



Defence  
Safety Authority

# DSA 03.OME Part 4 (JSP 498)- Defence Code of Practice (DCOP) and Guidance Notes – Defence Major Accident Control Regulations (MACR)

Defence OME Safety Regulator

*DOSR*



## **DSA VISION**

***Protecting Defence personnel and operational capability through effective and independent HS&EP regulation, assurance, enforcement and investigation.***

## PREFACE

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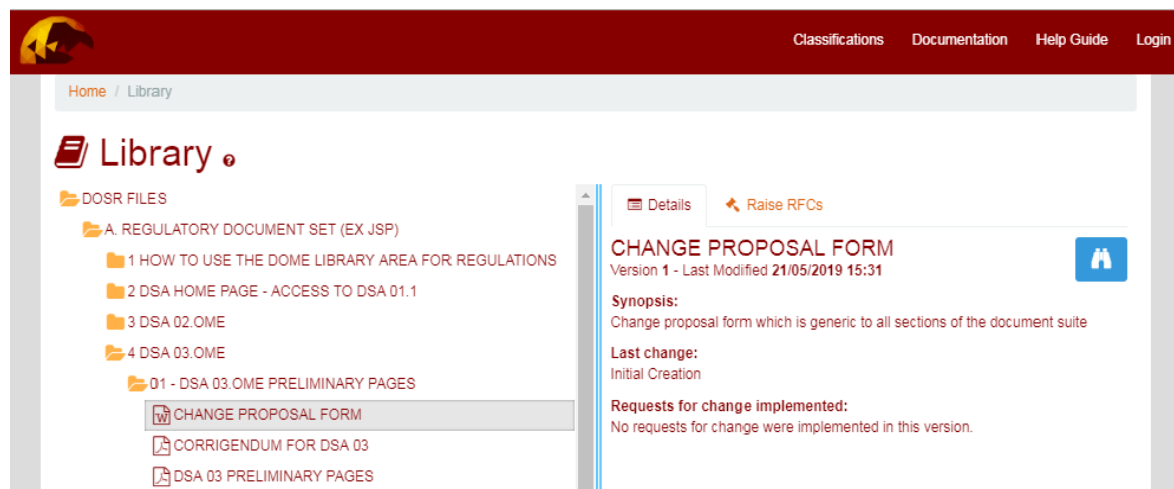


Figure 1. Change Proposal Form (Word version) Location

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## **CHAPTER 5**

### **ASSESSMENT, INSPECTION AND AUDIT**

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#### **INTRODUCTION**

1 The Major Accident Control Regulations (MACR) Competent Authority Support Group (CASG) will assess and endorse the Major Accident Prevention Policy (MAPP) that sets the policy, the Safety Report (SR) that demonstrates the policy is in effect and the On-Site Emergency Plan that specifies the response to an emergency, submitted by each establishment.

2 Assessments will be conducted on a 5-yearly basis in line with the Seveso III requirements. Assessments will usually be conducted on a 5-yearly basis. Assessments will be programmed approximately 6 months prior to the end of the current MACR Certification period for establishments to allow for any minor issues to be addressed before MACR Certification expires. MACR CA

may reduce the Assessment periodicity for establishments where a number of factors indicate that the standard 5 yearly basis does not meet the aims of MACR. These factors may include but are not limited to: Significant change; staff changeover frequency where many posts are rotated on short timescale or en block; MACR compliance history. In these cases Assessments and mandated Major Exercise Inspections (see Chapter 4) will be aligned. This will usually be to the 3-year period to allow both processes to be carried out during a single visit. Where a reduction in periodicity is being considered the Establishment and the relevant Senior Duty Holder will be consulted on the intentions. Following such consultation, the periodicity to be applied will be ratified by the MACR CA and any changes notified to interested parties.

### **ASSESSMENT PROCESS**

3 All activities at MOD establishments holding or processing dangerous substances are prescribed by basic Safety, Health, Environment and Fire (SHEF) documentation such as, The MOD Health and Safety Handbook - JSP 375, The MOD Environment Manual - JSP 418 and The MOD Explosives Regulations – DSA03.OME (JSP 482), etc.

4 The MACR CASG will review the MAPP, SR and On-Site Emergency Plan and assess whether the documentation fully represents the Major Accident (MA) potential from establishment operations and adequately describes the preventative and mitigatory measures in place.

5 Each MAPP, SR and On-Site Emergency Plan must be reviewed in the event of significant change to the MA potential of the establishment activities and revised by the establishment at least every five years.

6 The conclusions of the assessment will be communicated to the Head of Establishment (HOE) on completion and recommendations for endorsement will be confirmed, in writing, by the MACR CASG within three months.

7 Endorsement by the MACR CA is a formal recognition that the arrangements in place at a particular establishment meet the requirements of MACR.

### **ASSESSMENT CRITERIA**

8 The MACR CASG will assess the documentation to determine whether the required demonstrations have been made. The criteria used by the MACR CASG in the conduct of the assessments have been developed to enable common standards to be applied throughout all the qualifying establishments and are given in Annexes 5B to 5D. These criteria represent the key elements of the standards required and enable a critical evaluation to be carried out. This will allow the MACR CASG to assess that MACR policy; procedure and practice are applied and implemented at the establishment. Establishments may wish to utilise the criteria to undertake a self-assessment prior to submitting reports for formal assessment.

## ORGANISATION FOR ASSESSMENT

9 An Assessment Manager (AM) will be appointed for each establishment. The AM will be a MACR CA SG member who will manage the assessment process and bring the conclusions of the assessment together.

10 The AM will be supported by a team, the members of which will have the appropriate spread of competencies. The team will comprise Assessors who will provide specialist input on a range of aspects including, explosives process safety, fuel storage, structural or engineering safety and maintenance. They will have sufficient knowledge of, or experience in, Risk and Predictive Assessment in SHEF matters to enable them to assess establishment methods for hazard identification, consequence and risk analysis. They will also be able to confirm that all credible potential MA scenarios have been considered.

11 An Assessment Team will be assigned for each assessment.

## ASSESSMENT PROCEDURE

12 The assessment procedure will be as follows:

12.1 Pre-Planning. The AM will identify and estimate the expertise, resources and timescale required within which the assessment is to be completed. He will inform the HOE of the estimate and request the necessary facilities to be made available for the team.

12.2 Assessment Plan. The MACR CA SG will prepare an assessment plan, the estimated time allocated for the assessment, and any priorities or deadlines that should be considered.

12.3 Assessment. The AM and the team will carry out an assessment of the MAPP, SR and On-Site Emergency Plan against established standards and criteria, collecting and assessing any additional information as required. The assessment will primarily be conducted at the establishment and will include briefings to the HOE and staff as appropriate.

12.4 Assessment Conclusions. The AM will discuss the assessment conclusions with the HOE and any relevant staff and provide an assessment report which formally documents the assessment conclusions.

12.5 If the assessment fully meets the requirement of MACR the AM will recommend endorsement to the MACR CA and upon his acceptance of the recommendation the establishment will be issued a MACR Certificate. The certificate will be valid for a period of 5 years from the date of the assessment.

13 Improvement Notice: If, after the assessment visit, there are non-conformities outstanding, the establishment will be issued with a MACR Improvement Notice. The establishment must produce a timed and targeted action plan to address the non-conformities detailed in the Improvement Notice (including Assessment Report). MACR Improvement Notices are the equivalent of a COMAH Improvement Notice which ensures we maintain parity between the MACR and COMAH systems. The action plan will be monitored by the Assessment Manager and each non-conformity closed once satisfactory assurance has been confirmed. This would normally be obtained by provision of



adequate written evidence provided by the establishment. Alternatively, the Assessment Manager may decide to re-visit the establishment and re-assess the areas of non-conformance.

14 It is expected that actions plans will normally be completed within a 12-month period. If the action plan lasts in excess of 6 months the Assessment Manager will arrange a further visit to review outstanding issues. Should the Assessment Manager conclude that a further site visit would be of no benefit due to the nature of the outstanding issues he will advise the MACR CA of his conclusions and obtain authority not to progress a 6-monthly re-visit.

15 Endorsement. Once adequate evidence has been reviewed and the non-conformities closed by the AM a recommendation for endorsement will be made to the MACR CA and upon his acceptance of the recommendation the establishment will be issued a MACR Certificate. The certificate will be valid for a period of 5 years from the date of the assessment. It should be noted that the start date for the 5-year period is the date of the assessment visit. Therefore, if the non-conformities are not resolved for a period of months the end date of the certificate will reflect the remaining length of the 5-year period.

16 Non-Endorsement. If the MACR CA has been unable to endorse the submission, he will advise the Senior Duty Holder on continuance of those operations at the establishment outside of the MACR safety case. He will also agree an action plan with the HOE, which he considers would enable him to endorse the documents following an updated submission.

17 The assessment will be conducted by the AM on behalf of the MACR CA in a proactive manner. Consultation with the HOE will be maintained throughout the assessment so that points of clarification may be addressed as they arise. This will help the Assessment Team to reach its conclusions in a timely and informed manner. However, it is important that the assessment is carried out on the basis of the information made available by each establishment and that the HOE acknowledges full ownership of the MAPP or SR and the descriptions of their risks.

## **DISPUTES AND APPEALS**

18 The following procedures will apply to resolve disputes:

18.1 Following receipt of the Assessment Conclusions, the HOE may raise issues of dispute with the AM.

18.2 In the event that the HOE and the AM cannot reach agreement, the HOE may ask to take his views forward to the MACR CA.

18.3 In the event that the MACR CA dispute procedure cannot resolve the matter the HOE may arrange for the Operational Duty Holder to state his case formally to the Director DSA.

18.4 In the event that this hearing fails to resolve the matter, the Director DSA and Operational Duty Holder will formally notify Permanent Under Secretary (PUS) and the Senior Duty Holder concerned, so that they may jointly agree a solution.

## **INSPECTION**

19 Each qualified establishment will be subject to an inspection from the MACR CA SG in the period between the five yearly assessments. In order to take due account of the various SHEF audits and specialist inspections undertaken across MOD, the inspection will concentrate on observing the major exercises which is an element not normally covered by other audits or inspections. The inspection will also look at the way in which the MACR requirements have been embedded into standard operating procedures. The Topics, Pass Criteria, Guidance and Verification Methods for the inspection are given in Annex 6E.

20 Preference will be given to observing the mandatory three yearly exercise. However, in order to provide flexibility for the MACR CA SG it is acceptable to inspect the mandatory yearly exercise instead (see Chapter 4 Table 4.2). Each establishment is required to forward details of their programme of mandatory exercises to the MACR CA SG once the dates have been decided.

21 If the evidence from the Inspection raises significant concerns over the establishments continued compliance with DSA03.OME (JSP 498) the Assessment Manager may raise an Improvement Notice or withdraw the Current Certificate depending on the severity of the non-compliances. Withdrawal of Certification will then trigger a full re-assessment. This re-assessment should be undertaken as soon as feasible but within a 6-month period.

## **AUDIT**

22 Arrangements that monitor establishment MACR performance are incorporated into the hierarchy of existing Centre, TLBH and HLBH audits. Question sets designed to achieve this have been agreed with the respective audit authorities and will feature in the individual audits carried out.

23 The MACR CA will need to be satisfied that the audit process is effectively carried out, that the areas of weakness or non-compliance with MACR are identified and that the necessary corrective measures are put in hand. To enable this, the MACR CA will take due account of the appropriate Centre or TLBH audits.

## **LIAISON WITH OTHER REGULATORS**

24 The subject matter expertise of the MOD's internal regulators such as Inspectors of Explosives, Fuels & Gases Safety Regulators or SHEF Auditors is a valuable resource and the MACR procedures make full use of other regulators reports to inform both the assessment and inspection processes. Where there are issues of mutual interest a collaborative approach will be used to progress a solution.

## **ANNEX 5A**

### **COMMON SAFETY, HEALTH, ENVIRONMENT AND FIRE PROCEDURES**

#### **INTRODUCTION**

1. Although each MOD establishment is unique, almost all activities carried out are replicated in some way on many locations.

#### **RULES AND REGULATIONS**

2. The rules and regulations that govern the conduct of operations are contained in various JSPs and the modus operandi employed to satisfy a particular requirement is common across the MOD. Permanent overseas bases must also consider host nation agreements and local best practices, and operate to the more stringent level consistent with any extant formal agreement.
3. Some of the JSPs directly reflect or even quote the requirements of law. Others transpose legal requirements into MOD instructions and terminology to make them more easily understood and assimilated by MOD staff.
4. In Major Accident Control Regulations (MACR) compliance terms i.e. when compiling MACR documentation, many establishments will need to quote from other JSPs as evidence of the standards against which performance is gauged.

## ANNEX 5B

# MAJOR ACCIDENT PREVENTION POLICY ASSESSMENT CRITERIA

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>1. Commitment</b></p> <p>The Head of Establishment (HOE) must show commitment to Major Accident Control Regulations (MACR).</p> <ul style="list-style-type: none"> <li>• The Major Accident Prevention Policy (MAPP) contains a clear commitment to the prevention of Major Accidents (MAs) and the mitigation of consequences.</li> <li>• The MAPP includes information on, or reference to, the organisation and arrangements with reference to MAs.</li> <li>• Referenced establishment documentation is available and extant.</li> <li>• The Policy is known by all relevant groups on the establishment.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Check Health and Safety, Environment or other relevant Policy Statement.</p> <p>Does the organisation and arrangements statement indicate the organisation i.e. relevant personnel or posts, and arrangements e.g., reference to establishment Standing Orders, Emergency Plans, etc. for the prevention of MAs and appropriate control arrangements?</p> <p>Check the establishments Safety Management System (SMS) e.g., Safety Orders, Emergency Plans etc. for relevant MACR documentation. Does such documentation demonstrate a commitment by the HOE to MACR?</p> <p>Check communication arrangements for Policy e.g., staff briefings, display on notice boards, communication with establishment lodger units and permanent contractors.</p> <p>Do staff understand their responsibilities?</p>
<p><b>2. Establishment Activity</b></p> <p>Verify that the generic description of the major activities at the establishment that could give rise to an MA accurately reflects the situation at the establishment.</p> <ul style="list-style-type: none"> <li>• The MAPP contains an adequate description of the establishment activities.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Check MAPP information. A general description of the main establishment activities is all that is required e.g., Military Airfield, Storage and Processing of Explosives, Fuel Storage etc.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>3. Holdings of Dangerous Substances</b></p> <p><b>a. General.</b> Confirm that there is an effective system for accounting and that this relates to the maximum anticipated holdings rather than actual, average or permitted holdings.</p> <ul style="list-style-type: none"> <li>• The establishment has effective systems for monitoring and recording the type and quantity of dangerous substances brought onto and held on the establishment.</li> <li>• Effective systems are in place to ensure that information on the type and quantity of dangerous substances is collated and that there is a sound basis for determining maximum anticipated holdings.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Check MAPP and SR information; compare to establishments inventories of dangerous substances.</p> <p>Check stock records, inventories, explosives accounting systems (AMANDA, LUMAX), POL records (BFIS, ERIC) etc.</p> <p>Investigate systems for identification of type and quantity of dangerous substances present on the establishment.</p> <p>Discuss with MACR Co-ordinator or other relevant personnel methods used to determine maximum anticipated holdings across a 5-year period.</p>
<p><b>b. MACR Competent Authority (CA) Specific Substances.</b> Confirm the presence of any substances that fall into the category of MACR CA specific substances.</p> <ul style="list-style-type: none"> <li>• All MACR CA specific substances have been identified and recorded on the database.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Check MAPP/SR information and confirm with MACR Co-ordinator.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Organisation</b></p> <p><b>a. Job Descriptions (JDs).</b> Confirm that JDs, Terms of Reference (TOR) or other relevant documents exist for all appointments identified with a role in the establishments safety system for managing major incidents.</p> <ul style="list-style-type: none"> <li>• JDs, TOR or other relevant documentation describe the roles and responsibilities of key MACR posts.</li> <li>• Adequate cover is provided for these key posts.</li> <li>• Staff fully understand their roles, responsibilities and authority.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>This will include, as a minimum, the Establishment Main Controller, Establishment Incident Controller, MACR Co-ordinator and Liaison Officer with Local Authority (LA). Also, to include deputies and arrangements for 24-hour cover.</p> <p>Confirm that the roles of these positions are detailed in documented systems and procedures.</p> <p>Review documentation and information referenced in MAPP/SR e.g., Policy Statements, Organisation Charts, Standing Orders, Establishment Procedures, Fire Orders etc. to identify relevant personnel.</p> <p>Check JDs etc. of referenced personnel or posts.</p> <p>Confirm that these positions have been allocated to specific individuals. Interview these staff regarding their understanding of their roles, responsibilities and authority if required.</p>
<p><b>b. Training Needs.</b> Confirm that a system exists to identify the particular training requirement for each of the appointments identified in Topic 4a.</p> <ul style="list-style-type: none"> <li>• The competency requirements for each appointment are fully defined.</li> <li>• Appointed staff fulfil the competency requirements or are working towards full compliance.</li> <li>• Nominated Deputies have an appropriate level of training and experience.</li> <li>• Effective systems are in place to identify the training needs of individuals.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Review systems for identifying training needs and maintaining competency levels.</p> <p>Verify by review of documentation that competencies have been defined for each key post. Assess whether the defined competencies are appropriate to the establishment hazards and risks.</p> <p>Verify by review of training records and supplemented by interview that key posts are filled by competent persons. Records should be kept for a minimum of three year.</p> <p>The competency of nominated deputies must be included in this review.</p> <p>The system for Succession Management i.e. the preparing of replacement staff for those scheduled to leave the establishment should be considered.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Organisation (Continued)</b></p> <p><b>c. Control of Contractors.</b> Verify that the establishment has effective systems for the Control of Contractors.</p> <ul style="list-style-type: none"> <li>• Responsibilities for the management of contractors have been allocated.</li> <li>• Effective systems for the control of contractors are in place.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 7</p>	<p>Normally one would expect that the establishment complies with the principles laid down in JSP 375 Vol 2 Leaflet 34. If full compliance has not been achieved, then acceptable alternatives must be in place to ensure adequate control of contractors. Verify that an Appointed Duty Holder and Nominated Area Custodians have been appointed. Investigate procedures for the selection of contractors, authorization of work activities, communication arrangements between contractor and establishment (in particular with respect to risk, hazards, controls etc), controls, monitoring and supervision of contractors. Verify that the procedures are implemented.</p> <p>Check that Hazard Registers have been produced and are used as a means to provide relevant information to the contractor.</p> <p>Verify that there is an effective Permit to Work system in place.</p>
<p><b>5. Site Hazard Survey</b></p> <p><b>a. Completion.</b> Confirm that the establishment has completed a Site Hazard Survey.</p> <ul style="list-style-type: none"> <li>• A Site Hazard Survey has been completed in accordance with JSP 375 Vol 2 Leaflet 23 Annex A.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Confirm that a Site Hazard Survey has been carried out in accordance with JSP 375 Vol 2 Leaflet 23 along with hazard survey sheets in respect of each identified hazardous installation.</p>
<p><b>b. Location of Hazardous Installation.</b> Confirm that all the hazardous installations are covered by the Site Hazard Survey.</p> <ul style="list-style-type: none"> <li>• Location details are clearly defined.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Confirm that geographical details of the location of the hazardous installation are adequate. This would include details such as distance to major features or other installations. The details should be sufficient to establish the boundaries of the hazardous installation. Check establishment maps and site plan to verify that hazardous installations are clearly identified. Grid references or colour coding are acceptable means to identify the location of hazardous installations.</p> <p>See also Safety Report Assessment Criteria Topic 1.</p>



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>5. Site Hazard Survey (Continued)</b></p> <p><b>c. Function.</b> Confirm that there is an adequate explanation of the function of each hazardous installation.</p> <ul style="list-style-type: none"> <li>The function of each hazardous installation is accurately described.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 6</p>	<p>Check MAPP/SR information.</p> <p>Confirm by establishment tour, discussion with Installation Manager and review of establishment information.</p> <p>Simple explanations are acceptable when terminology is normally used within MOD e.g., explosives storage.</p>
<p><b>d. Controls.</b> Confirm that the establishments existing controls, relevant to each hazardous installation, comply with current technical regulations.</p> <ul style="list-style-type: none"> <li>Control and mitigation measures are in place (see also elements of Assessment of Emergency Plan).</li> <li>Technical Inspections have been completed at appropriate intervals.</li> <li>Appropriate action has been taken in response to recommendations made in Technical/Specialist/Statutory Inspections.</li> <li>No significant deficiencies have been reported or remain outstanding.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 3</p>	<p>Obtain and review content of last Technical/Specialist/Statutory Inspection for each hazardous installation. Pay particular attention to actions taken by the establishment in response to recommendations made in Inspection Reports.</p> <p>Where appropriate, in the absence of specialist inspections, review establishment procedures, operating manuals etc. and confirm compliance, as far as is reasonably practicable, by audit in specific area.</p> <p>Examples of technical regulations and legislation:</p> <p>MOD Explosives Regulations – DSA03.OME (JSP 482).</p> <p>Regulations for the Storage and Handling of Fuels and Lubricants - JSP 317.</p> <p>Fuel Safety Assurance assessment (FSAA)</p> <p>PG 06/12 (Task 249/Task 57)</p> <p>Gas JSP 319 – Regulations for the Storage Use and Handling of Gases</p> <p>MOD Fire Safety Policy - JSP 426 (see elements of Emergency Plan Assessment for this Topic).</p> <p>Property Management - JSP 434.</p> <p>Identify the controls referenced in Safety, Health, Environment and Fire (SHEF) Risk Assessments. Verify that control and mitigation measures are in place.</p>

<p style="text-align: center;"><b>TOPIC &amp; PASS CRITERIA</b></p>	<p style="text-align: center;"><b>GUIDANCE/VERIFICATION METHOD</b></p>
<p><b>6. Health and Safety Risk Assessments</b></p> <p>Confirm that Risk Assessments in respect to MAs have been carried out and that they cover all hazards identified in the Site Hazard Survey.</p> <ul style="list-style-type: none"> <li>• Risk Assessments derived from the Hazard Survey have been completed for all MA scenarios.</li> <li>• Risk Assessments identify all relevant control measures.</li> <li>• The results of Risk Assessments have been communicated to all persons at risk.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Verify that Risk Assessments have been completed for MA scenarios within each hazardous installation.</p> <p>Verify that Risk Assessments have been carried out in accordance with JSP 375 or appropriate alternative methods.</p> <p>Relate Hazard Survey to Risk Assessments.</p> <p>Verify that Risk Assessments have been properly documented, reviewed using appropriate expertise within or external to the establishment and been properly authorized.</p> <p>Verify that control measures are clearly identified.</p> <p>Verify that the results of Risk Assessments are communicated to relevant personnel both on and off the establishment.</p>
<p><b>7. Persons at Risk</b></p> <p>Confirm that the details relate to the maximum number of persons at risk from each hazardous installation.</p> <ul style="list-style-type: none"> <li>• Information supplied in MAPP/SR correlates with information gained on the establishment.</li> <li>• The establishment has taken into account all persons.</li> <li>• Risk Assessments detail the groups and numbers of persons at risk from MAs.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Interview relevant staff to identify number of Service, MOD civilian personnel, permanent contractors, lodger units etc. Consider also visitors, works contractors, occupiers of MOD housing, barracks etc as applicable.</p> <p>Short term additions of people for up to 24 hours may be ignored. It must include the possibility of members of the public being in areas, on or near the hazardous installation where they could be affected by an MA.</p> <p>The information on the number of persons at risk should be derived from the Risk Assessments.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>8. Environmental Risk Assessment</b></p> <p><b>a. Completion.</b> Confirm that an Environmental Risk Assessment (ERA) has been carried out in accordance with DSA03.OME (JSP 498) Chapter 2.</p> <ul style="list-style-type: none"> <li>• A comprehensive ERA has been completed.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Verify that processes, activities, substances with the potential to cause environmental harm have been identified (see also Topic 6 - Site Hazard Survey above). (See DSA03.OME (JSP 498) Chapter 6).and that where credible Major Accident scenarios have been identified, they are detailed, and risk assessed. Verify that the ERA has been completed and authorized by personnel competent in environmental issues. Is expertise available on-site or readily available to the establishment e.g., is use made of MOD or external consultants? Verify that the ERA is a living document and is up to date. Verify that the effects of emergency response action have been considered. Verify that the effects of pollutants on the receptors has been considered and for Major Accident scenarios adequately detailed.</p>
<p><b>b. Recommendations.</b> Confirm that any recommendations made in the ERA have been implemented.</p> <ul style="list-style-type: none"> <li>• An action plan for the implementation of recommendations made in the ERA is in place.</li> <li>• Action Plans have the backing of Senior Management.</li> </ul>	<p>Review any recommendations made in the ERA which have MA potential.</p> <p>Confirm that there is an effective system to identify and agree actions to be taken in response to recommendations made in the ERA.</p> <p>Confirm that there is Senior Management involvement in the prioritisation of actions and the allocation of funding.</p>
<p><b>9. Operational Control</b></p> <p>Confirm that all operations are carried out in accordance with systems defined within the SMS.</p> <ul style="list-style-type: none"> <li>• Operational controls are fully described.</li> <li>• The number and competencies of staff required has been defined.</li> <li>• The required number of appropriately trained staff are available – taking into account sickness, leave, training etc.</li> <li>• Effective systems are in place to authorize non-standard operations.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Review documentation referenced in MAPP/SR and SMS.</p> <p>Verify that management and technical controls are defined in SMS documentation.</p> <p>Verify that there are sufficient staff numbers to fill defined positions.</p> <p>Verify that staff understand the operational controls for the processes in which they are involved.</p> <p>Verify that effective controls are in place to cover non-standard operations.</p> <p>Controls should be subject to periodic review. Note. Controls may be specified by HQ organisations e.g., Munitions &amp; Explosives Processing Procedures (MEPP), Technical Instructions for Ammunition Depots (TIAD) or other procedures etc.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>10. Management of Change</b></p> <p><b>a. Installations.</b> Confirm that the establishments systems for managing changes to installations follow the principles laid down in Property Management - JSP 434.</p> <ul style="list-style-type: none"> <li>• Changes to installations are properly planned and approved.</li> <li>• Risk Assessments are undertaken in the planning phase and on completion of the change.</li> <li>• All relevant documentation, maps and plans etc. are amended as required.</li> <li>• Interested parties are advised of any changes to the level of risk to which they are exposed.</li> </ul> <p>JSP 498 Chapter 2 para 35</p>	<p>This includes modification to existing installations, either building structure or equipment within the installation. It could also cover the addition of new equipment or plant, or changes to adjoining installations that could have an effect on the hazardous installation e.g., encroachments on explosives licensed installations.</p> <p>Verify that the requirements of JSP 434 and 435 are met.</p> <p>Verify that there has been appropriate consultation with MOD Regulatory Bodies regarding changes to installations.</p> <p>Review Defence Infrastructure Organisation (DIO) Audit Reports, Health and Safety files, Construction, Design and Management (CDM) files, log books, maps and plans etc.</p>
<p><b>b. Process.</b> Confirm that the establishment has a system for updating or introducing new processes.</p> <ul style="list-style-type: none"> <li>• The introduction or modification of processes is effectively managed.</li> <li>• Appropriate approval has been given regarding new processes or significant changes to existing processes.</li> <li>• Risk Assessments have been documented or reviewed for modified or new processes.</li> <li>• Interested parties are advised of any changes to the level of risk to which they are exposed.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>This system should cross-refer to specialist control documentation if the process is governed by technical documentation. The system should include the requirement to undertake a Risk Assessment in accordance with JSP 375 Vol 2 Leaflet 23 if the process has a potential for generating an MA hazard.</p> <p>Verify that Regulatory Bodies have been consulted and, where appropriate, given approval.</p> <p>Review associated Risk Assessments and other documentation.</p> <p>Verify that the risks associated with the introduction or modification of processes have been assessed.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>10. Management of Change (Continued)</b></p> <p><b>c. Storage.</b> Confirm that the establishment has a system for updating or introducing new storage procedures.</p> <ul style="list-style-type: none"> <li>• The introduction or modification of storage arrangements is effectively managed.</li> <li>• Appropriate approval has been given for the storage arrangements for dangerous substances.</li> <li>• Risk Assessments have been documented or reviewed for modified or new storage arrangements.</li> <li>• Interested parties are advised of any changes to the level of risk to which they are exposed.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>This system should cross-refer to single Service documentation. It should also take account of any new legislation. The system should include the requirement to undertake a Risk Assessment.</p> <p>Confirm appropriate approval has been given for the storage arrangements on-site.</p> <p>Review Risk Assessments for storage areas.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>11. Emergency Plans</b></p> <ul style="list-style-type: none"> <li>Is it establishment policy to have On-Site Emergency Plans?</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Check that MAPP/SR information relates to extant On-Site Emergency Plans.</p>
<p><b>12. Monitoring Performance</b></p> <p>Confirm that effective procedures for monitoring the performance of the establishments SMS are implemented.</p> <ul style="list-style-type: none"> <li>Management employs effective processes (active and re-active) to monitor performance and acts on deficiencies and adverse trends.</li> <li>The frequency, scope and personnel requirements for internal inspections are defined in the SMS.</li> <li>The inspection programme covers all hazardous installations.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Does performance monitoring follow the principles laid down in JSP 375 Volume 2 Leaflet 21?</p> <p>Verify that internal inspections of the areas with MA potential are undertaken. Are inspection reports available and adequately detailed?</p> <p>Are the results of internal performance monitoring passed up the management chain? (See Topic 13 - Audit and Review).</p> <p>Are deficiencies and opportunities for improvement acted upon in a timely manner?</p> <p>Are work activities included in the performance monitoring system?</p> <p>Are Establishment Safety Committee Meetings held? Check minutes to determine attendees and content – are MA issues discussed – MACR should be a standing item on the agenda?</p> <p>Is accident and near miss data gathered and used to monitor performance?</p> <p>Are environmental incidents reported?</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>13. Audit and Review</b></p> <p>Confirm that the establishment has a procedure to undertake a periodic and systematic review of the MAPP and SMS.</p> <ul style="list-style-type: none"> <li>• The SMS is periodically subjected to a formal structured audit.</li> <li>• The establishment is subjected to audits by external regulatory bodies at appropriate intervals.</li> <li>• The SMS is subject to regular review to confirm its continued effectiveness.</li> <li>• The MAPP is regularly reviewed and updated to reflect change.</li> </ul> <p>DSA03.OME (JSP 498) Chapter 2</p>	<p>Verify that the hazardous installations and the SMS are subjected to formal structured audits.</p> <p>This should include audit of all areas of the establishment and the effectiveness of the SMS by establishment SHEF Advisors.</p> <p>MOD systems require external (to the establishment) agencies to undertake audits at appropriate frequencies e.g., Inspector of Explosives (IE), Fuels &amp; Gases Safety Regulator (FGSR), DIO, Defence Fire Service (DFS) Chief Environment and Safety Officer (CESO) etc. Verify that these audits are undertaken at the required frequencies and that appropriate information is passed to Senior Management.</p> <p>Does Senior Management at the establishment periodically review performance and the results of audits and assess the need for change? Is there a system for setting and reviewing performance targets?</p> <p>Identify what sources of information are used to inform management when undertaking a review of the SMS e.g., internal inspections, audits by external bodies, accident statistics etc. (see also Topic 12 - Monitoring Performance above).</p> <p>Verify that opportunities for improvement are identified and implemented.</p> <p>Is Senior Management at the establishment actively involved in SHEF committees? Are actions arising actively monitored?</p> <p>Are the documents which are referenced in the MAPP e.g., Establishment Standing Orders, Procedures, Work Instructions and Risk Assessments, subject to review at appropriate intervals? Check who is responsible for documentation review. Are effective documentation control systems in place?</p> <p>Is there a system for updating the MAPP?</p>

# **ANNEX 5C**

## **SAFETY REPORT ASSESSMENT CRITERIA**



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>1. Establishment Information</b></p> <p><b>a. Establishment Location.</b> Confirm that the location information is sufficient to establish the area that could be affected by a Major Accident (MA).</p> <ul style="list-style-type: none"> <li>• Effective methods have been used to gather information and identify features at risk from MAs.</li> <li>• Salient features are clearly identified on maps and site plans and in the database information.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>This is to include information that shows the relationship to nearby towns or significant features. A map should be provided of adequate scale to show land use of surrounding area and all salient features (areas that could be at risk such as schools, sports complex etc). The map should show the layout of the establishment including all hazardous installations. More than one map may be provided if sufficient detail is not possible on a single map (include a copy of the safeguarding map if relevant).</p> <p>Check database information. Check maps e.g., Ordnance Survey.</p> <p>Investigate what steps the establishment has taken to establish the presence of particularly sensitive factors (flora, fauna, water resources, people).</p> <p>Are maps marked up with all salient features?</p> <p>Check availability and information provided by establishment maps and plans giving details of hazardous installations.</p> <p>Check use of information available from the Defence Infrastructure Organisation (DIO) Data pack. (See also Major Accident Prevention Plan (MAPP) Assessment Criteria Topic 5 - Site Hazard Survey).</p>
<p><b>b. Establishment Topography.</b> Confirm that the descriptions of the topography includes the significant features of the local environment e.g., land type (mountainous, marsh etc), type of land use (urban, rural, agricultural), reference to types of waterways (estuary, lake etc). Includes meteorological and hydrographical conditions.</p> <ul style="list-style-type: none"> <li>• The Establishment Topography is adequately described.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>Details regarding the local topography etc. are commonly contained in the Environmental Risk Assessment (ERA) for the establishment.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>1. Establishment Information (Continued)</b></p> <p><b>c. Location of Hazardous Installation.</b></p> <ul style="list-style-type: none"> <li>• See MAPP Assessment Criteria Topic 5b – Location of Hazardous Installation.</li> </ul>	
<p><b>d. Hazard Topography.</b> Confirm this provides a more detailed review of the topography in the local area directly affected by any MA scenario.</p> <ul style="list-style-type: none"> <li>• The Hazard Topography is adequately described.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>Details regarding the hazardous installations and the local topography etc. are commonly contained in the establishment ERA.</p>
<p><b>2. Dangerous Substances Inventory</b></p> <p>Confirm the method by which the establishment identifies the inventory of dangerous substances held and that this information is linked to the MA Risk Assessment process.</p> <ul style="list-style-type: none"> <li>• See MAPP Assessment Criteria Topic 3 - Holdings of Dangerous Substances.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>3. Description of Installations</b></p> <p><b>a. Hazardous Installation.</b> See MAPP Assessment Criteria Topic 5 - Site Hazard Survey and Topic 1 above.</p> <ul style="list-style-type: none"> <li>Sufficient information is available on the hazards.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>Verify that database adequately describes the installations. Simple explanations only are required e.g., Explosives Storage Area (ESA) is adequate to denote an area used for the storage of explosives.</p>
<p><b>b. Function.</b></p> <ul style="list-style-type: none"> <li>See MAPP Assessment Criteria Topic 5c – Function.</li> </ul>	
<p><b>c. Description of Process.</b> Confirm this provides adequate information to describe the process that is being undertaken at the installation.</p> <ul style="list-style-type: none"> <li>Appropriate documentation on processes is referenced in the Safety Report.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>Establishment documentation should provide sufficient detail to allow an understanding of the process and the hazards that the process could generate. Operating methods should be included. Confirm that any operating methods are in accordance with appropriate technical regulations.</p>
<p><b>d. Dangerous Substances.</b> Verify that the quantities of Dangerous Substances declared in the Safety Report, in accordance with DSA03OME (JSP 498) Chapter 9, refer to the maximum anticipated holdings for each installation.</p> <ul style="list-style-type: none"> <li>The sum of all the installation holdings agrees with the establishments declared maximum anticipated holdings.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>See also MAPP Assessment Criteria Topic 3 - Holdings of Dangerous Substances.</p> <p>Verify that the sum of the quantities on the Description of Installation Form correlates with the quantity reported on the Establishment Holdings Form.</p>
TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD

<p><b>4. Assessment of Risk</b></p> <p><b>a. MA Scenarios.</b> Review the list of MA Scenarios. These must include a summary of events (either inside or outside the installation) which may play a role in triggering each of the scenarios.</p> <ul style="list-style-type: none"> <li>• All relevant MA Scenarios have been identified.</li> <li>• A summary of triggering events, consequences and response actions has been included in all MA Scenarios.</li> <li>• Risk Assessments have been undertaken to cover all MA Scenarios.</li> </ul> <p>DSA03OME (JSP 498) Chapter 2</p>	<p>See MAPP Assessment Criteria Topic 6 - Health and Safety Risk Assessments and Topic 8 - Environmental Risk Assessment.</p> <p>Check database information on MA scenarios. Verify that these scenarios are covered by Risk Assessments.</p> <p>Check that the scenarios include a summary of triggering events, consequences and response actions. Reference to appropriate emergency plans may be sufficient to address response actions.</p>
<p><b>b. Existing Controls.</b></p> <ul style="list-style-type: none"> <li>• See MAPP Assessment Criteria Topic 5d - Controls and Topic 9 - Operational Control.</li> </ul>	
<p><b>5. Protection Measures</b></p> <p><b>a. Existing Controls.</b></p> <ul style="list-style-type: none"> <li>• See MAPP Assessment Criteria Topic 5d - Controls and Topic 9 - Operational Controls.</li> </ul>	
<p><b>b. On-Site Emergency Plan.</b></p> <ul style="list-style-type: none"> <li>• See On-Site Emergency Plan Assessment Criteria.</li> </ul>	<p>Confirm adequacy of On-Site Emergency Plan (see On-Site Emergency Plan Assessment Criteria Annex 7D):</p>
<p><b>c. Off-Site Emergency Plan.</b> Confirm Off-Site Emergency plan dovetails with On-Site Emergency Plan.</p>	<p>Confirm dovetail of plans where an Off-Site Emergency Plan is available.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>6. Provision of Information to the Local Authority</b></p> <p>Confirm adequate information has been provided to the Local Authority (LA) to enable them to complete an Off-Site Emergency Plan in accordance with JSP 498 Chapter 7.</p> <ul style="list-style-type: none"> <li>• Responsibility for liaison with the LA has been allocated.</li> <li>• Effective communication arrangements are in place.</li> <li>• The level of information required by the LA has been discussed, agreed and provided to the LA.</li> <li>• Systems are in place for the review and revision of this information.</li> <li>• DSA03OME (JSP 498) Chapter 3, Chapter 7</li> </ul>	<p>Interview person allocated responsibility for liaising with LA.</p> <p>Verify that the establishment has prepared and maintained a record of the information provided to the LA, its source and how it is to be reviewed, revised and updated.</p> <p>See DSA03OME (JSP 498) Chapter 7 for details of information required by the LA.</p> <p>It is acknowledged that LAs may be unwilling or unable to co-operate. In such cases the establishment will be judged on whether they have taken all reasonable steps to liaise with, and provide information to, the LA.</p>
<p><b>7. Provision of Information to the Public</b></p> <p>Confirm that appropriate information has been provided to people in the Public Information Zone (PIZ) in accordance with JSP 498 Chapter 3 Annex 3A.</p> <ul style="list-style-type: none"> <li>• Responsibility for dealing with public enquiries has been allocated.</li> <li>• Procedures for issuing information have been documented.</li> <li>• The PIZ has been clearly identified, taking into account any special factors.</li> <li>• Information has been prepared and distributed to the PIZ.</li> </ul> <p>DSA03OME (JSP 498) Chapter 3</p>	<p>Confirm that procedures have been produced, if appropriate, regarding the provision of information to the public. NB use of DSA03OME (JSP 498) Chapter 3 is acceptable.</p> <p>Has an individual been allocated responsibility for dealing with requests from the public?</p> <p>Has Information been prepared in the format described in JSP 498 Annex 3A, or acceptable alternative? Check how information has been supplied or distributed.</p> <p>Have any specific requests been received from the public? Have these been dealt with satisfactorily and within required timescales (20 days)?</p> <p>Verify that the PIZ has been clearly identified e.g., on suitable maps. Have significant factors been taken into account in determining the PIZ e.g., other dangerous substance or particularly sensitive groups of people in the neighbourhood?</p>

# **ANNEX 5D**

## **ON-SITE EMERGENCY PLAN ASSESSMENT CRITERIA**

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>1. Responsibilities</b></p> <p>Confirm functions of Key Posts have been documented. See Major Accident Prevention Policy (MAPP) Assessment Criteria Topic 4.</p> <ul style="list-style-type: none"> <li>See MAPP Assessment Criteria Topic 4 - Organisation.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Who is the Establishment Main Controller (EMC)/Establishment Incident Controller (EIC)?</p> <p>In the event of an emergency who is responsible for liaising with the Local Authority?</p> <p>Have these positions been allocated? Any other significant positions or responsibilities?</p> <p>Are Job Descriptions or Terms of Reference available?</p> <p>Have deputies been nominated to cover for absences?</p> <p>How have those in Key Posts and their deputy's competence been ascertained?</p>
<p><b>2. Available Resources</b></p> <p><b>a. Arrangements for Staffing.</b> Including appropriate timescales to respond.</p> <ul style="list-style-type: none"> <li>The emergency response manning requirements have been defined.</li> <li>Staff are available to man the Emergency Control Centre (ECC) etc. including back-up staff to cover for absences.</li> <li>The response times for manning the ECC etc. have been defined and are achievable.</li> <li>The emergency arrangements have been developed in conjunction with the assessment of Major Accident (MA) risks.</li> <li>Suitable arrangements have been made for silent hours.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Investigate the arrangements for manning the emergency response organisation (ECC etc.). This should include suitable back-up arrangements. An immediate establishment response is vital for the credibility of any response system. Further in-depth response should be available within a specified timescale. These arrangements must be justified as adequate in relationship to the risk at the establishment.</p> <p>Confirm that manning requirements for the ECC and other key positions have been defined in establishment documentation. Investigate how individuals have been allocated duties regarding manning the ECC etc.</p> <p>Interview staff to verify that they understand their duties and authority.</p> <p>Check that response times have been defined. Have they been tested and found achievable? Investigate what arrangements have been made for silent hours. What arrangements have been made to recall key staff including safe route access to site and permissions to pass through cordons as required. Are the available resources appropriate to the risks? Refer to MA Risk Assessments and Environmental Risk Assessment (ERA).</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>2. Available Resources (Continued)</b></p> <p><b>b. Fire Fighting Equipment.</b> Confirm details are readily accessible showing what firefighting equipment is available. This can be a list or a diagram.</p> <ul style="list-style-type: none"> <li>• Fire Safety Management Plans (FSMP) are available and indicate that equipment level is appropriate.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Verify that an inventory of Fire Fighting Equipment has been produced and is available.</p> <p>Review Fire Safety Management Plans (FSMP). Do these indicate that equipment levels are appropriate to the establishment?</p>
<p><b>c. Fire Fighting Roles of Establishment Personnel.</b> Confirm details are available that show the firefighting roles, if any, to be undertaken by establishment personnel in the event of a fire.</p> <ul style="list-style-type: none"> <li>• Roles of Establishment Fire Service Personnel are defined.</li> <li>• Roles of other establishment personnel with respect to firefighting are defined.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>To include Defence Fire Service (DFS), RAF Fire Service, civilian staff, contractors etc. Job descriptions are preferred but simple statements of the roles are acceptable.</p> <p>Check establishment documentation. Does it define firefighting roles for personnel including Establishment Fire Service, Fire Wardens, Military etc.?</p> <p>Evidence of appropriate training should be sought. (See Topic 10 - Training).</p>
<p><b>d. Adequate Fire Fighting Water Supply.</b> Confirm how the water supply has been evaluated and approved as adequate. Reference should have been made to appropriate standards.</p> <ul style="list-style-type: none"> <li>• Adequate Fire Fighting Water supplies are available.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Seek evidence that water supplies conform to JSP 426 requirements and Crown Fire Standard D3. Review FSMPs for matters relating to water supply.</p> <p>Ring main, Emergency Water Supplies (EWS) etc. must be adequately maintained. (See Topic 12 - Maintenance of Emergency Equipment).</p>



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>2. Available Resources (Continued)</b></p> <p><b>e. Adequate Stocks of Foam Compound.</b> Confirm that the rationale for the quantities of foam compound held justifies the stock level.</p> <ul style="list-style-type: none"> <li>• Methods to determine quantity of foam compounds required on the establishment are sound.</li> <li>• Quantities of foam compounds held match the quantity deemed necessary.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>How is the quantity of foam compound required calculated? Is this issue covered in FSMPs; considered in emergency plans and ERA?</p> <p>Confirm that quantity held and evaluated quantity match.</p>
<p><b>f. Emergency Equipment.</b> Confirm details are provided of what emergency equipment is available on the establishment and where it is located.</p> <ul style="list-style-type: none"> <li>• Inventories of emergency equipment are maintained.</li> <li>• Location details of emergency equipment are specified.</li> <li>• Relevant personnel are familiar with the location details.</li> <li>• Emergency equipment is accessible.</li> <li>• Emergency equipment is suitably stored.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>This includes oil collection booms, cordoning equipment, barriers, emergency lighting etc. Confirm that there are arrangements to ensure the equipment will work when required e.g., protection from the elements to avoid freezing up or deterioration.</p> <p>Review Technical Inspection Reports and, if necessary, inventory of emergency equipment. Cross-reference with Risk Assessments. Does equipment held relate to emergency equipment requirements specified in Risk Assessment?</p> <p>Verify that location details of emergency equipment are clearly defined and that relevant personnel know of the location.</p> <p>Verify by location visit that the equipment is accessible in the event of an emergency (i.e. it is not locked away with no easy access to keys).</p> <p>Verify that equipment is suitably stored and maintained. (See Topic 12 - Maintenance of Emergency Equipment).</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>2. Available Resources (Continued)</b></p> <p><b>g. Arrangements for Supplementing Establishment Resources.</b> Confirm details are provided of the arrangements for supplementing establishment resources.</p> <ul style="list-style-type: none"> <li>• The need for support from external agencies with respect to MA prevention, mitigation or environmental remediation has been properly assessed.</li> <li>• The sources of support have been identified.</li> <li>• Effective liaison is maintained with organisations that may be called upon to provide assistance.</li> <li>• Where necessary, contracts have been placed.</li> <li>• Effective systems are in place to ensure that appropriate assistance is requested when necessary.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>This could be through the use of dormant contracts with commercial suppliers or MOD resources from other establishments. Detailed listing of equipment is not necessary; a broad indication of the type of support available is acceptable. Particularly important for environmental remediation actions.</p> <p>Check what supplementary arrangements for dealing with MAs are specified in Risk Assessments.</p> <p>Identify what contacts have been made with external agencies regarding assistance in the event of an MA. Review any contracts raised with respect to such support.</p> <p>Verify that relevant personnel are aware of the supplementary assistance available and the means to call upon this assistance.</p> <p>The names and contact details of organisations that may be called on to provide assistance are in emergency plans</p>
<p><b>h. Possibility of Loss of Utilities.</b> Confirm the plan shows how the establishment will deal with a loss of power or other essential service. It will either detail back-up arrangements or justification for not providing back-up arrangements.</p> <ul style="list-style-type: none"> <li>• Back-up arrangements to deal with loss of essential services have been fully justified.</li> <li>• Back-up arrangements are in place, tested and maintained.</li> <li>• DSA03OME (JSP 498) Chapter 4</li> </ul>	<p>Confirm that the means to deal with the loss of power etc. is set out in appropriate documentation.</p> <p>Investigate what back-up arrangements for power loss are in place e.g., emergency generators.</p> <p>Are systems tested and maintained? (See Topic 12 – Maintenance of Emergency Equipment).</p> <p>Information on this may be contained in the establishment Business Continuity or Contingency Plan (JSP 503 - Business Continuity refers).</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>2. Available Resources (Continued)</b></p> <p><b>i. Limiting Escalation.</b> Confirm details are provided on the general principles to be applied to mitigate the consequences of an incident.</p> <ul style="list-style-type: none"> <li>• Mitigation measures are identified in Risk Assessments.</li> <li>• Documentation is in place detailing measures to be taken to limit escalation of incidents.</li> <li>• Personnel are familiar with the actions to be taken to prevent escalation.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>This information should cover reactive measures e.g., the damping down of adjacent buildings in the event of a fire or the closure of fuel delivery valves in the event of a burst pipe. This includes notification of Water Companies or those who could otherwise be affected e.g. water abstractors, (This does not cover the use of stock segregation techniques, firewalls, Quantity Distance (QD) criteria etc. as these will be covered in the MAPP and are regarded as proactive measures).</p> <p>Review mitigation methods identified in Risk Assessments.</p> <p>Are these methods documented?</p> <p>Interview emergency response personnel to assess whether they are fully aware of the actions they must take to limit the potential for escalation of an event and to mitigate consequences.</p> <p>Are automatic control measures and shut off systems employed? If so is there a means of human intervention? Are staff trained to assess when human intervention might be necessary?</p>
<p><b>j. Establishment Resources Available to Off-Site Emergency Plan.</b></p> <ul style="list-style-type: none"> <li>• Information has been provided to the Local Authority (LA) on resources available on-site to deal with an MA.</li> <li>• Appropriate establishment personnel fully understand the resources available on-site to support the Off-Site Emergency Plan.</li> </ul> <p>DSA03OME (JSP 498) Chapter 5</p>	<p>Confirm this covers such arrangements as pre-positioned stocks of Foam, normally Film Forming Floro Protein (FFFP) or potential use of establishment staff to assist in evacuation procedures e.g., utilisation of Ministry of Defence Police (MDP) to assist Civil Police or the utilisation of establishment property by the media. Both On-Site and Off-Site Emergency Plans should clearly show what resources are available and the circumstances in which they will be released.</p> <p>Verify that information has been provided to the LA on the resources available to assist with the Off-Site Plan.</p> <p>Have the details of resources been discussed and agreed with the emergency services?</p> <p>Do relevant establishment personnel understand the support arrangements?</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>3. Emergency Arrangements</b></p> <p><b>Location of the ECC, Medical or First Aid Centres, Emergency Shelters, Muster Points, Forward Control Points.</b></p> <ul style="list-style-type: none"> <li>• The location of ECC, Medical Facilities, Muster Points, Emergency Shelters and other relevant locations are clearly shown in plans and relevant procedures.</li> <li>• The need for secondary locations and back-up facilities has been considered and included in plans where appropriate.</li> <li>• The selected locations are appropriate to the hazards at the establishment.</li> <li>• Where necessary, suitable direction signs and location signs have been erected.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm details are available of locations of the ECC (main and alternates) medical or first aid centres, emergency shelters, muster points and pre-planned forward control points. This may be provided in the form of a list or a diagram. It is acceptable to have different ECCs depending upon the nature of the emergency, but each should conform to the minimum standards required in DSA03OME (JSP 498) Chapter 4.</p> <p>Check plans and procedures detailing location of ECC, Medical Centres, Emergency Shelters etc.</p> <p>Investigate selection and justifications for these locations and for alternative or back-up locations.</p> <p>Visit locations to judge suitability e.g., proximity from hazardous installations, physical protective structure, etc. Are directions to/locations of: muster points, forward control points, Rendezvous Points (RVPs), emergency shelters etc. clearly signed?</p> <p>Verify that medical centres are fully manned.</p> <p>Note. Are First Aiders trained to deal with injuries likely to result from an MA e.g., trauma, severe burns etc.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems</b></p> <p><b>a. Establishment Alert Arrangements.</b></p> <ul style="list-style-type: none"> <li>• Effective arrangements are in place to alert: - <ul style="list-style-type: none"> <li>• Key personnel.</li> <li>• Specific areas.</li> <li>• Whole site.</li> <li>• External Agencies.</li> <li>• General Public.</li> </ul> </li> <li>• The means of alert are tested and maintained.</li> <li>• Response actions are periodically practised.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm details are provided to show how people on the establishment are alerted to an incident. This should include the systems for mass alert e.g., sirens or tannoy, as well as specific individuals. Establishment actions will also include contacting a limited number of off-site organisations, such as emergency services, neighbouring establishments, downstream water abstractors etc.</p> <p>Investigate systems for site wide and local area alerts or alarms. How are key personnel alerted in the event of an MA?</p> <p>Verify that systems are tested and check records.</p> <p>Question staff on arrangements for contacting external agencies i.e. emergency services, Environment Agency (EA), sewerage undertakers, water abstractors etc.</p> <p>How are contractors and visitors alerted and directed in the event of an MA?</p> <p>What arrangements are in place to alert the public in the event of an MA? This must be different to on site alerts unless the PIZ would be immediately affected in every scenario. Seek confirmation that the alerts adequately cover the PIZ.</p>
<p><b>b. Initial Reactions to Alert or Warning.</b></p> <ul style="list-style-type: none"> <li>• Initial actions in response to MA alerts are clearly documented.</li> <li>• Required actions have been effectively communicated to all relevant staff, contractors, visitors and others who may be affected.</li> <li>• Automatic systems are tested.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the plan shows what initial reactions are considered necessary. The depth required is dependent upon the complexity of the operation; however, as a minimum it should include, isolation of fuel valves, First Aid Fire Fighting, manning of the ECC and alerting the emergency services.</p> <p>Investigate availability and adequacy of documentation relating to actions to be taken in response to alerts. Check documentation relating to individual hazardous installations, hazardous areas, specified areas, whole site and off-site.</p> <p>Have automatic shut down or fire detection systems been installed? Are these systems tested and maintained? Is there scope for human intervention and override? Have staff been fully trained regarding the circumstances and actions to be taken when over-riding automatic systems?</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems (Continued)</b></p> <p><b>c. Arrangements for Briefing Emergency Services.</b></p> <ul style="list-style-type: none"> <li>• Personnel have been allocated responsibility for briefing emergency services responding to MAs.</li> <li>• Information on specific hazards is readily available to the emergency services.</li> <li>• Effective systems are in place to ensure information is accurate and maintained up to date.</li> <li>• Effective arrangements are in place to provide information on the developing situation to EMC, EIC or other relevant parties.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the plan describes the arrangements to brief the emergency services on the incident and any recommendations as to future actions. This should include how the initial information is to be briefed and how any follow up information is to be provided. The arrangements should be robust and avoid the possibility of confusing or misleading information being passed on. A single focal point for transfer of information is preferable.</p> <p>Verify that documentation details briefing arrangements for emergency services. Verify that nominated personnel are aware of their duties.</p> <p>Verify that information is readily available to the emergency services on arrival on the establishment e.g., grab pack at gatehouse. Check systems for keeping such information up to date and accurate. Investigate how accurate information is gathered and passed on to person(s) responsible for briefing emergency services. In particular, are details of the contents of explosives buildings readily available to Incident Controllers etc? Information sources should be clearly defined. Are briefing arrangements included in Communications Exercises?</p>
<p><b>d. Monitoring Arrangements for Wind Speed and Direction.</b></p> <ul style="list-style-type: none"> <li>• Measuring and monitoring equipment is available or has been installed where appropriate.</li> <li>• Links with the Meteorological Office have been established.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4 paras 22 - 24</p>	<p>Confirm that a system is available for determining wind speed and direction. A general indication from the local Meteorological Office may be sufficient. If the Risk Assessment indicates a high probability of wind borne contamination that will result in a toxic hazard, arrangements should be made on the establishment e.g., weather station or hand held anemometer. See also Topic 5 - Wind Borne Release. Check details of assessments of risk of wind borne contamination. Has dispersion modelling been used to estimate extent of potential hazard or arrangements made to obtain information on dispersion?</p> <p>Have links been established with Meteorological Office?</p> <p>Have other organisations that may provide information on wind borne hazards been identified? Is equipment available to measure wind speed and direction and type and concentration of contaminant?</p> <p>Is there a need for monitoring stations?</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems (Continued)</b></p> <p><b>e. Access Routes for Emergency Services, Escape Routes and Restricted Areas.</b></p> <ul style="list-style-type: none"> <li>• Maps and site plans clearly show access and escape routes and restricted areas.</li> <li>• Access and escape routes are signed as appropriate and free from obstruction in the event of an MA.</li> <li>• Arrangements are in place to direct people to designated routes.</li> </ul>	<p>Confirm details are available of any pre-planned access routes for the emergency services. If pre-planned routes are not available, then evidence should be available to show how the decision process is carried out to ensure the emergency services can approach the establishment safely and obtain a briefing of the situation. Expected documentation would be maps showing pre-determined access routes, escape routes and restricted areas.</p> <p>Verify that RVPs are clearly identified on plans. Check that the locations of RVPs are self-evident or signed.</p> <p>Verify that access and escape routes have been identified. Check that routes are signed as appropriate and that there is no restriction or blockage of access.</p> <p>Check that secondary or alternative routes have been identified.</p> <p>Check if emergency responders have agreed pre planned routes.</p> <p>Verify that restricted areas e.g., in or adjacent to hazardous areas, radar installations etc. are clearly identified and that sufficient information is available to be communicated to emergency services etc. Check that barriers, fences, signs or other suitable means are in place to indicate, or restrict access to, restricted areas.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems (Continued)</b></p> <p><b>f. Communications.</b></p> <ul style="list-style-type: none"> <li>• Communication arrangements are clearly defined in establishment procedures.</li> <li>• Suitable communication equipment is available.</li> <li>• Communication systems and equipment are tested.</li> <li>• Communication arrangements within hazardous installations have been addressed.</li> <li>• Communication arrangements with the emergency services have been agreed, tested and found to be suitable.</li> <li>• Back-up arrangements are in place.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that there are adequate communication systems, including interoperability. The plan should provide details of the communications systems available, telephone, radio etc. Where feasible it should explain how such systems could be combined to ensure adequate information flow. It should include any arrangements for integrating different systems e.g., the emergency services radio net and the establishments radio net. If emergency services focal points are not co-located in the ECC confirm adequate communications can be maintained. It is preferable to have systems co-located so radio nets can be operated in parallel.</p> <p>Verify that the means of communication between key personnel, emergency services and establishment personnel have been identified. (See Topic 4a for Establishment Alert Arrangements).</p> <p>Check availability of radios, pagers, mobile phones etc. and location of emergency phones in hazardous installations.</p> <p>Establish what checks have been made to ensure interoperability e.g., with equipment used by emergency services. What steps have been taken to ensure equipment operates across all appropriate areas on the establishment i.e. have dead areas been identified?</p> <p>Verify that communication exercises have been completed and that recommendations have been implemented. (See Topic 11 – Exercising of Emergency Plans).</p> <p>(See Topic 2h regarding communication back-up arrangements).</p> <p>Confirm that arrangements have been made with BT Emergency Communications Network. Have mobile phones been registered with Mobile Privileged Access Scheme.</p>



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems (Continued)</b></p> <p><b>g. Mustering and Search and Rescue Arrangements.</b></p> <ul style="list-style-type: none"> <li>• Effective procedures are in place to identify who is on the establishment at any time.</li> <li>• Effective arrangements are in place to complete roll call at muster points and to identify the potential whereabouts of missing persons.</li> <li>• Systems are in place to communicate information between the muster points and the EMC, EIC and search and rescue teams.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm details are shown of the mustering arrangements. Whilst adjustment can be made for the complexity or size of the establishment, mustering should normally be completed within 30 minutes. It is not necessary to muster the complete establishment if arrangements are in place to restrict access to the area that is affected by an incident. The system should include the principles for searching for people who are not accounted for on completion of mustering e.g., forwarding details to the emergency services along with an assessment of the risk involved in entering particular areas that are affected by the incident.</p> <p>Verify that muster points for MAs have been identified on plans (these may differ from muster points for smaller or localised incidents). Visit locations to judge suitability regarding MAs.</p> <p>Verify that persons have been nominated to complete muster procedures.</p> <p>Check arrangements for determining who is on the establishment, particularly in or near hazardous installations. Particular attention should be paid to the arrangements for accounting for contractors and visitors. Verify that a visitor's log is maintained e.g., at access points to the establishment and to hazardous areas.</p> <p>Check what arrangements have been made for silent hours.</p> <p>Verify that suitable arrangements are in place to notify EMC and emergency services of missing persons.</p> <p>Verify that search and rescue arrangements have been made, particularly for hazardous installations.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>4. Warning Systems (Continued)</b></p> <p><b>h. Evacuation Arrangements.</b></p> <ul style="list-style-type: none"> <li>• Organisations and staff responsible for managing evacuation are clearly defined.</li> <li>• Effective liaison is maintained between all parties involved in evacuation arrangements.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that plans are available showing the arrangements for on-site and off-site evacuation. This may be for immediate action or over a more extended period as deemed necessary to manage the incident. They should show who is controlling these procedures (MDP, Civil Police, Establishment Staff). This could be a mixture, for instance establishment staff overseeing an on-site evacuation whilst Civil Police oversee the off-site evacuation. It should be clear who has responsibility to action these arrangements.</p> <p>Review procedures for on-site and off-site evacuation. Are responsibilities clearly defined? Are nominated persons or agencies familiar with evacuation routes, mustering arrangements etc.</p> <p>Has appropriate information been passed to the LA for inclusion in the Off-Site Plan?</p>
<p><b>i. Consideration of the Effects of Emergency Response Actions.</b></p> <ul style="list-style-type: none"> <li>• The effects of emergency response actions have been considered in the ERA.</li> <li>• Procedures and physical controls are available and in place.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the effect to the environment from firewater run off is included in the ERA. The arrangements for reducing the impact of firewater run off should be shown. This would be expected to cover such elements as drain interceptors, curbed areas, the provision of catchment areas (lagoons), pre fire plan control burn options, etc.</p> <p>Check USRP for plans to control pollutants including FFW run off.</p> <p>Check ERA for assessment of effects of: emergency plans including FFW run off, emergency dams/excavations/back filling of drains/etc, mitigation provided by USRP.</p> <p>Review referenced procedures and documentation.</p> <p>Is special equipment e.g., booms, required?</p> <p>Discuss arrangements with the Establishment Fire Officer, Pollution Control officer and environmental advisor.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>5. Wind Borne Release</b></p> <p><b>Arrangements to Mitigate the Consequences of a Wind Borne Release.</b></p> <ul style="list-style-type: none"> <li>• Dangerous substances with the potential to be released to and carried in air have been identified in Risk Assessments.</li> <li>• Control measures identified by Risk Assessment are in place.</li> <li>• Areas at risk from wind borne hazards have been identified.</li> <li>• Sources of information relating to wind borne hazards have been identified and links established.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that if a Risk Assessment predicts the release of toxic wind borne particles the arrangements for mitigating the consequences of their release are provided. This may include methods of reducing the emission and the spread of particulates and ways to protect individuals who could be exposed to the emissions.</p> <p>Identify any toxic materials referenced in Risk Assessments inventories of dangerous substances, site hazard surveys etc. with potential to be released to atmosphere e.g., toxic smoke (fuels, CS), Depleted Uranium (DU), Man Made Mineral Fibres (MMMMF).</p> <p>Have physical control measures been introduced e.g., segregation or isolation, sprinkler systems, selection of location with regard to people on and off-site (taking into account prevailing winds)?</p> <p>Have instructions been published on actions to be taken in the event of release to atmosphere e.g., stay indoors, shut windows etc.?</p> <p>Has Personal Protection Equipment (PPE) and or Respiratory Protection Equipment (RPE) been provided to persons particularly at risk?</p> <p>(See also Topic 4d for monitoring arrangements for wind speed and direction).</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>6. Liquid Release</b></p> <p><b>a. Measures to Mitigate the Consequences of a Leak involving a Dangerous Substance.</b></p> <ul style="list-style-type: none"> <li>• Effective procedures are in place to monitor loss of liquid for both slow and rapid loss.</li> <li>• Effective shut-off procedures are in place.</li> <li>• Effective procedures are in place to deal with spills and leaks.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that details are provided of the arrangements to limit leaks. This would be expected to include arrangements to monitor pumping pressures or liquid levels and the actions that should be taken if changes in these monitored elements indicate a problem e.g., shut down of pipelines or valves. Examples of measures would include use of multiple valves with interlocks to reduce spills to short lengths of pipe or the automatic close down of pumps if pressure lost.</p> <p>Check the availability of reports undertaken by external authorities e.g., Fuels &amp; Gases Safety Regulator (FGSR). Review any such reports. Are any recommendations made relating to accidental liquid releases?</p> <p>Investigate process controls, monitoring, shut-off and isolation arrangements.</p> <p>Are Mass balance audits undertaken?</p> <p>Are staff trained in operation and monitoring of installation?</p> <p>Check that spill kits etc. are available and accessible. Verify that personnel have been trained in actions to be taken in the event of spills or leaks.</p> <p>Are filling and or discharge operations properly supervised?</p> <p>Check that all drains are identified on a plan. Check drains in location of hazardous installations. Are drains colour coded? Are physical controls e.g., separators, sumps, lagoons, catchment areas etc. identified and maintained?</p> <p>Check that leak pathways for gasses including heavier than air gasses have been identified and assessed.</p> <p>Check adequacy of controls associated with maintenance operations e.g., pre-planning, permits to work etc.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>6. Liquid Release (Continued)</b></p> <p><b>b. Secondary Containment.</b></p> <ul style="list-style-type: none"> <li>• Secondary containment volumes are appropriate to the volume of liquid stored.</li> <li>• The integrity of the secondary containment system is sound.</li> </ul>	<p>Confirm that the secondary containment e.g., bunding, is adequate for the quantity of liquid that may be released (110% of tank capacity and impermeable). This could also include secondary containment for firewater run off (kerbs, hoses, booms etc.).</p> <p>Review Technical Inspection Reports.</p> <p>Review calculations for bunding etc. volume. Visit bulk liquid storage installations.</p> <p>Confirm integrity and adequacy of bunding arrangements. Assess secondary arrangements, particularly in fill and discharge areas.</p> <p>Confirm that bunding arrangements etc. are periodically checked for integrity and that suitable arrangements are in place to deal with emptying debris and rain water.</p>
<p><b>7. Monitoring and Sampling</b></p> <p><b>Provisions for Monitoring Contamination.</b></p> <ul style="list-style-type: none"> <li>• Procedures for sampling and monitoring have been defined in establishment documentation.</li> <li>• Human and technical resources to undertake sampling and monitoring have been identified.</li> <li>• Actions to be taken in the event of excursions from defined limits have been documented.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the arrangements for the monitoring of contamination e.g., HAP/OTTO Fuel, DU, Oil Fuels etc, are detailed. This would include arrangements for obtaining suitable technical equipment and trained personnel to operate it. Staff conducting hazardous monitoring should be trained and certified as competent. It should be noted that, if the establishment is a Nuclear Authorized Site, radioactive spills are not covered by Major Accident Control Regulations (MACR).</p> <p>Check database for named substances.</p> <p>Check site hazard survey.</p> <p>Has the need for monitoring and sampling (including statutory health monitoring of workers) been assessed in the Risk Assessment process?</p> <p>Confirm that establishment documentation describes the arrangements for monitoring and sampling with regard to adverse health effects and environmental releases. Confirm that actions to be taken in the event of releases with MA potential are described in procedures</p> <p>Confirm that the technical and administrative arrangements are in place.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>8. Environmental Remediation</b></p> <p><b>Long Term Remediation Arrangements.</b></p> <ul style="list-style-type: none"> <li>• ERAs include information on potential remediation measures.</li> <li>• Sources of assistance to deal with long term consequences of pollution incidents resulting from MAs have been identified.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that there are arrangements for the long term remediation of the consequences of an MA. These will probably include dormant enabling contracts for decontamination such as the removal of contaminated soil, dispersal of spilled material, etc. Confirm that the arrangements include agreement from the relevant Environment Agency (EA/SEPA/etc), local conservation groups and other interested parties. It is better to concentrate on establishing the principles to be used rather than the application of specific measures.</p> <p>Review ERA for environmental aspects and impacts.</p> <p>Verify that potential remediation measures have been defined and that potential resources and sources of assistance been identified.</p> <p>Have contracts been placed to provide assistance with pollution incidents? Verify that these are appropriate to the environmental aspects relating to the establishment.</p> <p>Investigate what specialist assistance has been sought with regard to the identification of appropriate remediation arrangements.</p>
<p><b>9. First Aid and Medical Requirements</b></p> <p><b>On-Site Medical Emergency.</b></p> <ul style="list-style-type: none"> <li>• The level of medical and first aid resources has been properly assessed and justified.</li> <li>• Medical and first aid arrangements for dealing with MAs are documented.</li> <li>• Medical and first aid resources appropriate to the hazards and risks are in place.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm how the On-Site Emergency Plan deals with a medical emergency e.g., requirements for treating Otto fuel contaminated staff. Include details of how the establishment provisions dovetail with the Off-Site Emergency Plan where appropriate. These arrangements may be covered in a number of stand-alone procedures.</p> <p>Investigate justification for level of medical and first aid facilities (Health and Safety (First Aid) Regulations 1981 Reg 3).</p> <p>Check Risk Assessments etc. for the need for any special medical facilities or arrangements to deal with specific dangerous substances. Verify that such facilities are available. Verify that the training requirements have been defined and that staff have been trained and maintain their skill levels.</p> <p>Verify that establishment procedures describe the medical and first aid facilities available and arrangements for use in the event of an MA.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>10. Training</b></p> <p><b>a. Emergency Organisation Personnel.</b></p> <ul style="list-style-type: none"> <li>Effective systems are in place to ensure that staff receive training within specified timescales.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the training required for individuals having a specific role to undertake in the emergency organisation has been identified. This should cover, knowledge of alarm systems, information on MA scenarios, environmental impact, availability of resources and specific duties for emergency posts. Each position in the emergency organisation should have been assessed to determine the competencies required and the training needed to deliver those competencies. It should be demonstrable that the post requirements have been reviewed against the competency of an individual.</p> <p>These aspects have been covered in part in elements of the MAPP (Topic 4b), SR and On-Site Emergency Plan Assessment Criteria.</p> <p>Undertake a detailed review of training arrangements.</p>
<p><b>b. Awareness Training.</b></p> <ul style="list-style-type: none"> <li>An effective system is in place to provide persons working at the establishment with training and information on actions to be taken in the event of an MA.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that general awareness training has been developed to a set programme covering as a minimum; evacuation and mustering, initial actions and use of emergency and protective equipment. Frequency should be in accordance with the timeframes laid down in JSP 498 Chapter 4. Verify that appropriate training has been recorded on personal training records and that these records are kept for at least three years.</p> <p>Verify that there is a system for provision of training on actions to be taken in the event of an MA on joining and that refresher training is provided at appropriate intervals. Refresher training could be in the form of evacuation exercises, provision of information in the form of leaflets or briefings from supervisors etc.</p> <p>Verify that formal training is recorded on personal training records and that evacuation exercises are properly recorded.</p> <p>Test knowledge of individuals on action to be taken in the event of an MA. Pay particular attention to lodger units, contractors etc.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>10. Training (Continued)</b></p> <p><b>c. Emergency Services Familiarisation.</b></p> <ul style="list-style-type: none"> <li>• Emergency Services have been invited to undertake familiarisation visits at least annually.</li> <li>• Records of such visits should be maintained.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that the emergency services are encouraged to undertake a familiarisation visit to the establishment at least annually. Training should be undertaken in accordance with the frequencies laid down in DSA03OME (JSP 498) Chapter 4 and records of such training and familiarisation visits should be kept for at least three years.</p> <p>Verify records are maintained and kept for at least three years.</p>
<p><b>11. Exercising of Emergency Plans</b></p> <p><b>a. Frequency of Exercises.</b></p> <ul style="list-style-type: none"> <li>• Emergency exercises are undertaken in accordance with DSA03OME (JSP 498) Chapter 4.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that there is a programme for exercising the emergency plans in accordance with the frequencies laid down in JSP 498 Chapter 4 and that there is evidence of compliance to the programme.</p> <ul style="list-style-type: none"> <li>• Table Top – Yearly.</li> <li>• Communications – Six monthly.</li> <li>• Live (internal) – Yearly.</li> <li>• Live (with external emergency services) – Three yearly</li> </ul>



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>11. Exercising of Emergency Plans (Continued)</b></p> <p><b>b. Recording of Tests and Updating of Emergency Plans.</b></p> <ul style="list-style-type: none"> <li>• Detailed records relating to emergency exercises are maintained.</li> <li>• Recommendations made in Post Exercise Reports (PXR) have been implemented.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that arrangements exist for keeping PXR for a minimum period of three years. The PXR will include lessons learnt and they should be reviewed to ensure that the lessons learnt have been reflected into working practices and the emergency plans have been updated as required.</p> <p>If considered necessary, review PXR for each exercise.</p> <p>Verify that lessons learned, and recommendations have been implemented and emergency plans updated.</p>
<p><b>12. Maintenance of Emergency Equipment</b></p> <p><b>Arrangements for the Maintenance of Emergency Equipment.</b></p> <ul style="list-style-type: none"> <li>• Inspection, testing, examination and maintenance procedures are available for emergency equipment.</li> <li>• Equipment is inspected, maintained etc. by competent persons</li> <li>• Records of all inspection, maintenance etc. are kept.</li> <li>• Records indicate that inspection, maintenance etc. is undertaken at appropriate frequency.</li> </ul> <p>DSA03OME (JSP 498) Chapter 4</p>	<p>Confirm that such equipment is covered by standard plant maintenance procedures which includes inspection, examination and testing. Assessment of these arrangements should include scrutiny of the appropriate records. It should be possible to verify that the maintenance has been carried out in accordance with the Provision and Use of Work Equipment regulations 1998 (PUWER).</p> <p>Verify that all appropriate emergency equipment is entered onto some form of inventory or register.</p> <p>Verify that the inspection, testing and maintenance requirements for all such equipment are specified.</p> <p>Verify that records exist which demonstrate that equipment is inspected, tested and maintained to the required standards and frequencies.</p> <p>Verify that effective systems are in place to ensure new equipment is entered onto appropriate inspection schedules.</p> <p>Maintenance regimes should be in place for all emergency equipment, for example:-</p> <p>Water mains and emergency water tanks, firefighting equipment, stand-by generators, communication equipment, spill equipment and monitoring equipment.</p>

# **ANNEX 5E**

## **QUALIFIED ESTABLISHMENTS INSPECTION CRITERIA**

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>1. Emergency Exercise</b></p> <p><b>a. Planning Phase.</b> Confirm that the establishment has produced an exercise plan.</p> <ul style="list-style-type: none"> <li>• Specific objectives set.</li> <li>• Performance criteria for each objective set.</li> <li>• Realistic scenario produced.</li> </ul> <ul style="list-style-type: none"> <li>• Key events timeline produced.</li> </ul> <ul style="list-style-type: none"> <li>• Directing Staff (DS) and Observers identified.</li> </ul> <ul style="list-style-type: none"> <li>• Public warned (if appropriate).</li> </ul>	<p>Objectives may be as simple as testing particular elements of the emergency plan such as the evacuation arrangements or testing how the emergency plans cope with a particular type of incident and should identify the exercise objectives in discussion with all the agencies involved.</p> <p>Performance criteria should be agreed in advance and where possible should be quantitative e.g., full muster of staff completed within 30 minutes of the alarm.</p> <p>The scenario should be based on one of the Major Accident (MA) scenarios identified for the establishment. The off-site agencies may have particular requirements that they would like to exercise that will not be readily apparent to establishment staff. In order to generate maximum benefit, the exercise scenario should be agreed with the establishment and off-site agencies.</p> <p>Artificial compression of the key events timeline may be necessary in order to exercise all elements of the plan. However, any compression will introduce exercise artificiality and should be kept to a minimum. All staff should be made aware of any intentions to compress the timeline.</p> <p>DS must be identified and separate from those people undertaking their emergency response function. In addition to DS it is advantageous to have observers at various locations on the establishment to provide feedback on the responses that occur to the exercise action.</p> <p>It may be necessary to warn the public that an exercise is taking place. The establishment should also have a system in place to respond to any enquiries from the public during the exercise.</p>









TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>c. Debrief Phase.</b></p> <ul style="list-style-type: none"> <li>• Hot debrief held.</li> </ul> <p style="padding-left: 40px;">Written Post Exercise Report (PXR) produced.</p>	<p>There should be an immediate post exercise debrief (hot debrief) with all participating agencies being given the opportunity to contribute.</p> <p>There should be a written PXR produced within a reasonable timescale (normally within one month). All involved agencies should be given the opportunity to contribute to the PXR and all should receive a copy of the final report.</p> <p>The PXR should record any Lessons Identified and consider the need to improve procedures. Areas for improvement should be incorporated into an Action Plan.</p>
<p><b>d. Records and Update of Procedures.</b></p> <ul style="list-style-type: none"> <li>• Training Records kept up to date.</li> </ul> <p style="padding-left: 40px;">Procedures updated to reflect lessons learnt and any other changes.</p>	<p>Verify that the training records of the key personnel have been updated to reflect the role undertaken. It is acceptable for either individual training records to be updated or for a record to be kept detailing the roles all key personnel have undertaken. Records must state names as well as roles undertaken. The record should include competence evaluation of the MOD players.</p> <p>If the PXR established a need to improve procedures it should be verified that there is a system in place to incorporate the improvements in the procedures. A record should also be kept on file that justifies the action taken. This could simply be the PXR (including Action Plan) if that is judged to provide adequate information on the rationale for changing the procedure so that subsequent changes do not compromise the lessons learnt from previous exercises.</p>



TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>2. Other Major Accident Control regulations (MACR) Issues.</b></p> <p><b>a. Issues raised in last MACR Assessment Report</b></p> <ul style="list-style-type: none"> <li>• Issues raised have been adequately addressed.</li> </ul>	<p>Any comments and observations made in the last MACR Assessment Report and Executive Summary will be discussed with the MACR Co-ordinator and any other relevant person. Evidence should be sought that appropriate action has been taken regarding such matters.</p> <p>Where procedures were changed or updated during the Assessment checks should be taken to ensure that they have been embedded.</p>
<p><b>b. Review of Major Accident Prevention Plan (MAPP) or Safety Report</b></p> <ul style="list-style-type: none"> <li>• Evidence is available to show that the MAPP or Safety Report (as applicable) has been subject to periodic review in accordance with establishment procedure.</li> </ul>	<p>The MACR MAPP/SR held by the establishment should be periodically reviewed and updated to reflect changes to the activity, organisation and establishment documentation.</p> <p>The MACR Co-ordinator should demonstrate how this is achieved and indicate what changes have been made.</p> <p>Confirm that the MACR MAPP/SR has been updated to reflect any significant changes.</p>
<p><b>c. Safety, Health, Environment and Fire (SHEF) Management Systems</b></p> <ul style="list-style-type: none"> <li>• External SHEF audits and inspections are undertaken at appropriate frequencies.</li> <li>• SHEF audits and inspections indicate that effective Safety and Environmental Management Systems are in place.</li> </ul>	<p>MACR relies on the existence and effective implementation of other MOD regulations, inspections and audit regimes. In particular SHEF Management Systems should be audited in accordance with the systems described in JSP 375 Vol 1 Chapter 10.</p> <p>The establishment will be subject to periodic audit by SHEF Auditors and it should be confirmed that these audits are completed at the appropriate interval and that action is taken to address any recommendations with MACR implications.</p> <p>Confirm that MACR is discussed as a standing agenda item at internal SHEF meetings.</p>

TOPIC & PASS CRITERIA	GUIDANCE/VERIFICATION METHOD
<p><b>d. Specialist Inspections</b></p> <ul style="list-style-type: none"><li>Specialist inspections are being undertaken at appropriate intervals.</li><li>Appropriate action has been taken to address any recommendations made in the specialist reports.</li></ul>	<p>The establishment will be subject to periodic inspections by specialist regulators e.g. Fuels &amp; Gases Safety Regulator, Inspector of Explosives etc. and it should be confirmed that these inspections are completed at the appropriate interval and that action is taken to address any recommendations with MACR implications.</p>

## **ANNEX 5F**

### **Reference Material**

The following are basic reference material:

Performance Monitoring of Safety Management Systems  
Hazard Identification and Risk Assessment Principles  
MOD Environmental Policy  
Control of Contractors  
MOD Fire Policy  
Defence Security  
Construction and Maintenance  
MOD Explosives Regulations  
Storage and Handling of Fuels and Lubricants