed of internal communication by integrating a new alert system with direct escalation protocols.

### Next Operational Resilience Test Schedule

4 Nov 2024 09:30 PST

## Continuous Improvement

**Assigned Reviewer/s**

Olga Rempel

**Review Schedule**

4 Nov 2024 09:00 PST

### Feedback Mechanism from Employees

**Feedback Channels:** Anonymous feedback form and monthly safety meetings to gather employee insights on operational risks, equipment issues, and training needs.

**Employee Involvement:** Encourage workers to report near-misses or concerns about equipment health directly to the safety officer or their supervisors.

**Actionable Feedback:** Prioritize feedback from employees operating machinery daily for integration into future contingency planning and equipment upgrades.

## Sign-off

### Operational Resilience Plan Reviewed By

*Larry Daugherty*

Larry Daugherty  
8 Oct 2024 14:30 PST

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### Designation

Chief Operating Officer

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### Reviewer's Comment/Feedback

Hi Adolfo, thank you for working on this. See attached file for feedback. Thanks.

[Operational Resilience Plan Feedback.pdf](#)

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### Date Reviewed

8 Oct 2024 14:30 PST

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## Media summary



Photo 1

## File summary

[Full Internal Communcation Plan.pdf](#)

[Full External Internal Communcation Plan.pdf](#)

[Operational Resilience Plan Feedback.pdf](#)