

# The Offshore Audit, Monitoring and Review Inspection Guide

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***ED Offshore Inspectors***

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## **Summary**

This inspection guide (IG) outlines an approach to the inspection of a duty holder's arrangements with respect to audit, monitoring and review and the key areas that inspectors should consider when inspecting this topic. It is aimed specifically at major accident hazards. It sets out the criteria for satisfactory and unsatisfactory performance against which duty holder performance will be rated. References are made to technical standards and guidance that inspectors will use to form an opinion of legal compliance.

Audit and monitoring, together with the associated review processes, are key activities in the [Managing for health and safety \(HSG65\)](#) Plan, Do, Check, Act cycle, ensuring the cycle of activities are effective in controlling risks. Consequently, they are important components of any safety and environmental management systems (SEMS) inspection strategy. This IG is therefore part of HSE's strategy for inspecting, assessing and investigating aspects of SEMS. It sets out a framework for inspecting and investigating aspects of audit, monitoring and review arrangements. This draws on the arrangements for auditing and monitoring as described in safety cases.

The guidance highlights key areas for inspection and provides a framework against which inspectors can determine compliance, assign performance ratings and decide what enforcement action should be taken with respect to legislative breaches that may be found. It is not exhaustive but covers a range of issues and circumstances. In doing so, it is consistent with HSE's [Enforcement Policy Statement](#) (EPS) and [Enforcement Management Model](#) (EMM).

It is unlikely inspectors will be able to explore every aspect covered in this IG during one inspection. It is recommended that they plan and direct interventions and gather evidence which, over time, will enable them to build a view of the adequacy and effectiveness of a duty holder's audit, monitoring and review arrangements. The underlying causes of many deficiencies found during inspections raise questions about the effectiveness of audit and monitoring arrangements.

Scores can be allocated on a partial inspection of a system since they are based on identified risk gaps, not some notion of the overall state of (in this case) the audit, monitoring and review arrangements. For example, if a duty holder's audit plan is found not to have been implemented to a significant degree, this may well attract a score of 40 with the potential for an improvement notice (IN).

## **Introduction**

The IG is for use by all operational staff within ED Offshore. It is particularly aimed at inspection management team (IMT) inspectors because they have the responsibility for the SEMS topic specialism, but it is also for use by other topic specialists. The aim is to provide common, transparent procedures for inspectors to regulate a duty holder's undertakings consistently and efficiently. These procedures draw on best practice that has been developed over time.

## **Terminology**

### **Audit and Monitoring**

The activities covered by the terms 'audit' and 'monitoring' vary across duty holders and across guidance documents. For example, most duty holders will have a formal audit programme agreed by senior management which will meet the definition of audit as defined' for example' in The Offshore Installations (Offshore Safety Directive) (Safety Case etc) Regulations 2015 (SCR 2015) Regulation 16(3): "...*“audit” means systematic assessment of the adequacy of the management system to achieve the purpose referred to in paragraph (1)(a) carried out by a person who is sufficiently independent of the system (but who may be employed by the duty holder) to ensure that such assessment is objective.*”

They will also have arrangements in place for reviewing aspects of their systems locally which they may refer to as audits, for example, daily/weekly audits of their permit to work system or monthly audits of selected procedures. However, these are usually carried out by site personnel who may not be regarded as sufficiently independent of the system to meet the regulatory definition of audit above. Therefore, these activities might better be referred to as monitoring activities since the term 'monitoring' is usually associated with these routine higher frequency (daily, weekly, monthly) activities.

'Monitoring' as used for example in The Management of Health and Safety at Work Regulations 1999 (MHSW) Regulation 5, and [Developing process safety indicators \(HSG 254\)](#) is an all-encompassing term used to describe all the activities which provide information on SEMS performance – for example audits, key performance indicators (KPIs), workplace monitoring, investigations. To differentiate between this legislative use and its use to describe regular monitoring of activities on installations, the term 'workplace monitoring' is used throughout this IG for this latter activity.

Both audit and workplace monitoring activities should also be supplemented by other information gained from, for example, structured management visits, incident investigations employing root cause analysis and KPIs.

These terms and the associated activities are discussed in more detail in the appendices. Here, the important point to note is that there is a continuum of activities from regular and systematic worksite observations and checks by site personnel through to formal high-level company audits typically carried out at periods of several years. Duty holders are expected to collate the information from this spectrum of sources, reviewing and analysing it with the purpose of providing a clear understanding of the adequacy and effectiveness of their SEMS and identifying opportunities for learning and improvement.

## **Review**

HSG65 sets out under ‘Act’ (of Plan, Do, Check, Act) the purpose and processes of reviews. The review process allows an organisation to establish whether the essential health and safety principles – effective leadership and management, competence, risk management, worker consultation and involvement – have been embedded in the organisation. The outputs from audit and monitoring activities are one of a number of sources of information which need to be taken into account to understand how well the organisation is managing risk and protecting people; incidents, errors, near misses, organisational experience and general industry experience and learnings all contribute to an effective review.

It is important not only to learn lessons but to take action to address the lessons. The results from audit and monitoring and other activities will lead to the formation of views on both the effectiveness of organisational learning and the effectiveness of implementation of the learning through actions which give rise to sustainable organisational change.

## **Glossary**

ALARP	As Low as Reasonably Practical
Bowtie	Usually a diagram shaped like a bow tie showing the measures (or barriers) which prevent a major accident on the left hand side and the measures (barriers) that help control a major accident, if it occurs, on the right hand side.
CMAPP	Corporate Major Accident Prevention Policy
ED	Energy Division (HSE)
EMM	Enforcement Management Model
EPS	Enforcement Policy Statement
HSE	Health and Safety Executive
IG	Inspection Guide
IMT	Inspection Management Team (HSE, Energy Division)
IN	Improvement Notice
KPI	Key Performance Indicator
MAH	Major Accident Hazard
OGUK	Oil and Gas UK
SEMS	Safety and Environmental Management System

## **Relevant Legislation and Guidance**

**Health and Safety at Work Act 1974 (HSWA) Sections 2(1) and 3(1).** It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all their employees. This establishes the general duty of which audit, monitoring and review are reasonably practicable activities in the discharge of that duty.

### **The Offshore Installations (Offshore Safety Directive) (Safety Case etc) Regulations 2015**

**Regulation 7(6)(b).** Regarding the corporate major accident prevention policy (CMAPP), a duty holder must set up appropriate monitoring arrangements to ensure effectiveness of the policy.

**Regulation 16 (1)(b) and (3).** Audit arrangements are specifically required to assess the adequacy of a duty holder's management system to ensure compliance with relevant statutory provisions and that the management of arrangements with contractors and subcontractors is satisfactory.

**Regulation 27 (d), (e).** This regulation requires a written statement covering key aspects of audit reports to be kept (available) on the installation. The statement should cover specifically, the main findings of the audit report, recommendations, proposed actions and timescales and actions taken.

**Schedule 1(7).** This schedule, together with the associated [guidance L154](#) paragraph 364, require periodic audits undertaken by competent personnel, the establishing of arrangements to capture audit findings and the implementation of measures to feed back to relevant parties and adopt means to ensure outstanding actions are closed out. The arrangements should ensure significant matters will be raised to management board level, including where appropriate audit close-out backlogs, which may impact on the organisation's ability to manage and control major accident hazards.

**Schedule 2(4).** This schedule requires a suitable framework for monitoring compliance with all relevant statutory provisions by incorporating statutory duties in respect of major hazards control and environmental protection into standard operating procedures.

**Schedule 3(8).** This schedule, and the associated [guidance L154](#) in paragraph 386, require a duty holder's SEMS to include adequate arrangements for both active and reactive monitoring of health, safety and environmental performance, particularly in relation to major accidents. Such arrangements should also include reviews of the findings from such activities to ensure appropriate changes are made.

**Schedule 3(9).** This schedule, together with the associated [guidance L154](#) paragraphs 388 and 389, require the description of a duty holder's SEMS to include details of their audit and review arrangements.

**Schedule 6(5).** This schedule, together with the associated [guidance L154](#) in paragraph 436, require an adequate description of the operator's safety and environmental management system, including a summary of the policies, procedures, organisational arrangements, monitoring arrangements and audit practices in place to ensure the SEMS is and remains suitable.

This schedule, together with Regulation 32(4), requires duty holders to establish priorities for the development of standards and guidance and give practical effect to the prevention of major accidents and the limitation of their consequences. Audit, monitoring and review activities are primary means of generating information from which such priorities, standards and guidance can be derived.

**The Management of Health and Safety at Work Regulations 1999 (MHSW) Regulation 5.** This requires appropriate arrangements for the effective ...monitoring and review of preventive and protective measures.

**Managing for health and safety (HSG65, 3<sup>rd</sup> edition 2013).** This guidance focuses on monitoring in the context of checking and measuring performance.

**Developing process safety indicators (HSG254).** Under the term 'monitoring' this guidance brings together formal audits, process safety performance indicators and what are described in this IG as workplace monitoring activities. This covers the gathering of data over the spectrum from low frequency, in depth information to high frequency, lower depth information.

**Guidance on meeting expectations of EI Process safety management framework – Element 20: Audit, assurance, management review and intervention.** This provides comprehensive 'how to' guidance covering setting performance measures for workplace monitoring through to establishing a range of audits which integrate the various levels of activity and information. It covers good practice processes for audit, assurance, management review and intervention.

**Assurance Guidelines, Issue 1, November 2020, OGUK.** These guidelines describe good practices in the implementation of an assurance framework for the prevention of major accidents, including hydrocarbon releases. The guidelines aim to assist industry and help address regulator concern by describing effective assurance activities, providing examples of effective systems, and to promoting and sharing good practice.

## **Action**

- **Inspection Activity**

Inspection activities can be focussed on each of the three components of the auditing, monitoring and review processes.

The audit arrangements can mostly be inspected onshore since a duty holder's audit programme and all its outputs are available onshore. In general this a low frequency activity, most likely carried out in the early stages of a new duty holder taking over, and then repeated to a lesser degree on an annual basis to check the focus of a duty holder yearly audit programme (e.g. has it focussed on the primary MAH risks), its quality and the degree to which the audit plan has been implemented. This latter activity will also be a feature of specialist inspection activity.

Worksite monitoring arrangements are best inspected offshore (although key outputs and analysis should be available onshore) since they are part of the everyday activities carried out on the installation by installation personnel. Monitoring activities can be a major theme for an IMT inspection agenda when, for example, an inspector is new to an installation. Subsequently, individual elements can be specifically inspected by the IMT as part of a larger agenda. Information on monitoring performance will also emerge from inspecting against other SEMS topics and the inspection activities of other specialists.

The review processes need to be inspected both onshore and offshore, where the reviews take place. The offshore workforce is best placed to review the findings of offshore monitoring activities and take appropriate corrective actions. However, onshore managers and others should be aware of the findings and actions ensuring these contribute to the bigger picture of SEMS effectiveness and supporting and encouraging the worksite monitoring activities. This is also a fertile environment for workforce engagement since they can participate in worksite monitoring, reviewing findings and integrating these into findings and learnings from investigations, near-misses, etc.

A view should be formed on how well the spectrum of activities from installation workplace monitoring to high level audits inform the duty holder senior leadership and managers on the effectiveness of their SEMS, and how effectively they respond and implement improvements.

Major hazard management reviews are opportunities to explore the commitment of senior managers to the review processes, what information they review in order to gain an understanding of the effectiveness of their SEMS, and what changes they have and are putting in place to improve the SEMS.

These activities are discussed in detail in the appendices.

### ***Other Relevant Inspection Guides***

Most other IGs discuss audit, monitoring and review as a means for gauging the effectiveness of the elements of the SEMS system covered by the IG. However, the guidance will not be as comprehensive as this IG, although other IGs will often provide guidance at a finer level of detail than this IG. For example, the discussion of process safety performance indicators in the Monitoring and Review Arrangements section of the [Loss of Containment IG](#). All relevant guidance in other IGs will be sub-sets of the guidance contained in

this IG. Consequently, inspecting audit, monitoring and review arrangements in the context of other IGs is supportive to inspections carried out under this IG.

### **Specialist Advice**

Specialist advice and experience in audit, monitoring and review is primarily held in the IMT discipline and seconded into the ED Operational Policy Unit (ED7.2). The IG owner has a responsibility to oversee and coordinate the effective and consistent implementation of this IG and should be the first point of call for advice. Advice should be sought when enforcement is being considered and when there is debate over the level of demonstration made by the duty holder.

### **Organisation**

- **Targeting**

All focal point inspectors should be familiar with the duty holder's audit, monitoring and review arrangements. Depending on the levels of previous interventions and the knowledge of the focal point inspector on this topic, inspectors should plan to carry out an onshore inspection of the formal audit arrangements to assess the focus and quality of the audits and the degree of implementation of the audit plan. It should also be possible as part of this inspection to clarify the monitoring arrangements for each installation and review sample outputs to help form a view of their focus, quality and implementation. These activities, together with audit, monitoring and reviewing information from previous interventions will contribute to forming the duty holder strategy, and provide a baseline from which specific interventions can be planned and incorporated into the duty holder intervention plan.

- **Timing**

A duty holder's audit, monitoring and review procedures should be reviewed at least once every 5 years (following, for example, Template 1 in this guide), or more frequently if significant changes to the procedures are made or evidence emerges of significant systemic shortcomings. This is to ensure there is a current understanding of the procedures in place, that primary procedural deficiencies are addressed, and to provide a degree of confidence that if implemented correctly the procedures will be effective. Yearly reviews of the focus and implementation of a duty holder's formal audit plan supplemented by inspection of specific audit reports and the outputs of a sample of monitoring activities from across the duty holder's installations should be undertaken. This should be directed by the IMT and supplemented by specialist input.

- **Resources**

Primarily IMT inspectors working together with specialist colleagues.

- **Recording and reporting**

The duty holder performance ratings should be entered on the Inspection Rating Tab of the relevant installation Intervention Plan Service Order. Findings and performance ratings should be recorded in the post inspection report and letter.

## Appendix 1

# Audit, Monitoring and Review Processes: Duty Holder Audit Systems and Initial Inspection

- **Introduction**
- **Duty Holder Audit Systems**
- **Initial Inspection**

## Introduction

Senior leaders and managers rely on an organisation's audit, monitoring and review arrangements to provide evidence on the adequacy and effectiveness of their SEMS, to learn lessons, to identify improvements and ensure improvements and changes are implemented and embedded. Consequently, inspecting these systems is a key activity within the IMT inspection strategy.

Inspecting is a combination of targeted inspections – e.g. formal reviews of the system and system elements and their outputs – and the collection of data from routine inspection activity. For example, issues found during the range of HSE interventions can often be linked to the failure of a duty holder's audit, monitoring and review arrangements. That is, their audit, monitoring and review arrangements did not identify the deficiencies identified by HSE.

It is important for both HSE and the duty holder to understand why this is the case (to what degree are auditing and monitoring deficiencies underlying causes?) and where items and other enforcement should, as appropriate, seek explanations. Safety practitioners and managers may take the view that audit, monitoring and review cannot be expected to identify all incident precursors. While broadly true, this shouldn't be allowed to rule out an examination of the role of audit, monitoring and review; rather, it reinforces the need for managers not to be complacent but to maintain a sense of unease and ask, "Is there anything we're overlooking and what else do we need to do?"

Several duty holders see HSE's regulatory inspections as an important part of their overall audit, monitoring and review arrangements. Undoubtedly regulatory activities contribute to the understanding duty holders have of their SEMS however, significant reliance on HSE intervention activities should be discouraged since it is important that duty holders are self-sufficient, taking full responsibility for identifying weaknesses and ensuring the effectiveness of their systems.

Duty holders may use external standards and software packages to assist them in implementing and operating effective management systems. For example, ISO 45001, Health and Safety Management, was developed as an internationally recognised replacement for OHSAS 18001; ISO 19011, Guidelines for Auditing Management Systems. Inspectors will find it useful to familiarise themselves with these standards and systems, although they should recognise that meeting, for example, ISO 45001 certification standards, is unlikely to be sufficient to demonstrate compliance with health and safety law.

## Duty Holder Audit Systems

Duty holder audit, monitoring and review systems will vary across duty holders, but typically they comprise several levels ranging from low frequency high level audits to higher frequency site monitoring and inspection. For example, Figure 1 below:



Asset-based activities can include, for example, topic audits carried out by technical authorities. They are often supplemented by management visits and the collection of KPI data.

The yearly plan and the more frequent activities are usually risk based due to resource limitations.

There should be a clear link between each layer of activity showing how the information generated feeds back to the senior managers and leaders in a form which is suitable for analysis and decision-making.

A duty holder's audit arrangements should at least distinguish between

**System audits** – those that question the fitness-for-purpose of management arrangements

**Compliance audits** – those that confirm existing arrangements are being effectively implemented

**Regulatory audits** – those that confirm whether company arrangements comply with relevant statutory provisions

The OGUK Assurance Guidelines referenced above also include a fourth type, technical audits.

Technical audits can determine the fitness for purpose of technical systems, such as processes, plant design and operations, facilitating a deeper review of the risk controls from a technical perspective to ensure for example that these are proportionate to the risk and are ALARP.

The different audit types often require different skills, qualifications and experience for those personnel undertaking them but can and, for efficiency, should be carried out concurrently where possible.

Duty holders will also audit 3<sup>rd</sup> party organisations. Inspectors should expect to understand how the information from these audits is acted upon by the duty holder to ensure the effectiveness of their SEMS.

## Initial Inspection

The following template describes a set of compliance characteristics covering the matters described in this appendix. The characteristics focus on the audit, monitoring and review systems as described in the duty holder's procedures. This is a starting point for inspection of, for example, a new/unfamiliar duty holder.

If inspection against the following template reveals significant gaps in the processes and procedures, these will need to be addressed as a matter of priority. However, inspectors may wish to review aspects of the plans and outputs of the arrangements as they currently exist, as outlined in the following

appendices, in order to aid their understanding of the processes and their implementation, and to identify any stand-out deficiencies in implementation which support improvement of the underlying processes and procedures.

## Audit, Monitoring and Review: Template 1

	<b>Required Compliance Characteristics</b>	<b>Present: Y/N/Part</b>	<b>Inspector's Comments</b>
1.	An audit/monitoring system described by a procedure(s).		
2.	An audit/monitoring system comprising various levels, each level covering a specified depth and frequency of audit/monitoring. This will include management visits and any other form of information which is used to form a view on the effectiveness of the SEMS.		
3.	An audit/monitoring system which takes appropriate account of key performance indicator (KPI) data – as required by, for example, HSG254, paragraph 19.		
4.	A description of how the audit schedule for the various levels of audit/monitoring, together with other sources of information on the SEMS, are planned to ensure the effectiveness of the SEMS.		
5.	A description of how the audit schedule addresses the MAH barriers (or equivalent representation of MAHs) in a systematic manner, over time, ensuring that the frequency and depth of audit, monitoring and review are sufficient to ensure that the state of the barriers is known, understood and addressed.		
6.	<p>A description of how the audit/monitoring arrangements address</p> <ul style="list-style-type: none"> <li>• system audits – those that question the fitness-for-purpose of management arrangements</li> <li>• compliance audits – those that confirm existing arrangements are being effectively implemented</li> <li>• regulatory audits – those that confirm whether company arrangements comply with relevant statutory provisions</li> </ul>		

7.	A description of how the outputs from the various levels of audit/monitoring, together with other sources of information on the SEMS, are reviewed to ensure that the effectiveness of the SEMS can be determined.		
8.	A description of the parts of the audit/monitoring system which are reviewed by the various levels of management, in what depth and at what frequency, in order to ensure that appropriate decisions and actions on findings can be made.		
9.	A description of the system which ensures that audit actions are assigned to the appropriate person(s), and that corrective actions are reviewed and closed out in a timely manner.		
10.	A description of the system for ensuring that lessons to be learned are identified, applied and implemented across the organisation as appropriate. For example, are opportunities to improve the SEMS, including the audit/monitoring processes themselves, identified through the structure of the audits and through the review of the audit/monitoring outputs, including the identification of the underlying causes of deficiencies?		
11.	<p>A description of the criteria for selecting auditors including</p> <ul style="list-style-type: none"> <li>• are there systems and arrangements to secure the competence of everyone involved in auditing?</li> <li>• what training, qualifications, skills and level of competence are required for developing audit schedules, designing audit plans, undertaking audits, communicating the findings from audits etc.?</li> <li>• do competencies for auditors include planning and organising skills; interpersonal skills; communication skills?</li> <li>• what are the arrangements to assess and monitor the competence of auditors?</li> </ul>		

	<ul style="list-style-type: none"><li>• how is the performance of auditors measured and how sub-standard auditor performance addressed?</li><li>• are auditors sufficiently independent?</li><li>• how do you assure yourself that the composition of an audit team is adequate for the task?</li></ul>		
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## Appendix 2

### Audit, Monitoring and Review Processes: Inspecting Outputs

- **Audit, Monitoring and Review: Plans**
  - **Quality and Coverage**
  - **Deviations from the Plan**
- **Audit, Monitoring and Review: Data Sets/Reports**
  - **Audits**
  - **Worksite Monitoring**
- **Audit, Monitoring and Review: Review and Learning Processes**

The following activities should be the subject of discreet and focussed inspections; however, it is also beneficial and effective to see these as components of the wider inspection agenda. For example, most deficiencies identified by inspectors across all ED's inspection topics can be accompanied by the question; why didn't the duty holder's audit, monitoring and review arrangements pick up the deficiencies ahead of the HSE inspection? This question may then lead to a focus on one or more of the aspects below.

In some cases, the deficiencies will be known, and the duty holder may not have regarded them as deficiencies to the same degree as HSE. This is then primarily a matter of differences in perception and management of risk between the duty holder and HSE, which may need addressing via a particular focus in the intervention strategy. Often however, HSE's findings are new or not understood by the duty holder. The root cause is likely to be an ineffective audit, monitoring and review system.

The relative ease with which HSE can identify deficiencies in a duty holder's SEMS points strongly to an audit, monitoring and review system which is not fully effective.

#### **Audit, Monitoring and Review Plans**

The duty holder's audit, monitoring and review procedures should describe the planning process. Inspectors should review the plans for all levels (L1 to L4 or similar, see Figure 1) of audit, monitoring and review arrangements.

#### **Quality and Coverage**

The quality and coverage of a duty holder's audit, monitoring and review systems are key aspects contributing to its effectiveness. Judgements on quality, in particular, can be difficult because they depend on knowledge and experience of benchmark good practice. The following questions in Template 2 provide an initial baseline for forming opinions on quality and coverage. Inspection of the other aspects of the system as outlined in Templates 3, 4 and 5 will all contribute to forming an opinion on whether, overall, the quality and coverage is adequate.

## Audit, Monitoring and Review: Template 2

<b>Audit, Monitoring and Review Plans: Quality and Coverage</b>		
<b>Question</b>	<b>Comment</b>	<b>Inspector's Comments</b>
<b>Do the plans align with the written processes and procedures, particularly with regard to the frequencies of the activities and the approaches to topic coverage?</b>	Some variation from processes and procedures may be expected but significant deviations should be questioned.	
<b>Do the plans systematically address major accident hazards through barrier, bowtie or equivalent types of MAH analysis, and do they address appropriate aspects of people (including the potential for human failure to contribute to MAH), plant and processes?</b>	Topic coverage is often determined on the basis of risk, so yearly plans will vary. It is not uncommon to see audit, monitoring and review plans which appear to focus on occupational hazards and where the risks from major accident hazards are not adequately represented.	
<b>Are all the key MAH barriers addressed over a period of around 3 years? If not, why not?</b>	Even with a risk-based plan, inspectors should expect to see all key barriers appropriately sampled over a reasonable timeframe to help ensure that latent failures which, for example, have not been revealed by near misses or other events and activities, such as management visits (the basis for risk-based plans), are detected and addressed.	
<b>Does the risk-based planning stand up to scrutiny?</b>	Inspectors will need to discuss the risk basis of the plans with the duty holder by, for example, selecting a set of barriers and working through the evidence of risk and the logic of risk management through to the resulting audit, monitoring and review plan. Risk assessment and management are often weak points and inspectors may well find significant differences between the duty holder's perception of risk and that of HSE.	

<p><b>Is the information available from the auditing and monitoring activities analysed appropriately to enable conclusions to be drawn on the effectiveness of the duty holder’s management of MAH?</b></p>	<p>Again, this question can be addressed by working through a sample of audit, monitoring and review outputs from the various levels with the duty holder to see how the information from each level and activity is analysed and integrated to form a view of SEMS effectiveness and areas for improvement.</p>	
<p><b>In particular:</b>  <b>Are trends from data actively sought and identified?</b>  <b>Are common themes identified?</b>  <b>Are senior and other managers actively and appropriately involved in the process?</b>  <b>Are outcomes from the reviews followed through to improvements of SEMS, safety plans, etc.?</b></p>		

## Deviations from the Plan

There are a number of reasons why the implementation of a duty holder’s audit, monitoring and review plans can be deficient. The most common reasons include insufficient beds or helicopter places to accommodate auditors offshore (underlying reason can be insufficient priority given to audit), and a related general view that auditing isn’t that important or relevant and that slippage of plans is acceptable (attitudes to audit). Lack of time and insufficient resourcing are also a common complaint offshore and may be linked to a failure to carry out prescribed monitoring activities.

Any failures to follow the plan should be explored to understand the underlying reasons for the failure. Bear in mind that these may be linked to a natural drift (standards will always fall over time unless corrective action is taken) away from defined standards which have not been addressed in-house or by regulatory intervention activity.

The following questions in Template 3 should be used to reach an informed view on management and supervisor attitudes and associated areas for improvement. The approach should be used in conjunction with information gained from inspection of the other outputs.

## Audit, Monitoring and Review: Template 3

<b>Audit, Monitoring and Review Plans: Deviations from the Plan</b>		
<b>Action/Questions</b>	<b>Comment</b>	<b>Inspector's Comments</b>
<p><b>Open discussion with individuals on their roles and function in this area, throughout the various layers of supervision and management, can usefully reveal attitudes and commitment to audit, monitoring and review activities.</b></p> <p><b>It can be helpful to start with a selection of those responsible for worksite monitoring, working through to the most senior onshore management.</b></p>	<p>In pursuing this approach bear in mind the conclusions of a review of 70 operators of major accident hazard facilities asked about the value of internal audits:</p> <p><i>"The research highlighted auditor competence and senior management commitment to the audit process as areas for improvement. Practitioners believe internal auditing by competent auditors is effective and reduces the potential for a major accident, but also feel that too often the expectation of what an audit can realistically deliver is too high. "Just because an audit shows good process safety results yesterday, it is no guarantee that a major accident cannot happen tomorrow." This reinforces the need for managers not to be complacent when receiving positive audit reports but to maintain a sense of chronic unease and ask, "Is there anything we're overlooking and what else do we need to do?""</i></p>	
<p><b>Do you think this audit, monitoring and review activity you are involved in is useful and contributes significantly to the control of major accident hazards?</b></p>	<p>This, and the following direct questions, can help build on any indicated reservations or concerns by seeking suggestions for improvements.</p>	
<p><b>Are your audit, monitoring and review activities taking up more of your time than you think is useful or beneficial?</b></p>		
<p><b>How do you think the system could be improved to meet the overall aims of your audit, monitoring and review activities (which are, understanding the effectiveness of the SEMS and identifying and</b></p>		

implementing improvements)?		
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## **Auditing and Monitoring Data Sets/Reports**

The audit reports and data sets emerging from the audit, monitoring and review activities provide evidence of the quality, practical usefulness of the activities and their overall fitness for purpose. Select a sample of audits reports and worksite monitoring activities from across the duty holder's installations and review in the light of the following questions in Template 4. There are separate questions for audits and for workplace monitoring.

## Audit, Monitoring and Review: Template 4

<b>Auditing and Monitoring Reports/Data Sets: Audits</b>		
<b>Questions</b>	<b>Comment</b>	<b>Inspector's Comments</b>
<b>Do the audits have clear aims including the scope of the audit?</b>		
<b>Is the audit scope sufficiently wide, covering activities where non-conformities and other shortcomings might be expected to be relatively high?</b>		
<b>Similarly, is the audit scope sufficiently deep, addressing known common areas of failure?</b>		
<b>Is it clear that the audits are addressing the System, Compliance and Regulatory aspects?</b>	<ul style="list-style-type: none"> <li>• system audits – those that question the fitness-for-purpose of management arrangements</li> <li>• compliance – confirming existing arrangements are being effectively implemented</li> <li>• regulatory – confirming whether company arrangements comply with relevant statutory provisions?</li> </ul> <p>All of these may not feature in an audit, but are these aspects addressed over a reasonable series of audits?</p>	
<b>Are the audits identifying issues?</b>		
<b>Given the risk gap, are the identified issues given the significance and priority expected?</b>		
<b>Are the audit findings being closed out effectively, in a timely manner as required by the procedures?</b>		



## Audit, Monitoring and Review: Template 5

<b>Auditing and Monitoring Reports/Data Sets: Worksite Monitoring</b>		
<b>Do those responsible for worksite monitoring activities understand why they are carrying them out and the benefits? Are the aims clear?</b>	The activities may have clear benefits, but these may not have been clearly communicated or understood by those gathering the information.	
<b>What is the experience, training and job requirements for monitoring roles, and do those carrying out the roles meet the requirements?</b>	It is possible you will see a range of standards in the data gathered from these activities. High standards may be more a reflection of natural ability than training or coaching; opportunities for gathering good data and insights may be being lost for lack of these.	
<b>Do the frequency and nature of the monitoring activities reflect the higher level MAH risks?</b>		
<b>Do the monitoring activities cover the system, compliance and regulatory aspects?</b>		
<b>Do the data sets indicate that issues are being picked up, or are the findings generally good or bland? Is the recorded data sufficient to differentiate?</b>	Shortcomings here may be indicative of inappropriately trained personnel or monitoring templates/question sets which are not sufficiently comprehensive and rigorous, limiting insights into system performance.	

## ○ **Audit, Monitoring and Review: Review and Learning Processes**

This is perhaps the most difficult aspect of the audit, monitoring and review system to get right. Senior managers need to understand where the deficiencies are in their SEMS so that they can, as appropriate, be corrected, risk ranked for further action and the learnings identified, implemented and communicated. It requires the full range of information from across all the audit, monitoring and review activities, at all levels, to be analysed to identify patterns and trends.

This process appears to be most effective when analysis is carried out closest to the level at which it is generated. Carried out well this results in the extraction of key messages which can be combined from across the audit and monitoring activities and then passed up the management chain in a condensed and more easily managed form.

HSE's guidance SPC/Admin/81 [Energy Division selection criteria for investigating major hazard precursor events on investigations](#) points to another key factor: "...Without proper consideration of management system failures (or underlying causes) the investigation cannot meet its main objectives of determining

- what further actions the duty holder needs to take to prevent a similar incident
- wider lessons for duty holders and industry

In the audit, monitoring and review context this means the identification of the underlying causes of the deficiencies identified from the audit and monitoring activities to facilitate the extraction and communication of learnings and sustainable improvements.

Often audit, monitoring and review deficiencies are identified as non-conformities, which are addressed by emphasising the need to conform and follow procedures (perhaps with additional training or re-training). Addressing deficiencies in this way is relatively straight-forward but is generally regarded as weak learning since the failure to identify and address the underlying causes usually means the non-compliances reappear over time once the attention diminishes.

If duty holders are learning and improving as a result of their auditing and monitoring activities, then they should be in a position to supply evidence through examples. It should be possible to obtain from all levels of management and supervision examples of deficiencies from which they have extracted the learnings and generated/recommended improvements.

It is then possible to test by inspection whether the lessons have been embedded onshore and offshore.

The following question set addresses these matters.

## Audit, Monitoring and Review: Template 6

<b>Audit, Monitoring and Review: Review and Learning Processes</b>		
<b>Questions</b>	<b>Inspection Guide Comment</b>	<b>Inspector's Comments</b>
<b>Is the review process as described in the duty holder's procedures being followed?</b>		
<b>Are the review processes clear and understandable? For example, is it clear how the various outputs from all the audit and monitoring activities are analysed and combined to form a view of SEMS effectiveness and areas for improvement and additional focus?</b>	A good approach to addressing and forming a view is to discuss the process in the context of a sample of examples with those specifically tasked to review the audit, monitoring and review outputs.	
<b>Is the review process effective? For example, are system deficiencies identified and the associated underlying causes understood together with the associated levels of risk generated by them?</b>		
<b>Is it possible (can any examples be provided by duty holder personnel) to connect deficiencies from individual installations and across installations by the underlying causes, or are deficiencies generally treated as isolated examples with no common causes?</b>		
<b>Seek examples of learnings from across the range and levels of audit and monitoring activities.</b>		
<b>Are these examples sufficient to demonstrate a systematic and effective approach to learning?</b>		
<b>Identify how these learnings are embedded into the SEMS to help ensure sustainability and how they</b>		

<b>are communicated to help ensure wider learning and improvement.</b>		
<b>Review examples of learnings that have been both effectively communicated and applied across the duty holder's assets and, as appropriate, to the wider industry.</b>		

## Appendix 3

### Application of EMM and Duty Holder Performance Assessment

When inspecting the audit, monitoring and review systems, duty holder compliance is to be assessed against the relevant success criteria.

The success criteria have been determined from specific regulatory requirements, defined standards, established standards or interpretative standards.

This assessment will determine the EMM Risk Gap, the associated topic performance score together with the Initial Enforcement Expectation as shown in the table below. The initial enforcement expectation criteria differ slightly from the EMM for a 'Nominal' risk gap. This is because in practice '30' scores have been found to cover a wide range of risk gaps and a verbal warning would be an inappropriate enforcement response in many cases.

The actual enforcement may differ depending on local factors, **however, should this occur then the relevant local factors should be identified.**

Further guidance can be found at: <http://www.hse.gov.uk/enforce/emm.pdf>

<b>EMM RISK GAP</b>					
<b>Extreme</b>	<b>Substantial</b>	<b>Moderate</b>	<b>Nominal</b>	<b>None</b>	<b>None</b>
<b>TOPIC PERFORMANCE SCORE</b>					
<b>60</b>	<b>50</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>10</b>
Unacceptable	Very Poor	Poor	Broadly Compliant	Fully Compliant	Exemplary
<b>EMM Initial Enforcement Expectation</b>					
Prosecution / Enforcement Notice	Enforcement notice / Letter	Enforcement notice / Letter	Letter/Verbal warning	None	None

It should be noted that:

- the IG and hence the allocated scores may not cover all the matters that were considered during the intervention.
- the intervention may not necessarily have used every part of the IG. Consequently, the score only reflects what was inspected and the risk gap associated with the inspection findings.
- Where compliance gaps are found in two or more areas the overall score should not be less than the most significant risk gap identified. In addition, risks are cumulative, therefore risk gaps found in several areas need to be 'added' to ensure the overall risk is accounted for in the score. For example, two or three substantive scores of '30' will point strongly to an overall score of '40'. There is currently no mathematical or other systematic process for doing this and inspectors must therefore use their judgement to allocate an appropriate score that best represents the overall inspection findings against this IG. The judgements made will be reviewed over time with the aim of establishing improved guidance for this activity.