

Safety and Environmental Management Systems (SEMS)	Revision Number:	1
	Revision Date:	2/16/14

(API RP 75 Element 3) § 250.1911 Hazards Analysis

The SEMS program requires the development and implementation of a hazards analysis (facility level) and a job safety analysis (operations/task level) for all OCS facilities. We must document and maintain current facility analyses for each operation covered by the regulation and for the life of the facility. The analyses must be updated when an internal audit is conducted to ensure that it is consistent with the current operations on the facility. Hazards analysis requirements for simple and nearly identical facilities, such as well jackets and single well caissons, may be fulfilled by performing a single hazards analysis which can apply to all such facilities after verification that any site specific deviations are addressed in each of the elements of the SEMS program.

Hazards Analysis (facility level)

The hazards analysis must be appropriate to the complexity of the operation and must identify, evaluate, and manage the hazards involved in the operation.

A prioritization scheme must be established for conducting initial facility hazard analyses. Priority must be given to the platforms that pose the most risk to personnel, environment and property.

The hazards analysis (content) must address the following:

1. Hazards of the operation;
2. Previous incidents related to the operation, including any incident in which an Incident of Noncompliance (INC) or a civil or criminal penalty was issued;
3. Control technology applicable to the operation the hazards analysis is evaluating; and
4. A qualitative evaluation of the possible safety and health effects on employees, and potential impacts to the human and marine environments, which may result if the control technology fails.

The hazards analysis must be performed by a person(s) with experience in the operations being evaluated. These individuals also need to be experienced in the hazards analysis methodologies being employed.

All recommendations in the hazards analysis must be resolved and the resolution must be documented.

Periodic Analysis

Hazard Analysis shall be updated every 5 years.

Analysis Personnel

The analysis shall be performed by a team of persons knowledgeable in engineering operations, design, process, safety, environmental and other specialties as appropriate.

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Analysis Report

A written report of the findings of the PHA shall be kept at the facility for the life of the facility which describes the hazards that have been identified and the recommended steps to be taken to mitigate them. The identified hazards and follow-up actions shall be communicated to appropriate personnel via facility safety meetings, postings, company training, maintenance programs, or by participation in the PHA itself.

If a follow-up action is required to be completed prior to startup, that item shall be completed or the hazard shall be otherwise remedied. An appropriate tracking system shall be used to document the resolution of the action items and shall be documented and kept with the master copy of the PHA report. It is not uncommon, upon further risk evaluation to declassify and/or eliminate an action item based on relatively low risk, likelihood, severity, and operational feasibility. Consensus among the PHA team members is necessary to close an action item in this manner.

Job Safety Analysis (JSA)

Every facility must develop and implement a Job Safety Analysis (JSA) for OCS activities that are outside the scope of normal operations (non-routine). At a minimum, a JSA must be prepared, conducted, and approved for OCS activities that include the following non-routine work:

1. All contract work outside the scope of operating the platform,
2. All tasks that require energy isolation (electrical, pneumatic, hydraulic, kinetic),
3. Confined Space Entry,
4. Welding, Cutting, Brazing, Hot Taps,
5. Hazardous Material Handling and Disposal,
6. Exposed Electrical,
7. Critical Crane Lifts,
8. Pigging operations,
9. Working over water,
10. Changing pumps.

The JSA is a technique used to identify risks to personnel associated with their job activities. The JSAs are also used to determine the appropriate mitigation measures needed to reduce job risks to personnel. The JSA must include all personnel involved with the job activity.

The JSA must identify, analyze, and record:

1. The steps involved in performing a specific job;
2. The existing or potential safety and health hazards associated with each Step; and
3. The recommended action(s)/procedure(s) that will eliminate or reduce these hazards and the risk of a workplace injury or illness.

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Example: Typical JSA Format

Sequence of Job Steps	List all Hazards & Potential Accidents / Injuries	Recommended Controls & Safe Behaviors

Job Safety Analysis (JSA) Approval

A JSA requires two (2) levels of approval. 1) The immediate supervisor of the crew performing the job must conduct the JSA, sign the JSA, and ensure that all personnel participating in the job understand and sign the JSA. 2) Additionally, the person in charge of the facility must approve the JSA prior to the commencement of the work. No work will be allowed without all required signatures.

Re-Occurring (Routine) Jobs

If a particular job is conducted on a recurring basis (routine), and if the parameters of these recurring jobs do not change, then the person in charge of the job may decide that a JSA for each individual job is not required. The parameters you must consider in making this determination include, but are not limited to, changes in personnel, procedures, equipment, and environmental conditions associated with the job.

Verifying Training prior to approving Job Safety Analysis (JSA)

All personnel, which includes contractors, must be trained in accordance with the requirements of § 250.1915 (API RP 75 Element 7-Training). Site supervisor's prior to approving a JSA must verify that contractors are trained in accordance with § 250.1915 prior to performing a job. Refer to section 7 of this SEMS program for a list of minimum acceptable contractor training.

A copy of the most recent JSA (operations/task level) must be kept at the job site and it must be readily accessible to employees. The person in charge of the activity must document the results of the JSA in writing and must ensure that records are kept onsite for 30 days. The company must retain these records for 2 years and make them available to BSEE upon request.