

**GAP ANALYSIS: BOEMRE FINAL RULE ADD'L REQMTS W/ HSE CASE GUIDELINES**

ADDITIONAL CFR SECTION	REQUIREMENT	HSE CASE GUIDELINES REF.
<p>☐</p> <p><b>Section 1 General</b></p> <p>+30 CFR 250.1909</p>		
Management General Responsibility	<p>-Establish goals and performance measures, demand accountability for implementation and provide necessary resources for effective SEMS</p> <p>-Appoint management representatives to establish, implement and maintain effective SEMS</p> <p>-Designate management representatives that are responsible to report on performance of SEMS program</p> <p>-Review SEMS program at specific intervals (at least annually) review SEMS program to determine suitability, adequateness, and effectiveness.</p> <p>-Develop and endorse written description of safety and environmental policies and organizational structure that define responsibilities, authorities and lines of communication required to implement SEMS program</p> <p>-Utilize personnel with expertise to identify safety hazards, environmental impacts, optimizing operations, developing safe working practices, developing training programs and investigating incidents.</p> <p>-Ensure facilities are designed, constructed, maintained, monitored and operated in compatible manner with industry codes, standards and accepted practices, and in compliance with governmental regulations.</p> <p>-Ensure management of safety hazards and environmental impacts are integral part of design, construction, maintenance, operation, and monitoring of facility.</p> <p>-Ensure suitably trained and qualified personnel are employed to carry out SEMS program</p> <p>-Ensure SEMS program is maintained and kept up-to-date by periodic audits to ensure effective performance</p>	<p>2.0 (&amp; RP75)</p> <p>2.2.2.1, 2.2.2.2, 2.2.2.3 (&amp; RP75)</p> <p>2.2.2.1(&amp; RP75)</p> <p>1.2.5, 2.5.1 (&amp; RP75)</p> <p>2.2.1, 2.2.2 (&amp; RP75)</p> <p>4.3 (&amp; RP75)</p> <p>3.1.2, 3.1.4, 3.2.1, 3.2.2 (&amp; RP75)</p> <p>3.0 (&amp; RP75)</p> <p>2.2.4 (&amp; RP75)</p> <p>2.4.5, 6.4 (&amp; RP75)</p>

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<b>Section 2 SAFETY AND ENVIRONMENTAL INFORMATION</b>		
+30 CFR 250.1910		
Safety and Environmental Information	<p>-Develop and maintain safety and environmental information for SEMS program that includes</p> <p>a. Information that provides a basis for implementing all SEMS program elements; including requirements for hazard analysis.</p> <p>b. Process design information: including simplified process flow diagram; and acceptable upper and lower limits for items such as temperature, pressure, flow and composition.</p> <p>c. Mechanical design information: including piping and instrument diagrams; electrical area classifications; equipment arrangement drawings; design basis of relief system; description of alarm, shutdown and interlock systems; description of well control systems; design basis for passive and active fire protection features and emergency evacuation procedures.</p>	<p>2.3.1, 2.3.6, 2.3.7, 2.3.8, 4.3.1 (&amp; RP75)</p> <p>2.3.1 (&amp; RP75)</p> <p>3.3 (drilling process only) (&amp; RP75)</p> <p>Appendix 3 (may not be complete) (&amp; RP75)</p>
<b>Section 3 HAZARD ANALYSIS</b>		
+30 CFR 250.1911		
Criteria for Hazards Analysis	<p>-Develop and implement a hazards analysis (facility) and a job safety analysis (operations/task) for each facility.</p> <p>-Document and maintain current analyses for each operation covered by this section for the life of the operation at the facility. (Analysis must be updated when internal audits conducted). An initial hazard analysis must be performed on or before 15 November 2011.</p> <p><b>-Hazard Analysis must address:</b></p> <p>a. Hazards of the operation</p> <p>b. Previous incidents related to the operation; including any incident issued an INC or civil/criminal penalty.</p> <p>c. Control technology applicable to the operation being evaluated</p> <p>d. Qualitative evaluation of possible safety and health effects on employees; and potential impacts to the human and marine environments.</p> <p>-Hazard Analysis must be performed by person experienced in the operation being evaluated and</p>	<p>2.3.1, 2.3.4 (&amp; RP75)</p> <p>4.3, 6.5 (&amp; RP75)</p> <p>4.3.1 (&amp; RP75)</p> <p>4.7</p> <p>1.2.6, 2.3.6 (partial)</p> <p>4.4.3</p> <p>4.3.1 (&amp; RP75)</p>

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[]	<p>have hazard analysis methodology experience.</p> <p>-Hazard Analysis recommendation(s) must be resolved with resolution documented</p> <p><b>-Job Safety Analysis (JSA)</b> must be developed and implemented for OCS activities identified or discussed in SEMS program.</p> <p>-Copy of most recent JSA must be accessible on job site</p> <p>-JSA must identify, analyse and record the following:</p> <ol style="list-style-type: none"> <li>a. Steps involved in performing specific job</li> <li>b. Existing or potential safety and health hazards associated with each step</li> <li>c. Recommended procedure to eliminate or reduce hazard and risk of injury or illness</li> </ol> <p>-Supervisor of person-in-charge must approve JSA prior to work commencement.</p>	<p>4.7.3, 4.9.1</p> <p>2.3.4 (partial)</p> <p>Not specified</p> <p>Not specified</p>
<b>Section 4 MANAGEMENT OF CHANGE</b>		
+30 CFR 250.1912		
Criteria for Management of Change	<p>-Develop and implement MOC procedures for modifications with:</p> <ol style="list-style-type: none"> <li>a. Equipment</li> <li>b. Operating procedures</li> <li>c. Personnel changes (including contractors)</li> <li>d. Materials</li> <li>e. Operating conditions</li> </ol> <p>-Review all changes prior to implementation</p> <p>-Include the following in MOC procedures</p> <ol style="list-style-type: none"> <li>a. Technical basis for change</li> <li>b. Impact of change on safety, health, coastal and marine environments</li> <li>c. Necessary time period to implement</li> <li>d. Management of approval procedures for change</li> </ol>	<p>1.2.5, 2.3.2 (specific areas not covered)</p> <p>Not specified</p> <p>1.2.5, 2.3.2 (specific areas not covered)</p>
<b>Section 5 OPERATING PROCEDURES</b>		
+30 CFR 250.1913		
Criteria for	-Develop and implement operating procedures that	2.3

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Operating Procedures	provide instructions for conducting safe and environmentally sound activities for each operation in SEMS program.	
	-Operating procedures need to be accessible to all involved in operation(s)	2.3.13
	-Operating procedures must be reviewed periodically to ensure they remain current	1.2.5, 2.3.2, 6.3
	-Develop and implement environmentally sound work practices for identified hazards	2.3.6
	-Review of procedure changes need to be documented and communicated to responsible personnel.	2.3.2

## Section 6 SAFE WORK PRACTICES

+30 CFR 250.1914

Criteria to be documented for safe work practices and contractor selection	-Establish and implement safe work practices for operation, maintenance and modification activities and the handling of materials/substances that could affect safety or environment.	2.3.5, 2.3.12.1 (& RP75)
	-Contractor selection must include evaluation of their safety and environmental performance. Contractor must have their own written safe practices. Operator must document their agreement on appropriate contractor safety and environmental policies and practices prior to work commencement.	2.3.5, 2.2.4
	-Document contracted employees are experienced and knowledgeable in work practices to perform their job safely in and environmentally sound manner. Copy available to BOEMRE upon request.	2.2.4
	-SEMS program to include procedures and verification for contractor selection to include:	
	a. Procedures to verify contractor conducting their activities IAW SEMS program	Not specified
	b. Contractors have skills and knowledge for duties assigned.	2.2.4
	c. Results of contractor selection verification available to BOEMRE upon request	Not specified
	d. Perform periodic evaluations of contractor employee performance	4.2
	e. Maintain contractor employee injury and illness log for 2 years (include info on Form MMS-131)	Not specified
	f. Inform contractors of any known hazards at facility	4.9

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[]	g. Develop and implement safe work practices to control employee presence, entrance and exit in operation areas.	Not specified
<b>Section 7 TRAINING</b>		
+30 CFR 250.1915		
Criteria for Training	-Establish and implement training program so all personnel are trained to work safely and are aware of environmental considerations related to their duties and responsibilities. Training to address operating procedures, safe work practices, and emergency response and control measures.)	2.2.4 (& RP75)
	-Document qualifications of instructors	Not specified
	-SEMS program to include:	
	a. Initial training	2.2.4.4, 2.2.4.5
	b. Periodic training	2.2.4.5, 5.3.2 (& RP75)
	c. Communication requirements to manage changes	2.3.2
	d. Verify contractors are trained	2.2.4
<b>Section 8 ASSURANCE OF QUALITY AND MECHANICAL INTEGRITY OF CRITICAL EQUIPMENT</b>		
+30 CFR 250.1916		
Criteria for Mechanical Integrity	-Develop and implement written procedures that provide instructions to ensure the mechanical integrity and safe operation of equipment through inspection, testing and quality assurance thereby ensuring "fit-for-purpose."	2.3.19 (& RP75)
	-The mechanical integrity program must encompass:	
	a. Design, procurement, fabrication, installation, calibration, and maintenance of equipment IAW Manufacturer's specs	3.1.5
	b. Employee training regarding maintaining equipment	2.2.4.4 (partial)
	c. Frequency of inspections and tests.(IAW BOEMRE regulations and the manufacturer's recommendations.)	2.4.1, 6.3 (partial)
	d. Documentation of each inspection and test performed.	6.5 (partial)
	e. Timely correction of equipment deficiencies.	Not specified

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[]	<ul style="list-style-type: none"> <li>f. Installation of new equipment with verification.</li> <li>g. Modification of existing equipment.</li> <li>h. Verification of suitable spare parts and materials for maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>2.3.19 (partial)</li> <li>2.3.19 (partial)</li> <li>Not specified</li> </ul>
<b>Section 9 PRE-START UP REVIEW</b>		
+30 CFR 250.1917		
Criteria for Pre-start up	<ul style="list-style-type: none"> <li>-Requires a commissioning process for new and significantly modified facilities to confirm the following: <ul style="list-style-type: none"> <li>a. Construction and equip IAW specifications.</li> <li>b. Safety, environmental, operating, maintenance, emergency procedures are in place.</li> <li>c. Safety and environmental info is current</li> <li>d. Hazard analysis recommendations implemented</li> <li>e. Training of operating personnel completed</li> <li>f. Programs to address MOC in place.</li> </ul> </li> </ul>	Not specified
<b>Section 10 EMERGENCY RESPONSE AND CONTROL</b>		
+30 CFR 250.1918		
Criteria for Emergency Response and Control	<ul style="list-style-type: none"> <li>-Requires that emergency response and control plans are in place and validated by drills per SEMS program schedule. Plans must include: <ul style="list-style-type: none"> <li>a. Emergency Action Plan that assigns qualified persons at facility</li> <li>b. Emergency Control center for facility</li> <li>c. Training and drills, which have realistic scenarios, and also incorporate evacuation procedures. Analysis and critique of each drill.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>2.3.3, 5.1.3, 5.2.2 (&amp; RP75)</li> <li>5.1.3, 5.2.1 (&amp; RP 75)</li> <li>5.2.1 (&amp; RP75)</li> <li>5.3.1, 5.3.2, 5.3.3, 5.5.1, 5.5.2 (&amp; RP75)</li> </ul>
<b>Section 11 INVESTIGATION OF ACCIDENTS</b>		
+30 CFR 250.1919		
Criteria for Investigation of Accidents	<ul style="list-style-type: none"> <li>-Establish procedures for prompt investigation of all incidents with serious safety or environmental consequences. The investigation must address: <ul style="list-style-type: none"> <li>a. Nature of incident</li> <li>b. Human or other factors that contributed to initiation or escalation or control</li> <li>c. Recommended changes to procedures</li> </ul> </li> </ul>	2.4.2, 6.3.1 (& RP75)

ADDITIONAL CFR SECTION	REQUIREMENT	HSE CASE GUIDELINES REF.
[]	-Establish a corrective action program to analyse root causes. Program should include: <ol style="list-style-type: none"> <li>a. Findings of investigation</li> <li>b. Documented response</li> <li>c. Distribution of conclusions</li> </ol>	6.3.1 (partial)

## Section 12 AUDIT OF SAFETY AND ENVIRONMENTAL MANAGEMENT PROGRAM ELEMENTS

+30 CFR 250.1920, 1924, and 1925

Criteria for Audit of SEMS program	-Comprehensive audit conducted by third party or designated and qualified person within 2 years of initial implementation and 3 years hence.	2.4.5, 6.4 (& RP75)
	-Audit plan must meet/exceed API RP75 Section 12	Not specified
	-BOEMRE (or rep) will visit / evaluate facility to determine effectiveness of SEMS program.	Not specified
	-BOEMRE must be notified 30 days prior to conducting an audit of facility.	Not specified
	-BOEMRE may direct independent third part audit	Not specified
	-Audits must be submitted to BOEMRE within 30 days of audit completion	Not specified
	-BOEMRE is to be provided a copy of the plan to address deficiencies, if findings from audits result in enforcement actions.	Not specified

## Section 13 RECORDS AND DOCUMENTATION

+30 CFR 250.1928

Criteria for Records and Documentation	-SEMS program procedures must ensure that records are maintained for 6 years (esp audits). Copy of SEMS program documents must be maintained at an onshore facility.	Not specified
	-Person in charge must document results of JSAs in writing and maintain them on facility for 30 days; these records must be retained and available to BOEMRE for 2 years.	Not specified
	-MOC provisions must be documented and dated and retained and available to BOEMRE for 2 years.	Not specified
	-Injury and illness log must be retained and available to BOEMRE for 2 years.	Not specified
	-Evaluations on contractor safety policies and procedures must be retained and available to	Not specified

BOEMRE for 2 years.

-All records must be in orderly manner, easily identifiable, retrievable, and legible; and include the date of any and all revisions.

Not specified

## **ADDITIONAL BOEMRE PROVISIONS FOR SEMS PROGRAM AS PER THE FINAL RULE**

-Recordkeeping and Documentation regarding specification of the amount of time records are to be kept.

Not specified

-Clarification of the differences between hazards analysis(facility level) and job safety analysis (task level)

Not specified

-Procedures to verify that contractors are conducting their activities IAW the operator's SEMS program and an evaluation to ensure that contractors have the skills and knowledge to perform their assigned duties

Not specified

-An independent third party or your designated and qualified personnel must conduct all SEMS audits

Not specified

-Audit documentation must be submitted to BOEMRE

Not specified

-Other documentation must be submitted to BOEMRE

Not specified

-Other documentation to be made available to BOEMRE upon request

Not specified

-OCS performance measures data (Form MMS-131)

Not specified