

# SEMS — PLAN B

## PLAN B

Ian Sutton

*January 2012*

*2<sup>nd</sup> Edition*



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2<sup>nd</sup> edition

Published and distributed by Sutton Technical Books, Houston, Texas

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Sutton Technical Books ([www.stb07.com](http://www.stb07.com)) publishes books, ebooks, checklists and webinars for the process industries. This ebook, *SEMS — Plan B*, is based on material from a wide range of sources, including the SEMS rule and the proposed SEMS II rule (both of which can be found at [www.bsee.gov](http://www.bsee.gov)) and the book *Offshore Safety Management* ([www.stb07.com/bookshop/book-offshore-safety-management.html](http://www.stb07.com/bookshop/book-offshore-safety-management.html)).

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## INTRODUCTION

The Safety and Environmental Management Systems (SEMS) rule became effective November 15<sup>th</sup> 2011. The rule (30 CFR Part 250), which is administered and enforced by the Bureau of Safety and Environmental Enforcement (BSEE or “Bessie”), requires companies operating on the Outer Continental Shelf (OCS) of the United States to have in place a complete and comprehensive SEMS Plan. There is no ramp-up period. Companies are expected to be in full compliance immediately. Moreover senior managers from BSEE have made it clear that they will be enforcing the rule energetically and will not be allowing any informal grace period.

There are around 4,000 drilling rigs and production platforms on the Outer Continental Shelf (OCS) — mostly in the Gulf of Mexico. As can be expected, the degree to which these facilities have a functioning SEMS program varies enormously. It would be naïve to believe that every one of these facilities is in full compliance with all the elements of the SEMS rule. Indeed, data provided by the old Minerals Management Service show that many facilities were far from being in compliance just a few years ago. There is little evidence, either subjective or objective, to suggest that the situation has changed radically since then. This is partly because, as discussed on page 2, it is generally considered that it takes around five years to develop a complete Safety Management System such as SEMS, given that a facility is starting with nothing (which is rarely the case).

Hence, if a facility is audited by BSEE (the various government acronyms are explained on page 6) or, even worse, has a serious incident, it is likely that the audit or investigation will generate many findings or INCs (see page 8 for a description of this term). Therefore many managers of offshore facilities face a dilemma. They know that their SEMS programs are far from complete, but they know that there will be little tolerance in the event that they are audited. These managers find themselves in the less than enviable position of having far too much to do, and too little time in which to do it. Therefore they need to develop a SEMS program that addresses these realities. They need a Plan B.

The development of a Plan B is what this ebook is about.

The essential elements of such a Plan are:

- It should demonstrate that a clear philosophy for addressing the requirements of the SEMS rule has been developed.
- The Plan should be detailed and provide well-defined guidance as to what needs to be done.
- Management must show that they are following the Plan.
- Management must also show that they are addressing any deficiencies that are identified during hazards analyses and related activities.

Having a Plan B does not, of course, mean that penalties cannot be assessed on audit findings. However, such a Plan does demonstrate a good faith effort on the part of management. It shows that they are honestly and energetically addressing the requirements of SEMS, and that a program is in place to achieve the greatest reduction in risk in the shortest period of time.

This ebook has been written to provide facility managers with guidance as to how a Plan B can be developed. It is essential to understand that there is no single “right answer” as to how this is to be done; each company and each facility needs to develop a SEMS program that addresses its own needs and circumstances. For this reason various types of Plan B are discussed here. They are summarized in Table 1.

Table 1  
Types of Plan B

1. Audit-Based;
2. The MMS “top four”; and
3. Risk/Experience-Based.

A discussion of each of these approaches starts on page 9.

Whichever approach is followed, it is vital that a long-term action plan be developed for meeting SEMS requirements, and that the plan be followed. Any deviation from the plan should be thoroughly explained, justified and documented.

## **TIME REQUIRED**

The precedents from other regions of the world and other industries that are discussed below suggest that it takes around five years for a company to build a complete Safety Management System (SMS) starting from the ground up. Therefore the one year that BOEMRE gave to companies is not enough. Their response would be that companies were not, or at least should not have been, starting from the ground up. They should have been working on their SEMP programs for the last twenty years, and one year is plenty of time to convert a SEMP to a SEMS. However, as their own data show, many companies did not have a SEMP program — nor were they required to since RP 75 is a *Recommended Practice*. Therefore the BOEMRE response is somewhat disingenuous.

### **Precedents**

One historical precedent that justifies the above estimate comes from the implementation of the OSHA Process Safety Management (PSM) standard. There are strong similarities between PSM and SEMS. Therefore the time that companies needed to implement PSM probably provides sensible guidance for the same activity with SEMS. In 1992 OSHA told companies that they had to have most of the elements in place immediately. However, the agency did allow for a five year implementation period for certain key activities such as the completion of P&IDs and hazards analyses. Consequently, PSM became — unofficially — a five year standard. And, in general, that was about the right amount of time that a committed company needed to be in compliance.

Another relevant benchmark comes from a public hearing that the Chemical Safety Board held September 15<sup>th</sup> 2010. Authorities on the implementation of Safety Cases in the United Kingdom, Australia and Norway said that it took about five years to develop a representative program.

### **Types of Operator**

BOEMRE divided oil and gas operators into three broad categories depending on their level of activity: High, Moderate and Low. The division depends on the thousands of barrels of oil equivalent (MMBOE) produced per day. BOEMRE reviewed data that had been submitted by many of the operators to do with their SEMP programs, and published the summarized information shown in Table 2.

Table 2  
Types of Operators

Size	Production Rate	Number of Operators	Percentage with SEMP
High Activity	$\geq 10$ MMBOE	13	100
Moderate Activity	1 MMBOE < 10 MMBOE	41	71
Low Activity	< 1MMBOE	76	37

The information shown in Table 2 is self-reported — it was not verified through an independent audit. Therefore it is possible that some companies, both large and small, may have indulged in a little unjustified optimism or wishful thinking regarding their current status, and that they were not actually in as full compliance as reported. It has also been reported that the percentage of companies meeting the SEMP requirements has been slipping since the information in Table 2 was published.

### High Activity Companies

The first conclusion to be drawn from Table 2 is that High Activity (usually the larger companies) should have had little trouble meeting the SEMS rule because they were all 100% in compliance with SEMP. This does not mean, however, that these companies do not have some make-up work to do given that SEMS > SEMP, particularly when the requirements of SEMS II are added in. Therefore even some of the High Activity companies may find that they have a need for a Plan B.

### Moderate Activity Companies

Table 2 shows that there are 41 Moderate Activity operators. They report good compliance with SEMP. But they also are likely to have a considerable amount of work to do to comply with the SEMS standard due to BOEMRE's additional requirements. Therefore they will need some type of Plan B to help prioritize their catch-up work.

### Low Activity Companies

The largest number of operators is in the Low Activity category. Based on Table 2 these smaller operators have a lot of work to do before they have a full and effective SEMS program. Realistically they are not going to have a complete program complete by the 2011 deadline. For these companies a Plan B is a must.

### Companies Already “In Compliance”

Even those companies that have a good SEMS program in place can benefit from the development of a Plan B. When it comes to safety one manager has said, “There is always news about safety, and some of that news is bad”. No company, no matter how excellent its Safety Management System may be is perfect — accidents can occur in even the best-run organizations, and there will always be gaps in even the best SEMS programs. Therefore there will always be a place for some form of Plan B.