

**GENERAL INSTRUCTION MANUAL**

6.004

ISSUING ORG. LOSS PREVENTION DEPARTMENT

ISSUE DATE  
04/12/2017REPLACES  
02/15/2012

SUBJECT NEAR MISS REPORTING PROCESS

APPROVAL  
AAGPAGE NO.  
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- \* 6.004-3, SAP EHSM NEAR MISS INCIDENT SEARCH PROCEDURE
- \*\* 6.004-4, PROCESS SAFETY NEAR MISS EXAMPLES

**\* 1.0 PURPOSE AND SCOPE**

This General Instruction (GI) provides a process for reporting, investigating, analyzing, and communicating near misses in Saudi Aramco facilities/operations. The objective is to use this information to identify corrective actions and preventive measures to reduce injuries and losses.

Incidents which result in injury, property damage, product loss or environmental damage are typically reported and investigated according to established procedures, such as GIs 6.001, 6.003, 6.005, and 6.029.

**2.0 DEFINITION**

- \* 2.1 **Near miss:** An unplanned incident which under slightly different circumstances could have resulted in harm to people, damage to assets, financial loss and/or harm to the environment. It may include:
  - Incidents where injury or property damage could have occurred but did not, e.g., employee tripped over a cable on the floor and almost fell; employee was standing very close to a load that was dropped from a crane; mechanic drops a heavy wrench from a scaffold to the floor almost hitting another employee.
  - Incidents where a major safety system failed to perform as designed, e.g., fire pump auto start malfunction.
  - Incidents where potential environmental damage could result, e.g., a full drum of oil knocked over but the lid remains on.
- \* 2.2 **Process safety near miss:** An undesired event or condition that under slightly circumstances, could have resulted in a release of hazardous material. It may include but not limited to the following:
  - A failure of a safety systems (pressure relief devices, safety instrumented systems, mechanical shutdown systems), when required.
  - Primary containment inspection or testing results outside acceptable limits.
  - Process deviation or excursion.

\* CHANGE

\*\* ADDITION

NEW INSTRUCTION

COMPLETE REVISION

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For more examples of Process Safety Near Miss see Supplement 6.004-4.

**3.0 GENERAL GUIDELINES**

- \*\* 3.1** A near miss incident should be investigated if there was the potential for more serious consequences and an investigation is not required by other instructions. Note that unsafe conditions and unsafe acts in themselves are not near misses but may be part of a near miss occurrence.
- 3.2** Near misses should be openly reported, investigated, analyzed, and communicated with the objective of sharing lessons learned and taking corrective action to prevent recurrence and improve safety performance.
- 3.3** Departments should promote and publicize that near miss reporting is a positive attribute to be encouraged and supported. Employees must be made aware that they will not be punished or disciplined for reporting near misses.

**4.0 COMMUNICATION AND FOLLOW-UP**

- 4.1** On a quarterly basis all departments should review, summarize, and openly communicate information on near misses within their organization with the objective of improving safety performance. This shall include trend analyses to identify areas for improvements in processes, procedures, equipment, and other factors. These summaries should be communicated to appropriate management, key personnel, and a copy sent to the Area Loss Prevention Division.
- 4.2** All recommendations from near misses should be tracked within the organization to completion or resolution.
- 4.3** For near misses with the potential for serious consequences (e.g., serious injury/fatality, property damage, product loss, environmental impact) or near misses with valuable lesson learning potential, both the near miss report and the investigation (if any) should be routed to the Area Loss Prevention Division for wider communication throughout the company as appropriate.

**5.0 RESPONSIBILITIES**

- 5.1** All employees/contractors
- 5.1.1** Report any item that might be considered a near miss to their immediate supervision or the facility supervisor (in the case of contractors).
- 5.1.2** Participate in the investigation and resolution of near misses as directed by their supervision.
- \* 5.1.3** The employee should initiate and complete a near miss report in SAP EHSM. The contractor should report the incident to the Saudi Aramco facility supervisor who will initiate and complete the near miss report in SAP EHSM.
- 5.2** Unit operations foremen/supervisors
- 5.2.1** Promote immediate reporting of all near misses, assuring employees and contractors that these are considered positive efforts.

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\* 5.2.2 Review or forward in SAP EHSM the near miss incident to a reviewer for advice if necessary.

\* 5.2.3 Reject or submit it to the next level of management in SAP EHSM.

5.2.4 Assign an employee within the organization to follow up to completion with the facility who is responsible for the corrective action of the near miss incident.

5.2.5 Verify all action items resulting from investigations are implemented, and other necessary follow-up action is completed.

### 5.3 Reviewer

\* 5.3.1 Review and provide feedback for the near miss incident in SAP EHSM when forwarded for advice by the supervisor or other levels of management.

\* 5.3.2 Send back the near miss to the sender by clicking on the Reviewed button in SAP EHSM.

### 5.4 Division heads

\* 5.4.1 Ensure all employees and contractors understand the intent of this GI and have been provided appropriate orientation on the organization's near miss process.

5.4.2 Upon being notified of a near miss, determine if additional investigation is required and arrange for the investigation to be completed.

\* 5.4.3 Approve or reject the near miss incident in SAP EHSM.

5.4.4 Ensure action items resulting from investigations are communicated to responsible parties and are tracked to completion.

5.4.5 Forward copies of serious near miss reports and investigations to the Area Loss Prevention Division for wider communication throughout the company. To save or print a copy of the report that the organization wants to send to the Area Loss Prevention Division, see Supplement 6.004-3 for the procedure.

### 5.5 Department managers

\* 5.5.1 Ensure all aspects of the near miss process are complete, are maintained up to date, and are implemented adequately.

5.5.2 Encourage and support open reporting where individuals do not fear any negative consequences from reporting a near miss.

5.5.3 Ensure that corrective actions are properly implemented.

\* 5.5.4 Highlight near misses at Safety Management Committee (SMC) meetings and ensure that lessons learned and improvements resulting from near miss reports are publicized within the department.

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5.5.5 Ensure quarterly (at a minimum) analyses and summaries of near misses are prepared and communicated per Section 4.1.

\* 5.5.6 Annually perform an internal review of the near miss process and make improvements as necessary.

## 5.6 Loss Prevention Area Division

\* 5.6.1 Disseminate appropriate information on serious near misses to a wider audience (such as in SMC meetings) to increase awareness and promote lessons learned.

\*\* 5.6.2 Provide advice when contacted on whether or not a particular event should be reported as a near miss. In general, any on-job near miss where "someone could benefit by learning from the event" should be reported and investigated as an opportunity to improve safety in the workplace.

APPROVED:

DATE: \_\_\_\_\_

\_\_\_\_\_  
MANAGER

Loss Prevention Department

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5 OF 8**\* Supplement 6.004-1, SAP ENVIRONMENT, HEALTH & SAFETY MANAGEMENT (EHSM) NEAR MISS INCIDENT REPORTING PROCEDURE**

1. Log on to the “MyHome Corporate Portal”.
2. Click the “EHSM” link.
3. Expand the Near Miss application by clicking “Near Miss” arrow
4. Click “Report Near Miss”
5. Complete the required information.
6. Click “Submit”.
7. Confirm you action by clicking “Yes”.
8. For Supervisor, click the near miss workflow from your workflow inbox.
9. Review the details shown in the “Basic Information” section.
10. Click “Next” to continue.
11. Add and Save corrective action if any or approve the near miss report.
12. For Division Head or Next Level of Management, click the near miss workflow from your workflow inbox, the near miss report in PDF will be displayed.
13. Review the details and click “Approve” to approve the workflow.

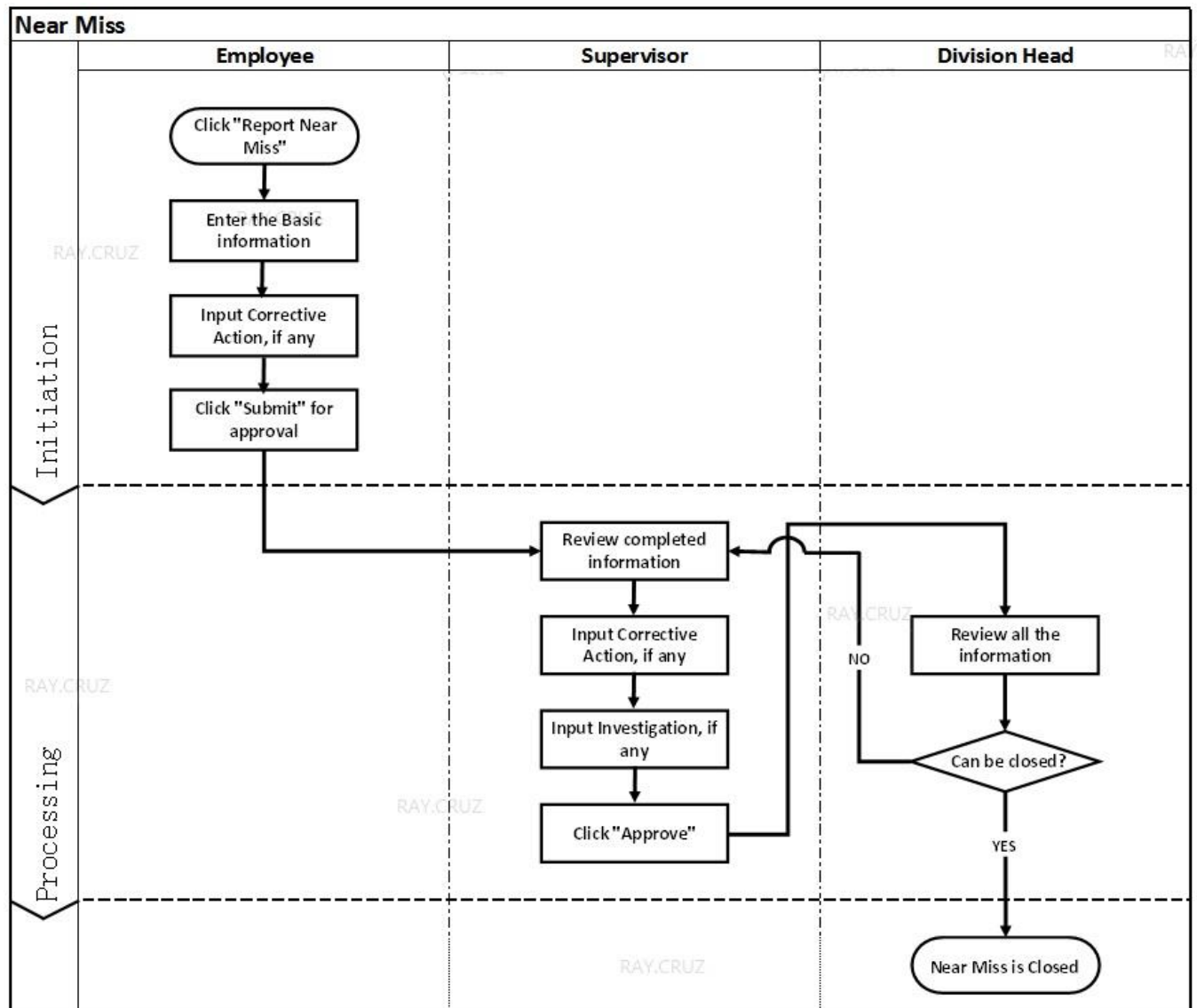
Note: The training simulation course for “Reporting and Processing Near Miss” can also be accessed through the LPD website at <http://lp.aramco.com.sa> under Services, E-learning, Available LP Courses or Safety Related Courses, Incident Management (E-learning Simulations).

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1. Log on to the “My Home Corporate Portal”.
2. Select “EHSM”.
3. Expand the “Near Miss” by clicking the arrow.
4. Select “Search Near Miss”.
5. Fill up any fields such as Incident ID, Event Dates (FROM-TO), or any other fields that you want to use as the search criteria.
6. Click “Search”.
7. Click on the “Incident ID”.
8. Click “Print”.
9. Click “Save” in order to save the incident in Microsoft Word document.
10. Send the file or the printed report to the Area Loss Prevention Division.

**PURPOSE OF THIS PROCEDURE**

1. To send copies of serious near miss reports and investigations to the Area Loss Prevention Division for wider communication throughout the company.
2. To print copies of near miss reports for discussion in SMC and other safety meetings.
3. To print copies of near miss reports for other purposes.

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Near misses for Demands on Safety Systems may fall into a category of a demand with failure of the safety system given a legitimate demand with a potential for loss of containment. Examples include:

- Failure to open of a rupture disk, a pressure control valve to flare or atmospheric release, or a pressure safety valve when the system conditions reach or exceed the prescribed trigger point.
- Any time a safety instrumented system fails to operate as designed when a demand is placed on the system (i.e. unavailability on demand).
- The number of times a mechanical shutdown system is called upon to function by a valid signal and does not respond.

Mechanical shutdown systems that are configured for equipment protection with no related loss of containment protection should be excluded from the process safety near miss count.

Near misses involving primary containment inspection or testing results outside acceptable limits:

An inspection or test finding that indicates primary containment equipment has been operated outside acceptable limits. These findings typically trigger an action, such as replacement-in-kind, repairs to restore fitness-for-service, replacement with other materials, increased inspection or testing, or de-rating of process equipment. Examples include:

- An inspection or test finding that indicates vessels, atmospheric tanks, piping, or machinery when previous operating pressures or levels exceed the acceptable limits based upon wall thickness inspection measurements.
- A single event is recorded for each pressure vessel or atmospheric tank regardless of the number of individual test measurements found to be below the required wall thickness.
- A single event is recorded for each pipe circuit regardless of the number of individual test measurements below its required wall thickness as long as it is the same line, constructed of the same material, and is in the same service.

Near misses involving a process deviation or excursion that may lead to a loss of primary containment include:

- Excursion of parameters such as pressure, temperature, flow outside operating window but remaining within the process safety limits.
- Excursions of process parameters beyond pre-established critical control points or those for which emergency shutdown or intervention is indicated.
- Operation outside of equipment design parameters.
- Unusual or unexpected runaway reaction whether or not within design parameters.