



Defence
Safety Authority

DSA 03.OME Part 4: Defence Code of Practice (DCOP) 401

General Duties of Operators



Version Record

Version 1.1

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Preface

Requests for Change

1. Proposed changes, recommendations, or amendments to DOSR Regulations and Guidance can be submitted to the DOSR Regulations and Publications Team:

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Postal Address: Juniper #5004, Level 1, Wing 4, Abbey Wood North, Bristol, BS34 8QW

2. Any post and grammar change proposals can be approved or rejected by the DOSR without involvement of the associated Working Group.

3. Technical change proposals should be submitted to the associated Working Group for review and approval or rejection.

4. When incorporating changes, care is to be taken to maintain coherence across regulations.

5. Changes effecting Risk to Life will be published immediately. Other changes will be incorporated as part of routine reviews.

Review Process

6. The DOSR team will ensure OME Regulations remain fit for purpose by conducting regular reviews through the DOSR Governance Committees, consulting with MOD Stakeholders and other Defence Regulators as necessary on interfaces and where there may be overlaps of responsibility.

Further Advice and Feedback

7. For further information about any aspect of this document, or questions not answered within the subsequent sections, or to provide feedback on the content, contact the DOSR Regulations and Publications Team.

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Amendment Record

No	Section	Para	Amendment Summary	Agreed	Date
1.0	all	all	Document created	Regs ATL	Jul 2021
1.1	all	all	Reformatted in line with DSA accessibility requirements.	Regs ATL	Aug 2024

DSA 02.OME Regulation 401

General Duties of Operators

1. Every operator shall take all measures necessary to prevent major accidents and limit their consequence to human health and the environment.
2. Every operator shall demonstrate to the competent authority that they have taken all measures necessary as specified in these Regulations.
3. Every operator shall provide the Major Accident Control Regulations (MACR) Assurance Team with such assistance as is necessary to enable the competent authority to perform its functions under these Regulations.

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Introduction to MACR for Operators

1. The Control of Major Accident Hazards Regulations 2015 (COMAH) and The Control of Major Accident Hazards Regulations (Northern Ireland) 2015 implement much of the Seveso III Directive (2012/18/EU) in Great Britain and Northern Ireland. The purpose of the COMAH Regulations is to prevent major accidents involving dangerous substances and limit the consequences to people and the environment of any accidents which do occur.
2. COMAH is UK legislation made under the Health and Safety at Work etc. Act (HSWA) 1974. The established policy of the Secretary of State (S of S) where legislation does not apply and where appropriate, measures will be introduced in MOD to achieve as good as or better results than those demanded by statute.
3. MACR discharges that policy in the context of prevention of a Major Accident (MA) and the mitigation of consequences to human health and or the environment if one occurs. The MACR Competent Authority (CA) is empowered by the Permanent Secretary (PS) via DG Defence Safety Authority (DSA) to maintain and regulate MACR.

Major Accident Definition and Criteria

4. MACR defines an MA as an occurrence (in particular, a major emission, fire or explosion) resulting from uncontrolled developments during the operation of any MACR qualified establishment, that leads to serious danger to human health and or the environment, whether immediate or delayed, inside or outside of the establishment and involving one or more dangerous substances.
5. An accident meeting any one of the following criteria is classified as an MA and must be notified to the MACR Assurance Team:
 - a. Any fire, explosion or accidental discharge of a dangerous substance involving a quantity of at least 5% of the qualifying quantity for the establishment (see paragraph 8).

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- b. Any fire, explosion or accidental discharge involving more than 50 Tonnes of a petroleum product.
- c. Injury to persons and damage to property caused by an accident directly involving a dangerous substance that results in one of the following events:
 - (1) A death.
 - (2) Six persons injured within an establishment and kept in hospital for at least 24 hours.
 - (3) One person outside the establishment kept in hospital for a period of 24 hours.
 - (4) Dwellings outside the establishment damaged and unusable as a result of the accident.
 - (5) The evacuation or confinement of persons for more than two hours. Calculated by Persons x Hours with a value of at least 500.
 - (6) The interruption of off-site drinking water, electricity, gas or telephone services for more than two hours. Calculated by Persons x Hours with a value of at least 1000.
- d. Immediate damage to the environment as follows:
 - (1) Permanent or long-term damage to terrestrial habitats within the following levels:
 - (2) 0.5 hectare (ha) or more if a habitat of environmental or conservation importance protected by legislation.
 - (3) Ten or more ha of more widespread habitat, including agricultural land.
 - (4) Significant or long-term damage to fresh water or marine habitats within the following levels:
 - (5) 10 km or more of river or canal.
 - (6) 1 ha or more of a lake or pond.
 - (7) 2 ha or more of delta.
 - (8) 2 ha or more of coastline or open sea.
 - (9) Significant damage to an aquifer or underground water of 1 ha or more.
 - (10) Damage to property within approximately the following levels:
 - (11) Damage within the establishment of at least 2 million pounds sterling.

(12) Damage outside of the establishment of at least 500,000 pounds sterling.

e. Accidents and near misses which are regarded as being of technical interest for preventing MAs and limiting their consequences, but which do not meet the criteria above, are to be notified to the MACR Assurance team.

MACR Scope

6. There are two qualifying threshold quantities for each of the named and generic categories of dangerous substances that delineate classification of individual establishments that fall within scope of MACR. These are Lower Tier Establishment (LTE) or Upper Tier Establishment (UTE).

7. Establishments may also fall within the scope of MACR (even though the threshold quantities of substances are not exceeded) if qualifying threshold quantities of specified dangerous substances could be produced as a result of loss of control of a process.

8. Dangerous substances classed as In Transit and held in Intermediate Temporary Storage are not to be taken into account when calculating maximum anticipated quantities if held for up to a maximum period of four days, whether moving by road, rail, sea or air.

9. Determination of qualification under MACR is illustrated in the flowchart at Annex A. Annex A also details duties for existing MACR establishments, overseas deployments and visiting forces to the UK.

10. MACR applies to the establishment as a whole, rather than individual activities within the establishment.

Duties of Head of Establishment (HOE) - Operator

11. The HOE, defined as the Operator, of a qualifying establishment is charged under MACR with the prevention of MAs and with mitigating the consequences to human health and or the environment of any that occur. This imposes the following specific duties which may be discharged through a competent MACR Co-ordinator:

- a. Notifying the MACR Assurance Team of the existence and qualification of the establishment according to the LTE or UTE threshold criteria.
- b. Providing to the MACR Assurance Team with details of the HOE, the type and maximum anticipated quantity of dangerous substance held, the operation concerned, the establishment MAPP, the On-Site Emergency Plan and the assessment of the risks to human health and or the environment of establishment activities.
- c. Notifying the MACR Assurance Team of the programme of the mandatory exercise.
- d. Providing to the MACR Assurance Team a Conformance Certificate signed by the HOE, two weeks prior to the formal visit by the MACR Assurance

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Assessment Team. Examples of Conformance Certificates are given in the respective DCOPs for UTE and LTE.

e. Advising the MACR Assurance Team of the details of any major accidents or near misses, which do occur, and making suitable arrangements to allow the MACR Assurance Team to attend any Inquiry into such accidents.

f. Additionally, UTEs are required to:

(1) Demonstrate in an SR that adequate measures have been taken to prevent or mitigate the consequences of an MA.

(2) Provide relevant information to the Local Authorities (LA) in whose area they are located, sufficient to enable them to prepare an Off-Site Emergency Plan.

(3) Provide information to people within the Public Information Zone (PIZ).

DSA 03.OME DCOP 401a - Annex A - MACR Thresholds

Existing MACR Establishment

1. If during an establishment's life its holdings of dangerous substances are reclassified, reduced or increased, thus altering the status from LTE to UTE or vice versa, the Head of Establishment (HOE) is to update the MACR MAPP/SR and notify the MACR Assurance Team. Where the change means the establishment will move from LTE to UTE the MACR Assurance Team will undertake a re-assessment in accordance with the timescales shown below. If the change is from UTE to LTE status any immediate re-assessment would be an unnecessary burden as the establishment would already be meeting the more stringent requirements and the re-assessment may be left until the 5 yearly assessment is due. The MACR Assurance Team will formally confirm the change of status to the HOE. Changes will fall into the following two categories:

a. Anticipated Change (LTE to UTE). Where a change in holdings of dangerous substances is anticipated and the timescale permits forward planning, the updated Major Accident Prevention Plan (MAPP), Safety Report (SR), On-Site Emergency Plan and Off-Site Emergency Plan is to be in place on the day the change is implemented. These establishments will be formally reassessed within six to nine months of the change. If the timescale does not permit the above documents to be put in place by the day the change is implemented, then the timescale for an unforeseen change may be utilised. The MACR Assurance Team is to be notified of such intentions at the earliest opportunity.

b. Unforeseen Change (LTE to UTE). Circumstances may suddenly force change onto an establishment with very little notice or no notice at all, in which case forward planning by the HOE will be prevented. This may be due to the reclassification of a dangerous substance resulting in the lowering of threshold levels or simply to meet an operational imperative. In such circumstance the HOE is to inform the MACR CA and put in place the updated MAPP, SR, On-Site Emergency Plan and Off-Site Emergency Plan (provision of information to the Local Authority to enable a plan to be produced) within six months of the change occurring, during which time an advisory visit may be requested. These establishments will be formally reassessed within twelve months of the change.

New MACR Establishments

2. New MACR establishments are those where a new build is planned or a change to role has been agreed and it is anticipated that dangerous substances will be held above MACR qualifying threshold levels. In these instances, the MACR Assurance Team must be informed as soon as possible. A liaison visit to the establishment will be arranged 3 months prior to operations commencing to advise on MACR requirements. The HOE is required to put in place the MAPP, SR (UTE only), On-Site Emergency Plan and Off-Site Emergency Plan (UTE only) before

dangerous substances are received into the facility. Formal assessment by the MACR Assurance Team will take place within six to twelve months thereafter. This in-built delay is to allow time for any new and therefore immature procedures to be fully embedded.

3. The timeframes for formal assessment or reassessment may be varied at the discretion of the MACR Assurance Team.

Application Overseas

4. MACR does not apply to short term deployments overseas i.e. deployments lasting less than 12 months. Where a deployment lasts more than 12 months and it is considered impracticable or inappropriate to implement MACR because of the operational situation, a case is to be submitted to the MACR Assurance Team through the Chain of Command. The MACR Assurance Team will assess each case on its merits and has the authority to defer implementation. All such decisions will be subject to periodic review in conjunction with the Top Level Budget Holder (TLBH).

5. Permanent overseas bases come within scope of MACR if the provisions of detailed in the DCOP apply. All requirements of the MAPP apply; however, elements of the SR may be difficult to implement in full, depending on the individual circumstances. There may be local sensitivities or areas of concern that are quite different to those in the United Kingdom (UK). This could mean that some of the MACR requirements, in respect to the provision of information to the general public about the hazards posed and arrangements with local emergency services, are not readily applicable.

6. The HOE is to consult the MACR Assurance Team on any aspect of the SR or emergency plans where it is considered that strict adherence to the MACR requirements will cause unacceptable difficulty or be contrary to the formal agreements that exist with the host country. Any agreement to vary the MACR requirements for a particular establishment will be formally authorised by the MACR Assessment Manager.

Application to Visiting Forces

7. In accordance with the Visiting Forces Act 1957 the Armed Services of other countries are required to comply with host nation Legislation and MOD Regulations. Detailed arrangements for each establishment are subject to formal agreements that cover the requirements of SHEF. Establishments under the control of the United States Air Force Europe (USAFE) are not covered by the MACR arrangements as agreed by the MOD, HSE and USAFE Liaison Committee who have deemed that the USAFE's own procedures provide a suitable alternative.

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General Duties of Operators - All Measures Necessary

1. Relevant good practice is to be adopted as a minimum. In judging how this duty is to be complied with, the MACR Assurance Team recognises that risk cannot be completely eliminated and there is some proportionality between the risk and the measures taken to control the risk. The MACR Assurance Team will make a judgement about whether a preventive or mitigation measure is necessary in relation to the major hazard and the risk the measure addresses.
2. Prevention is to be considered in a hierarchy based on the principles of reducing risk to a level as low as reasonably practicable (ALARP). The ideal is always to avoid a hazard altogether. This is known as "inherent safety" and the principles apply to human and environmental hazards. Where reliance is placed on people as part of necessary measures, human factor issues are just as important as technical and engineering mitigation measures.
3. Once a process or other activity has been selected, HOEs (operators) are to look at how it can be made safer by reducing hazards, for example by reducing or rationalising inventory. The next stage is to ensure that risks have been reduced to ALARP. For new MOD establishments, ALARP will be judged on what measures would be reasonable at the concept and design stage.
4. In most cases, good practice will mean adopting sound engineering design principles, along with good operating and maintenance practices, there will be some cases where good practice has not been established. Here, the first step is to examine the good practice that applies in comparable circumstances, for example that used for a similar process, to determine if it is transferable or can be modified to achieve at least the same level of protection.
5. There is a range of risk management systems, but they typically include the following elements:
 - a. identifying the hazards and risks;
 - b. using a hierarchical approach to examine the control options available and their merits, including the human factor aspects;
 - c. adopting decisions for action informed by the findings of a and b;
 - d. implementing the decisions;
 - e. evaluating the effectiveness of the actions taken and revising where necessary.
6. In demonstrating ALARP, it is not a requirement of the Regulations that quantified risk assessment is always be undertaken. However, in some cases, this may help to set priorities when comparing risk values, particularly where new technology is used and where there is no established good practice for comparison. 'All measures necessary' includes measures for mitigating the effects of major

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accidents. It includes planning for emergencies and remedial measures for restoration of the environment in the event of a major accident

DSA 03.OME DCOP 401b - Annex A - General Duties for Upper Tier HoE (Operators)

1. Upper tier operators are required to have a MAPP, which must be included as a separate document in the Safety Report, and also have the following additional duties.

Produce a Safety Report

2. All operators of upper-tier establishments are required to prepare and retain a Safety Report. Its purpose is to show that you have put in place arrangements for the control of major accident hazards and to limit the consequences to people and the environment of any that do occur.

3. The Safety Report must include:

- a. a description of the establishment and its environment including the geographical location, meteorological, geological, hydrographic conditions and, if necessary, its history
- b. a description of processes, in particular the operating methods, where applicable, taking into account available information on best practices
- c. a description of dangerous substances, including their classification under the CLP Regulation and an inventory of dangerous substances
- d. a detailed description of the possible major accident scenarios and their probability or the conditions under which they might occur including a summary of the events which may play a role in triggering each of these scenarios, the causes being internal or external to the installation
- e. a policy on how to prevent and mitigate major accidents
- f. a safety management system for implementing that policy
- g. an effective method for identifying any major accidents that might occur;
- h. measures (such as safe plant and safe operating procedures) to prevent and mitigate major accidents
- i. information on the safety precautions built into the plant and equipment when it was designed and constructed
- j. details of measures (such as fire-fighting, relief systems and filters) to limit the consequences of any major accident that might occur
- k. identification of neighbouring establishments, as well as sites that fall outside the scope of these Regulations, areas and developments that could be

the source of, or increase the risk or consequences of a major accident and of domino effects

I. information about the emergency plan for the site, which is also used by the local authority in preparing an external emergency plan

4. The safety report needs to be kept up to date. If there are any modifications to the plant or the way it is operated or if new facts or information become available that may affect the site risk profile, the safety report must be reviewed and, if necessary, revised at the time. It must be reviewed after 5 years even if there have not been any changes. The operator must notify the MACR Assurance Team of any revision, and also if the 5 year review does not lead to a revision.

Prepare and test an internal emergency plan

5. Upper tier operators must prepare an internal emergency plan to deal with the on-site consequences of a major accident. These plans are to be in writing and cover the full range of possible major accidents, including the response to reasonably foreseeable low-probability, high-consequence events, such as catastrophic vessel failure, multiple tank fires following an uncontrolled explosion, deflagration or detonation within an explosives store. The details are given in Schedule 4 of the regulations.

Supply information to local authorities for external emergency planning purposes

6. Local authorities play a key role by preparing, reviewing, revising and testing external emergency plans for dealing with the off-site consequences of major accidents at upper tier sites. To fulfil this role they need information from operators. Operators will need to hold discussions with their local authorities or emergency planning authorities to determine their exact needs. The information for the local authority or emergency planning authority must be supplied no later than the date the internal emergency plan for the site has to be completed.

DSA 03.OME DCOP 401b - Annex B - General Duties for Lower Tier HoE (Operators)

Prepare a Major Accident Prevention Policy (MAPP)

1. Every lower tier operator must prepare and retain a Major Accident Prevention Policy (MAPP). The MAPP will usually be a short, simple document setting out what is to be achieved. It is to include a summary and further references to the safety management system that will be used to put the policy into action. The detail will be contained in other documentation relating to the establishment, for example plant operating procedures, training records, job descriptions and audit reports, which the MAPP can refer to.

2. The MAPP should address issues relating to the operator's safety management system. The key areas are:

- a. organisation and personnel
- b. identification and evaluation of major hazards
- c. operational control
- d. management of change
- e. planning for emergencies
- f. monitoring, audit, and review

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Operator Assistance to the MACR Assurance Team

3. The MACR Assurance Team 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.

4. Assessments will be conducted on a 5-yearly basis in line with the Seveso III requirements. 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. The MACR Assurance Team may reduce the Assessment periodicity for establishments where a number of factors indicate that the standard 5 yearly assessment 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 past MACR compliance history. In these cases, Assessments and mandated Major Exercise Inspections 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 Assurance Team and any changes notified to interested parties.

Assessment Process

5. 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 DSA03.OME (formerly JSP 482).

6. The MACR Assurance Team 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.

7. 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 5 years.

8. 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 Assurance Team within 3 months.

9. Endorsement by the MACR Assurance Team is a formal recognition that the arrangements in place at a particular establishment meet the requirements of MACR.

Assessment Criteria

10. The MACR Assurance Team will assess the documentation to determine whether the required demonstrations have been made. The criteria used by the MACR Assurance Team in the conduct of the assessments have been developed to enable common standards to be applied throughout all the qualifying establishments. These criteria represent the key elements of the standards required and enable a critical evaluation to be carried out. This will allow the MACR Assurance Team 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

11. An Assessment Manager (AM) will be appointed for each establishment. The AM will manage the assessment process and bring the conclusions of the assessment together.

12. 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.

13. An Assessment Team will be assigned for each assessment.

Assessment Procedure

14. The assessment procedure will be as follows:

a. **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.

b. **Assessment Plan.** The MACR Assurance Team will prepare an assessment plan, the estimated time allocated for the assessment, and any priorities or deadlines to be considered.

c. **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.

d. **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.

15. 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.

16. If the assessment does not meet the requirement of MACR then enforcement action will be taken in accordance with the DSA enforcement policy detailed in [DSA01.1](#) Defence Policy for Health, Safety & Environmental Protection

17. **Meeting the requirements of MACR.** Once adequate evidence has been reviewed and the non-conformities closed by the AM a recommendation for certification will be made to the MACR CA and upon 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 is to 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.

18. **Not meeting the requirements of MACR.** 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.

19. 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

20. An disputes or appeals will be dealt with in accordance with the DSA enforcement policy detailed in [DSA01.1](#) Defence Policy for Health, Safety & Environmental Protection

Inspection

21. Each qualified establishment will be subject to an inspection from the MACR Assurance Team in the period between the 5 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 A.

22. Preference will be given to observing the mandatory 3 yearly exercise. However, in order to provide flexibility for the MACR CA SG it is acceptable to inspect the mandatory yearly exercise instead. Each establishment is required to

forward details of their programme of mandatory exercises to the MACR Assurance Team once the dates have been decided.

23. If the evidence from the Inspection raises significant concerns over the establishments continued compliance with DSA03.OME Part 4 the Assessment Manager may 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 is to be undertaken within a 6-month period.

Audit

24. Arrangements that monitor establishment MACR performance are incorporated into the hierarchy of existing 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.

25. The MACR Assurance Team 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 Assurance Team will take due account of the appropriate TLBH audits.

Liaison with other Regulators

26. The subject matter expertise of the DSA regulators is a valuable resource and the MACR Assurance Team 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.

Common Safety, Health, Environment and Fire Procedures

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

28. The rules and regulations that govern the conduct of operations are contained in various DSA Regulations and JSPs employed to satisfy a particular requirement that 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.

29. Some of the DSA Regulations and 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.

DSA 03.OME DCOP 401c - Annex A: Major Accident Prevention Policy Assessment Criteria

Topic and pass criteria	Guidance/verification method
<p>1. Commitment The Head of Establishment (HOE) must show commitment to Major Accident Control Regulations (MACR). The Major Accident Prevention Policy (MAPP) contains a clear commitment to the prevention of Major Accidents (MAs) and the mitigation of consequences. The MAPP includes information on, or reference to, the organisation and arrangements with reference to MAs. Referenced establishment documentation is available and extant. The Policy is known by all relevant groups on the establishment. DCOP 403 Part a</p>	<p>Check Health and Safety, Environment or other relevant Policy Statement. 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? 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? Check communication arrangements for Policy e.g., staff briefings, display on notice boards, communication with establishment lodger units and permanent contractors. Do staff understand their responsibilities?</p>
<p>2. Establishment Activity 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. The MAPP contains an adequate description of the establishment activities. DCOP 403 Part a</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>

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Topic and pass criteria	Guidance/verification method
<p>3. Holdings of Dangerous Substances a. General. 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. The establishment has effective systems for monitoring and recording the type and quantity of dangerous substances brought onto and held on the establishment. 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. DCOP 402 Part a</p>	<p>Check MAPP and SR information; compare to establishments inventories of dangerous substances. Check stock records, inventories, explosives accounting systems, POL records etc. Investigate systems for identification of type and quantity of dangerous substances present on the establishment. Discuss with MACR Co-ordinator or other relevant personnel methods used to determine maximum anticipated holdings across a 5-year period.</p>
<p>b. MACR Specific Substances. Confirm the presence of any substances that fall into the category of MACR specific substances. All MACR specific substances have been identified and recorded on the database. DCOP 402 Part a</p>	<p>Check MAPP/SR information and confirm with MACR Co-ordinator.</p>
<p>4. Organisation a. Job Descriptions (JDs). 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. JDs, TOR or other relevant documentation describe the roles and responsibilities of key MACR posts. Adequate cover is provided for these key posts. Staff fully understand their roles, responsibilities and authority. DCOP 403 Part a</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. Confirm that the roles of these positions are detailed in documented systems and procedures. 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. Check JDs etc. of referenced personnel or posts. 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>

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Topic and pass criteria	Guidance/verification method
<p>b. Training Needs. Confirm that a system exists to identify the particular training requirement for each of the appointments identified in Topic 4a. The competency requirements for each appointment are fully defined. Appointed staff fulfil the competency requirements or are working towards full compliance. Nominated Deputies have an appropriate level of training and experience. Effective systems are in place to identify the training needs of individuals. DCOP 403 Part a</p>	<p>Review systems for identifying training needs and maintaining competency levels. 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. 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 3 year. The competency of nominated deputies must be included in this review. The system for Succession Management i.e. preparing for replacement of key staff.</p>
<p>c. Control of Contractors. Verify that the establishment has effective systems for the Control of Contractors. Responsibilities for the management of contractors have been allocated. Effective systems for the control of contractors are in place. DCOP 403 Part a</p>	<p>Normally it would be expected that the establishment complies with the principles laid down in JSP 375 Vol 2 Chapter 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 (risk, hazards, controls etc), controls, monitoring and supervision of contractors. Verify that the procedures are implemented. Check that Hazard Registers have been produced and are used as a means to provide relevant information to the contractor. Verify that there is an effective Permit to Work system in place.</p>
<p>5. Site Hazard Survey a. Completion. Confirm that the establishment has completed a Site Hazard Survey. A Site Hazard Survey has been completed in accordance with JSP 375 Vol 2 Chapter 23 Annex A. DCOP 403 Part a</p>	<p>Confirm that a Site Hazard Survey has been carried out in accordance with JSP 375 Vol 2 Chapter 23 along with hazard survey sheets in respect of each identified hazardous installation.</p>
<p>b. Location of Hazardous Installation. Confirm that all the hazardous installations are covered by the Site Hazard Survey. Location details are clearly defined. DCOP 403 Part a</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>

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Topic and pass criteria	Guidance/verification method
<p>c. Function. Confirm that there is an adequate explanation of the function of each hazardous installation. The function of each hazardous installation is accurately described. DCOP 403 Part a</p>	<p>Check MAPP/SR information. Confirm by establishment tour, discussion with Installation Manager and review of establishment information. Simple explanations are acceptable when terminology is normally used within MOD e.g., explosives storage.</p>
<p>d. Controls. Confirm that the establishments existing controls, relevant to each hazardous installation, comply with current technical regulations. Control and mitigation measures are in place (see also elements of Assessment of Emergency Plan). Technical Inspections have been completed at appropriate intervals. Appropriate action has been taken in response to recommendations made in Technical/Specialist/Statutory Inspections. No significant deficiencies have been reported or remain outstanding. DCOP 403 Part a</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. 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. Examples of technical regulations and legislation: MOD Explosives Regulations – DSA03.OME Part 2. Regulations for the Storage and Handling of Fuels and Lubricants - JSP 317. Fuel Safety Assurance assessment (FSAA) PG 06/12 (Task 249/Task 57) Gas JSP 319 – Regulations for the Storage Use and Handling of Gases Defence Fire Safety Regulations (DSA02) and guidance (DSA03) Identify the controls referenced in Safety, Health, Environment and Fire (SHEF) Risk Assessments. Verify that control and mitigation measures are in place.</p>
<p>Health and Safety Risk Assessments Confirm that Risk Assessments in respect to MAs have been carried out and that they cover all hazards identified in the Site Hazard Survey. Risk Assessments derived from the Hazard Survey have been completed for all MA scenarios. Risk Assessments identify all relevant control measures. The results of Risk Assessments have been communicated to all persons at risk. DCOP 403 Part a</p>	<p>Verify that Risk Assessments have been completed for MA scenarios within each hazardous installation. Verify that Risk Assessments have been carried out in accordance with JSP 375 or appropriate alternative methods. Relate Hazard Survey to Risk Assessments. Verify that Risk Assessments have been properly documented, reviewed using appropriate expertise within or external to the establishment and been properly authorized. Verify that control measures are clearly identified. Verify that the results of Risk Assessments are communicated to relevant personnel both on and off the establishment.</p>

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Topic and pass criteria	Guidance/verification method
<p>7. Persons at Risk Confirm that the details relate to the maximum number of persons at risk from each hazardous installation. Information supplied in MAPP/SR correlates with information gained on the establishment. The establishment has taken into account all persons. Risk Assessments detail the groups and numbers of persons at risk from MAs. DCOP 403 Part a DCOP 404 Part a</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. 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. The information on the number of persons at risk should be derived from the Risk Assessments.</p>
<p>8. Environmental Risk Assessment a. Completion. Confirm that an Environmental Risk Assessment (ERA) has been carried out in accordance with DSA03.OME (JSP 498) Chapter 3. A comprehensive ERA has been completed. DCOP 405 Part a</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) 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. Recommendations. Confirm that any recommendations made in the ERA have been implemented. An action plan for the implementation of recommendations made in the ERA is in place. Action Plans have the backing of Senior Management.</p>	<p>Review any recommendations made in the ERA which have MA potential. Confirm that there is an effective system to identify and agree actions to be taken in response to recommendations made in the ERA. Confirm that there is Senior Management involvement in the prioritisation of actions and the allocation of funding.</p>
<p>9. Operational Control Confirm that all operations are carried out in accordance with systems defined within the SMS. Operational controls are fully described. The number and competencies of staff required has been defined. The required number of appropriately trained staff are available – taking into account sickness, leave, training etc. Effective systems are in place to authorize non-standard operations. DCOP 403 Part a DCOP 404 Part a</p>	<p>Review documentation referenced in MAPP/SR and SMS. Verify that management and technical controls are defined in SMS documentation. Verify that there are sufficient staff numbers to fill defined positions. Verify that staff understand the operational controls for the processes in which they are involved. Verify that effective controls are in place to cover non-standard operations. Controls should be subject to periodic review. Note. Controls may be specified by various organisations e.g., Munitions & Explosives Processing Procedures (MEPP), or other procedures etc.</p>

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Topic and pass criteria	Guidance/verification method
<p>10. Management of Change a. Installations. Confirm that the establishments systems for managing changes to installations follow Defence Infrastructure Organisation (DIO) principles Changes to installations are properly planned and approved. Risk Assessments are undertaken in the planning phase and on completion of the change. All relevant documentation, maps and plans etc. are amended as required. Interested parties are advised of any changes to the level of risk to which they are exposed. DCOP 402 a, b and c</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. Verify that there has been appropriate consultation with MOD Regulatory Bodies regarding changes to installations. 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. Process. Confirm that the establishment has a system for updating or introducing new processes. The introduction or modification of processes is effectively managed. Appropriate approval has been given regarding new processes or significant changes to existing processes. Risk Assessments have been documented or reviewed for modified or new processes. Interested parties are advised of any changes to the level of risk to which they are exposed. DCOP 402 a, b and c</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 Chapter 23 if the process has a potential for generating an MA hazard. Verify that Regulatory Bodies have been consulted and, where appropriate, given approval. Review associated Risk Assessments and other documentation. Verify that the risks associated with the introduction or modification of processes have been assessed.</p>
<p>c. Storage. Confirm that the establishment has a system for updating or introducing new storage procedures. The introduction or modification of storage arrangements is effectively managed. Appropriate approval has been given for the storage arrangements for dangerous substances. Risk Assessments have been documented or reviewed for modified or new storage arrangements. Interested parties are advised of any changes to the level of risk to which they are exposed. DCOP 403 Part c</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. Confirm appropriate approval has been given for the storage arrangements on-site. Review Risk Assessments for storage areas.</p>

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Topic and pass criteria	Guidance/verification method
<p>11. Emergency Plans Is it establishment policy to have On-Site Emergency Plans? DCOP 403 Part d DCOP 406 all</p>	<p>Check that MAPP/SR information relates to extant On-Site Emergency Plans.</p>
<p>12. Monitoring Performance Confirm that effective procedures for monitoring the performance of the establishments SMS are implemented. Management employs effective processes (active and re-active) to monitor performance and acts on deficiencies and adverse trends. The frequency, scope and personnel requirements for internal inspections are defined in the SMS. The inspection programme covers all hazardous installations. DCOP 401 all DCOP 403 Part c</p>	<p>Does performance monitoring follow the principles laid down in JSP 375 Volume 2 Chapter 21? Verify that internal inspections of the areas with MA potential are undertaken. Are inspection reports available and adequately detailed? Are the results of internal performance monitoring passed up the management chain? (See Topic 13 - Audit and Review). Are deficiencies and opportunities for improvement acted upon in a timely manner? Are work activities included in the performance monitoring system? 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? Is accident and near miss data gathered and used to monitor performance? Are environmental incidents reported?</p>

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Topic and pass criteria	Guidance/verification method
<p>13. Audit and Review Confirm that the establishment has a procedure to undertake a periodic and systematic review of the MAPP and SMS. The SMS is periodically subjected to a formal structured audit. The establishment is subjected to audits by external regulatory bodies at appropriate intervals. The SMS is subject to regular review to confirm its continued effectiveness. The MAPP is regularly reviewed and updated to reflect change. DCOP 401 all DCOP 403 Part c</p>	<p>Verify that the hazardous installations and the SMS are subjected to formal structured audits. This should include audit of all areas of the establishment and the effectiveness of the SMS by establishment SHEF Advisors. MOD systems require external (to the establishment) agencies to undertake audits at appropriate frequencies e.g., Inspector of Explosives (IE), Fuels & Gases Safety Regulator (FGSR), DIO, Defence Fire Safety Regulator (DFSR) Chief Environment and Safety Officers (CESO) etc. Verify that these audits are undertaken at the required frequencies and that appropriate information is passed to Senior Management. 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? 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). Verify that opportunities for improvement are identified and implemented. Is Senior Management at the establishment actively involved in SHEF committees? Are actions arising actively monitored? 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? Is there a system for updating the MAPP?</p>
<p>4. Organisation a. Job Descriptions (JDs). 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. JDs, TOR or other relevant documentation describe the roles and responsibilities of key MACR posts. Adequate cover is provided for these key posts. Staff fully understand their roles, responsibilities and authority. DCOP 403 Part a</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. Confirm that the roles of these positions are detailed in documented systems and procedures. 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. Check JDs etc. of referenced personnel or posts. 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>

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Topic and pass criteria	Guidance/verification method
<p>b. Training Needs. Confirm that a system exists to identify the particular training requirement for each of the appointments identified in Topic 4a. The competency requirements for each appointment are fully defined. Appointed staff fulfil the competency requirements or are working towards full compliance. Nominated Deputies have an appropriate level of training and experience. Effective systems are in place to identify the training needs of individuals. DCOP 403 Part a</p>	<p>Review systems for identifying training needs and maintaining competency levels. 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. 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 3 year. The competency of nominated deputies must be included in this review. The system for Succession Management i.e. preparing for replacement of key staff.</p>
<p>c. Control of Contractors. Verify that the establishment has effective systems for the Control of Contractors. Responsibilities for the management of contractors have been allocated. Effective systems for the control of contractors are in place. DCOP 403 Part a</p>	<p>Normally it would be expected that the establishment complies with the principles laid down in JSP 375 Vol 2 Chapter 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 (risk, hazards, controls etc), controls, monitoring and supervision of contractors. Verify that the procedures are implemented. Check that Hazard Registers have been produced and are used as a means to provide relevant information to the contractor. Verify that there is an effective Permit to Work system in place.</p>
<p>5. Site Hazard Survey a. Completion. Confirm that the establishment has completed a Site Hazard Survey. A Site Hazard Survey has been completed in accordance with JSP 375 Vol 2 Chapter 23 Annex A. DCOP 403 Part a</p>	<p>Confirm that a Site Hazard Survey has been carried out in accordance with JSP 375 Vol 2 Chapter 23 along with hazard survey sheets in respect of each identified hazardous installation.</p>
<p>b. Location of Hazardous Installation. Confirm that all the hazardous installations are covered by the Site Hazard Survey. Location details are clearly defined. DCOP 403 Part a</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>

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Topic and pass criteria	Guidance/verification method
<p>c. Function. Confirm that there is an adequate explanation of the function of each hazardous installation. The function of each hazardous installation is accurately described. DCOP 403 Part a</p>	<p>Check MAPP/SR information. Confirm by establishment tour, discussion with Installation Manager and review of establishment information. Simple explanations are acceptable when terminology is normally used within MOD e.g., explosives storage.</p>
<p>d. Controls. Confirm that the establishments existing controls, relevant to each hazardous installation, comply with current technical regulations. Control and mitigation measures are in place (see also elements of Assessment of Emergency Plan). Technical Inspections have been completed at appropriate intervals. Appropriate action has been taken in response to recommendations made in Technical/Specialist/Statutory Inspections. No significant deficiencies have been reported or remain outstanding. DCOP 403 Part a</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. 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. Examples of technical regulations and legislation: MOD Explosives Regulations – DSA03.OME Part 2. Regulations for the Storage and Handling of Fuels and Lubricants - JSP 317. Fuel Safety Assurance assessment (FSAA) PG 06/12 (Task 249/Task 57) Gas JSP 319 – Regulations for the Storage Use and Handling of Gases</p> <p>Defence Fire Safety Regulations (DSA02) and guidance (DSA03) Identify the controls referenced in Safety, Health, Environment and Fire (SHEF) Risk Assessments. Verify that control and mitigation measures are in place.</p>
<p>Health and Safety Risk Assessments Confirm that Risk Assessments in respect to MAs have been carried out and that they cover all hazards identified in the Site Hazard Survey. Risk Assessments derived from the Hazard Survey have been completed for all MA scenarios. Risk Assessments identify all relevant control measures. The results of Risk Assessments have been communicated to all persons at risk. DCOP 403 Part a</p>	<p>Verify that Risk Assessments have been completed for MA scenarios within each hazardous installation. Verify that Risk Assessments have been carried out in accordance with JSP 375 or appropriate alternative methods. Relate Hazard Survey to Risk Assessments. Verify that Risk Assessments have been properly documented, reviewed using appropriate expertise within or external to the establishment and been properly authorized. Verify that control measures are clearly identified. Verify that the results of Risk Assessments are communicated to relevant personnel both on and off the establishment.</p>

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Topic and pass criteria	Guidance/verification method
<p>7. Persons at Risk Confirm that the details relate to the maximum number of persons at risk from each hazardous installation. Information supplied in MAPP/SR correlates with information gained on the establishment. The establishment has taken into account all persons. Risk Assessments detail the groups and numbers of persons at risk from MAs. DCOP 403 Part a DCOP 404 Part a</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. 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. The information on the number of persons at risk should be derived from the Risk Assessments.</p>
<p>8. Environmental Risk Assessment a. Completion. Confirm that an Environmental Risk Assessment (ERA) has been carried out in accordance with DSA03.OME (JSP 498) Chapter 3. A comprehensive ERA has been completed. DCOP 405 Part a</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) 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. Recommendations. Confirm that any recommendations made in the ERA have been implemented. An action plan for the implementation of recommendations made in the ERA is in place. Action Plans have the backing of Senior Management.</p>	<p>Review any recommendations made in the ERA which have MA potential. Confirm that there is an effective system to identify and agree actions to be taken in response to recommendations made in the ERA. Confirm that there is Senior Management involvement in the prioritisation of actions and the allocation of funding.</p>

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Topic and pass criteria	Guidance/verification method
<p>9. Operational Control Confirm that all operations are carried out in accordance with systems defined within the SMS.</p> <p>Operational controls are fully described. The number and competencies of staff required has been defined. The required number of appropriately trained staff are available – taking into account sickness, leave, training etc. Effective systems are in place to authorize non-standard operations.</p> <p>DCOP 403 Part a DCOP 404 Part a</p>	<p>Review documentation referenced in MAPP/SR and SMS. Verify that management and technical controls are defined in SMS documentation. Verify that there are sufficient staff numbers to fill defined positions. 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. Controls should be subject to periodic review. Note. Controls may be specified by various organisations e.g., Munitions & Explosives Processing Procedures (MEPP), or other procedures etc.</p>
<p>10. Management of Change a. Installations. Confirm that the establishments systems for managing changes to installations follow Defence Infrastructure Organisation (DIO) principles Changes to installations are properly planned and approved. Risk Assessments are undertaken in the planning phase and on completion of the change. All relevant documentation, maps and plans etc. are amended as required. Interested parties are advised of any changes to the level of risk to which they are exposed.</p> <p>DCOP 402 a, b and c</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. Verify that there has been appropriate consultation with MOD Regulatory Bodies regarding changes to installations. 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. Process. Confirm that the establishment has a system for updating or introducing new processes. The introduction or modification of processes is effectively managed. Appropriate approval has been given regarding new processes or significant changes to existing processes. Risk Assessments have been documented or reviewed for modified or new processes. Interested parties are advised of any changes to the level of risk to which they are exposed.</p> <p>DCOP 402 a, b and c</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 Chapter 23 if the process has a potential for generating an MA hazard. Verify that Regulatory Bodies have been consulted and, where appropriate, given approval. Review associated Risk Assessments and other documentation. Verify that the risks associated with the introduction or modification of processes have been assessed.</p>

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Topic and pass criteria	Guidance/verification method
<p>c. Storage. Confirm that the establishment has a system for updating or introducing new storage procedures. The introduction or modification of storage arrangements is effectively managed. Appropriate approval has been given for the storage arrangements for dangerous substances. Risk Assessments have been documented or reviewed for modified or new storage arrangements. Interested parties are advised of any changes to the level of risk to which they are exposed.</p> <p>DCOP 403 Part c</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. Confirm appropriate approval has been given for the storage arrangements on-site. Review Risk Assessments for storage areas.</p>
<p>11. Emergency Plans Is it establishment policy to have On-Site Emergency Plans?</p> <p>DCOP 403 Part d DCOP 406 all</p>	<p>Check that MAPP/SR information relates to extant On-Site Emergency Plans.</p>
<p>12. Monitoring Performance Confirm that effective procedures for monitoring the performance of the establishments SMS are implemented. Management employs effective processes (active and re-active) to monitor performance and acts on deficiencies and adverse trends. The frequency, scope and personnel requirements for internal inspections are defined in the SMS. The inspection programme covers all hazardous installations.</p> <p>DCOP 401 all DCOP 403 Part c</p>	<p>Does performance monitoring follow the principles laid down in JSP 375 Volume 2 Chapter 21? Verify that internal inspections of the areas with MA potential are undertaken. Are inspection reports available and adequately detailed? Are the results of internal performance monitoring passed up the management chain? (See Topic 13 - Audit and Review). Are deficiencies and opportunities for improvement acted upon in a timely manner? Are work activities included in the performance monitoring system? 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? Is accident and near miss data gathered and used to monitor performance? Are environmental incidents reported?</p>

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Topic and pass criteria	Guidance/verification method
<p>13. Audit and Review Confirm that the establishment has a procedure to undertake a periodic and systematic review of the MAPP and SMS. The SMS is periodically subjected to a formal structured audit. The establishment is subjected to audits by external regulatory bodies at appropriate intervals. The SMS is subject to regular review to confirm its continued effectiveness. The MAPP is regularly reviewed and updated to reflect change. DCOP 401 all DCOP 403 Part c</p>	<p>Verify that the hazardous installations and the SMS are subjected to formal structured audits. This should include audit of all areas of the establishment and the effectiveness of the SMS by establishment SHEF Advisors. MOD systems require external (to the establishment) agencies to undertake audits at appropriate frequencies e.g., Inspector of Explosives (IE), Fuels & Gases Safety Regulator (FGSR), DIO, Defence Fire Safety Regulator (DFSR) Chief Environment and Safety Officers (CESO) etc. Verify that these audits are undertaken at the required frequencies and that appropriate information is passed to Senior Management. 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? 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). Verify that opportunities for improvement are identified and implemented. Is Senior Management at the establishment actively involved in SHEF committees? Are actions arising actively monitored? 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? Is there a system for updating the MAPP?</p>

DSA 03.OME DCOP 401c - Annex B: Safety Report Assessment Criteria

Topic and pass criteria	Guidance/verification method
<p>1. Establishment Information</p> <p>a. Establishment Location. Confirm that the location information is sufficient to establish the area that could be affected by a Major Accident (MA). Effective methods have been used to gather information and identify features at risk from MAs. Salient features are clearly identified on maps and site plans and in the database information DCOP 404 Part b</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). Check database information. Check maps e.g., Ordnance Survey. Investigate what steps the establishment has taken to establish the presence of particularly sensitive factors (flora, fauna, water resources, people). Are maps marked up with all salient features? Check availability and information provided by establishment maps and plans giving details of hazardous installations. 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. Establishment Topography. 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. The Establishment Topography is adequately described. DCOP 404 Part b</p>	<p>Details regarding the local topography etc. are commonly contained in the Environmental Risk Assessment (ERA) for the establishment.</p>
<p>c. Location of Hazardous Installation. See MAPP Assessment Criteria Topic 5b – Location of Hazardous Installation. DCOP 404 Part b</p>	<p>None.</p>

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Topic and pass criteria	Guidance/verification method
<p>d. Hazard Topography. Confirm this provides a more detailed review of the topography in the local area directly affected by any MA scenario. The Hazard Topography is adequately described. DCOP 404 Part b</p>	<p>Details regarding the hazardous installations and the local topography etc. are commonly contained in the establishment ERA.</p>
<p>2. Dangerous Substances Inventory 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. See MAPP Assessment Criteria Topic 3 - Holdings of Dangerous Substances. DCOP 404 Part b</p>	<p>None.</p>
<p>3. Description of Installations a. Hazardous Installation. See MAPP Assessment Criteria Topic 5 - Site Hazard Survey and Topic 1 above. Sufficient information is available on the hazards. DCOP 404 Part b</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. Function. See MAPP Assessment Criteria Topic 5c – Function.</p>	<p>None.</p>
<p>c. Description of Process. Confirm this provides adequate information to describe the process that is being undertaken at the installation. Appropriate documentation on processes is referenced in the Safety Report. DCOP 404 Part b</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>d. Dangerous Substances. Verify that the quantities of Dangerous Substances declared in the Safety Report refer to the maximum anticipated holdings for each installation. The sum of all the installation holdings agrees with the establishments declared maximum anticipated holdings. DCOP 404 Part b</p>	<p>See also MAPP Assessment Criteria Topic 3 - Holdings of Dangerous Substances. Verify that the sum of the quantities on the Description of Installation Form correlates with the quantity reported on the Establishment Holdings Form.</p>

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<p>4. Assessment of Risk a. MA Scenarios. 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. All relevant MA Scenarios have been identified. A summary of triggering events, consequences and response actions has been included in all MA Scenarios. Risk Assessments have been undertaken to cover all MA Scenarios. DCOP 403 Part b</p>	<p>See MAPP Assessment Criteria Topic 6 - Health and Safety Risk Assessments and Topic 8 - Environmental Risk Assessment. Check database information on MA scenarios. Verify that these scenarios are covered by Risk Assessments. 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. Existing Controls. See MAPP Assessment Criteria Topic 5d - Controls and Topic 9 - Operational Control.</p>	<p>None.</p>
<p>5. Protection Measures a. Existing Controls. See MAPP Assessment Criteria Topic 5d - Controls and Topic 9 - Operational Controls.</p>	<p>None.</p>
<p>b. On-Site Emergency Plan. See On-Site Emergency Plan Assessment Criteria.</p>	<p>Confirm adequacy of On-Site Emergency Plan.</p>
<p>c. Off-Site Emergency Plan. 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>
<p>6. Provision of Information to the Local Authority Confirm adequate information has been provided to the Local Authority (LA) to enable them to complete an Off-Site Emergency Plan in accordance with DCOP 404 Part b Responsibility for liaison with the LA has been allocated. Effective communication arrangements are in place. The level of information required by the LA has been discussed, agreed and provided to the LA. Systems are in place for the review and revision of this information. DCOP 404 Part b DCOP 406 all</p>	<p>Interview person allocated responsibility for liaising with LA. 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. See DCOP 406 for details of information required by the LA. 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>

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Topic and pass criteria	Guidance/verification method
<p>7. Provision of Information to the Public Confirm that appropriate information has been provided to people in the Public Information Zone (PIZ) in accordance with DCOP 407 Responsibility for dealing with public enquiries has been allocated. Procedures for issuing information have been documented. The PIZ has been clearly identified, taking into account any special factors. Information has been prepared and distributed to the PIZ. DCOP 407 all</p>	<p>Confirm that procedures have been produced, if appropriate, regarding the provision of information to the public. Has an individual been allocated responsibility for dealing with requests from the public? Has Information been prepared in the format described in JSP 498 Annex 4A, or acceptable alternative? Check how information has been supplied or distributed. Have any specific requests been received from the public? Have these been dealt with satisfactorily and within required timescales (20 days)? Verify that the PIZ has been clearly identified e.g., on suitable maps. Have significant factors been considered in determining the PIZ e.g., other dangerous substance or particularly sensitive groups of people in the neighbourhood?</p>

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Topic and pass criteria	Guidance/verification method
<p>1. Responsibilities Confirm functions of Key Posts have been documented. See Major Accident Prevention Policy (MAPP) Assessment Criteria Topic 4. See MAPP Assessment Criteria Topic 4 - Organisation. DCOP 406 Part a and b</p>	<p>Who is the Establishment Main Controller (EMC)/Establishment Incident Controller (EIC)? In the event of an emergency who is responsible for liaising with the Local Authority? Have these positions been allocated? Any other significant positions or responsibilities? Are Job Descriptions or Terms of Reference available? Have deputies been nominated to cover for absences? How have those in Key Posts and their deputy's competence been ascertained?</p>
<p>2. Available Resources a. Arrangements for Staffing. Including appropriate timescales to respond. The emergency response manning requirements have been defined. Staff are available to man the Emergency Control Centre (ECC) etc. including back-up staff to cover for absences. The response times for manning the ECC etc. have been defined and are achievable. The emergency arrangements have been developed in conjunction with the assessment of Major Accident (MA) risks. Suitable arrangements have been made for silent hours. DCOP 406 Part a and b</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. 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. Interview staff to verify that they understand their duties and authority. 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>

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Topic and pass criteria	Guidance/verification method
<p>2. Available Resources (Continued) b. Fire Fighting Equipment. Confirm details are readily accessible showing what firefighting equipment is available. This can be a list or a diagram. Fire Safety Management Plans (FSMP) are available and indicate that equipment level is appropriate. DCOP 406 Part a and b</p>	<p>Verify that an inventory of Fire Fighting Equipment has been produced and is available. Review Fire Safety Management Plans (FSMP). Do these indicate that equipment levels are appropriate to the establishment?</p>
<p>c. Fire Fighting Roles of Establishment Personnel. Confirm details are available that show the firefighting roles, if any, to be undertaken by establishment personnel in the event of a fire. Roles of Establishment Fire Service Personnel are defined. Roles of other establishment personnel with respect to firefighting are defined. DCOP 406 Part a and b</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. Check establishment documentation. Does it define firefighting roles for personnel including Establishment Fire Service, Fire Wardens, Military etc.? Evidence of appropriate training should be sought. (See Topic 10 - Training).</p>
<p>d. Adequate Fire Fighting Water Supply. Confirm how the water supply has been evaluated and approved as adequate. Reference should have been made to appropriate standards. Adequate Fire Fighting Water supplies are available. DCOP 406 Part d and e</p>	<p>Seek evidence that water supplies conform to Defence Infrastructure Fire Standards (DIFS). Review FSMPs for matters relating to water supply. Ring main, Emergency Water Supplies (EWS) etc. must be adequately maintained. (See Topic 12 - Maintenance of Emergency Equipment).</p>
<p>2. Available Resources (Continued) e. Adequate Stocks of Foam Compound. Confirm that the rationale for the quantities of foam compound held justifies the stock level. Methods to determine quantity of foam compounds required on the establishment are sound. Quantities of foam compounds held match the quantity deemed necessary. DCOP 406 Part d and e</p>	<p>How is the quantity of foam compound required calculated? Is this issue covered in FSMPs; considered in emergency plans and ERA? Confirm that quantity held and evaluated quantity match.</p>

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Topic and pass criteria	Guidance/verification method
<p>f. Emergency Equipment. Confirm details are provided of what emergency equipment is available on the establishment and where it is located. Inventories of emergency equipment are maintained. Location details of emergency equipment are specified. Relevant personnel are familiar with the location details. Emergency equipment is accessible. Emergency equipment is suitably stored. DCOP 406 Part c DCOP 406 Part d and e</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. 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? Verify that location details of emergency equipment are clearly defined and that relevant personnel know of the location. 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). Verify that equipment is suitably stored and maintained. (See Topic 12 - Maintenance of Emergency Equipment).</p>
<p>2. Available Resources (Continued) g. Arrangements for Supplementing Establishment Resources. Confirm details are provided of the arrangements for supplementing establishment resources. The need for support from external agencies with respect to MA prevention, mitigation or environmental remediation has been properly assessed. The sources of support have been identified. Effective liaison is maintained with organisations that may be called upon to provide assistance. Where necessary, contracts have been placed. Effective systems are in place to ensure that appropriate assistance is requested when necessary. DCOP 406 Part a and b</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. Check what supplementary arrangements for dealing with MAs are specified in Risk Assessments. 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. Verify that relevant personnel are aware of the supplementary assistance available and the means to call upon this assistance. The names and contact details of organisations that may be called on to provide assistance are in emergency plans</p>
<p>h. Possibility of Loss of Utilities. 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. Back-up arrangements to deal with loss of essential services have been fully justified. Back-up arrangements are in place, tested and maintained. DCOP 406 Part a and b</p>	<p>Confirm that the means to deal with the loss of power etc. is set out in appropriate documentation. Investigate what back-up arrangements for power loss are in place e.g., emergency generators. Are systems tested and maintained? (See Topic 12 – Maintenance of Emergency Equipment). Information on this may be contained in the establishment Business Continuity or Contingency Plan (JSP 440 - Defence Manual of Security, Resilience and Business Continuity).</p>

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Topic and pass criteria	Guidance/verification method
<p>2. Available Resources (Continued)</p> <p>i. Limiting Escalation. Confirm details are provided on the general principles to be applied to mitigate the consequences of an incident. Mitigation measures are identified in Risk Assessments. Documentation is in place detailing measures to be taken to limit escalation of incidents. Personnel are familiar with the actions to be taken to prevent escalation.</p> <p>DCOP 406 Part d and e</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). 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>j. Establishment Resources Available to Off-Site Emergency Plan. Information has been provided to the Local Authority (LA) on resources available on-site to deal with an MA. Appropriate establishment personnel fully understand the resources available on-site to support the Off-Site Emergency Plan.</p> <p>DCOP 406 Part a and b</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>

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Topic and pass criteria	Guidance/verification method
<p>3. Emergency Arrangements Location of the ECC, Medical or First Aid Centres, Emergency Shelters, Muster Points, Forward Control Points. The location of ECC, Medical Facilities, Muster Points, Emergency Shelters and other relevant locations are clearly shown in plans and relevant procedures. The need for secondary locations and back-up facilities has been considered and included in plans where appropriate. The selected locations are appropriate to the hazards at the establishment. Where necessary, suitable direction signs and location signs have been erected. DCOP 406 Part a and b</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 DCOP 406d and e. Check plans and procedures detailing location of ECC, Medical Centres, Emergency Shelters etc. Investigate selection and justifications for these locations and for alternative or back-up locations. 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? Verify that medical centres are fully manned. Note. Are First Aiders trained to deal with injuries likely to result from an MA e.g., trauma, severe burns etc.</p>
<p>4. Warning Systems a. Establishment Alert Arrangements. Effective arrangements are in place to alert: - Key personnel. Specific areas. Whole site. External Agencies. General Public. The means of alert are tested and maintained. Response actions are periodically practised. DCOP 406 Part c, d and e</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 tannoys, 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. Investigate systems for site wide and local area alerts or alarms. How are key personnel alerted in the event of an MA? Verify that systems are tested and check records. Question staff on arrangements for contacting external agencies i.e. emergency services, Environment Agency (EA), sewerage undertakers, water abstractors etc. How are contractors and visitors alerted and directed in the event of an MA? 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>

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<p>b. Initial Reactions to Alert or Warning. Initial actions in response to MA alerts are clearly documented. Required actions have been effectively communicated to all relevant staff, contractors, visitors and others who may be affected. Automatic systems are tested. DCOP 406 Part d and e</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. 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. 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>
<p>c. Arrangements for Briefing Emergency Services. Personnel have been allocated responsibility for briefing emergency services responding to MAs. Information on specific hazards is readily available to the emergency services. Effective systems are in place to ensure information is accurate and maintained up to date. Effective arrangements are in place to provide information on the developing situation to EMC, EIC or other relevant parties. DCOP 406 Part a and b</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. Verify that documentation details briefing arrangements for emergency services. Verify that nominated personnel are aware of their duties. 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>

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<p>d. Monitoring Arrangements for Wind Speed and Direction. Measuring and monitoring equipment is available or has been installed where appropriate. Links with the Meteorological Office have been established. DCOP 406 Part d and e DCOP 403 Part b</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? Have links been established with Meteorological Office? 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? Is there a need for monitoring stations?</p>
<p>e. Access Routes for Emergency Services, Escape Routes and Restricted Areas. Maps and site plans clearly show access and escape routes and restricted areas. Access and escape routes are signed as appropriate and free from obstruction in the event of an MA. Arrangements are in place to direct people to designated routes. DCOP 406 Part d and e</p>	<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. Verify that RVPs are clearly identified on plans. Check that the locations of RVPs are self-evident or signed. 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. Check that secondary or alternative routes have been identified. Check if emergency responders have agreed pre planned routes. Verify that restricted areas e.g., in or adjacent to hazardous areas, radar installations etc. are clearly identified and that enough 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>

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Topic and pass criteria	Guidance/verification method
<p>f. Communications. Communication arrangements are clearly defined in establishment procedures. Suitable communication equipment is available. Communication systems and equipment are tested. Communication arrangements within hazardous installations have been addressed. Communication arrangements with the emergency services have been agreed, tested and found to be suitable. Back-up arrangements are in place. DCOP 406 Part a and b DCOP 406 Part c</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. Verify that the means of communication between key personnel, emergency services and establishment personnel have been identified. (See Topic 4a for Establishment Alert Arrangements). Check availability of radios, pagers, mobile phones etc. and location of emergency phones in hazardous installations. 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? Verify that communication exercises have been completed and that recommendations have been implemented. (See Topic 11 – Exercising of Emergency Plans). (See Topic 2h regarding communication back-up arrangements). Confirm that arrangements have been made with BT Emergency Communications Network. Have mobile phones been registered with Mobile Privileged Access Scheme.</p>

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Topic and pass criteria	Guidance/verification method
<p>g. Mustering and Search and Rescue Arrangements. Effective procedures are in place to identify who is on the establishment at any time. Effective arrangements are in place to complete roll call at muster points and to identify the potential whereabouts of missing persons. Systems are in place to communicate information between the muster points and the EMC, EIC and search and rescue teams. DCOP 406 Part d and e</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. 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. Verify that persons have been nominated to complete muster procedures. 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. Check what arrangements have been made for silent hours. Verify that suitable arrangements are in place to notify EMC and emergency services of missing persons. Verify that search and rescue arrangements have been made, particularly for hazardous installations.</p>
<p>h. Evacuation Arrangements. Organisations and staff responsible for managing evacuation are clearly defined. Effective liaison is maintained between all parties involved in evacuation arrangements. DCOP 406 Part d and e</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. 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. Has appropriate information been passed to the LA for inclusion in the Off-Site Plan?</p>

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Topic and pass criteria	Guidance/verification method
<p>i. Consideration of the Effects of Emergency Response Actions. The effects of emergency response actions have been considered in the ERA. Procedures and physical controls are available and in place. DCOP 406 Part d and e</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. Check USRP for plans to control pollutants including FFW run off. 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. Review referenced procedures and documentation. Is special equipment e.g., booms, required? Discuss arrangements with the Establishment Fire Officer, Pollution Control officer and environmental advisor.</p>
<p>5. Wind Borne Release Arrangements to Mitigate the Consequences of a Wind Borne Release. Dangerous substances with the potential to be released to and carried in air have been identified in Risk Assessments. Control measures identified by Risk Assessment are in place. Areas at risk from wind borne hazards have been identified. Sources of information relating to wind borne hazards have been identified and links established. DCOP 403 Part b DCOP 406 Part d and e</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. 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). 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)? Have instructions been published on actions to be taken in the event of release to atmosphere e.g., stay indoors, shut windows etc.? Has Personal Protection Equipment (PPE) and or Respiratory Protection Equipment (RPE) been provided to persons particularly at risk? (See also Topic 4d for monitoring arrangements for wind speed and direction).</p>

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Topic and pass criteria	Guidance/verification method
<p>6. Liquid Release</p> <p>a. Measures to Mitigate the Consequences of a Leak involving a Dangerous Substance.</p> <p>Effective procedures are in place to monitor loss of liquid for both slow and rapid loss.</p> <p>Effective shut-off procedures are in place.</p> <p>Effective procedures are in place to deal with spills and leaks.</p> <p>DCOP 406 Part d and e</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 & 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>
<p>b. Secondary Containment.</p> <p>Secondary containment volumes are appropriate to the volume of liquid stored.</p> <p>The integrity of the secondary containment system is sound.</p> <p>DCOP 405 all</p> <p>DCOP 406 all</p>	<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>

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Topic and pass criteria	Guidance/verification method
<p>7. Monitoring and Sampling Provisions for Monitoring Contamination. Procedures for sampling and monitoring have been defined in establishment documentation. Human and technical resources to undertake sampling and monitoring have been identified. Actions to be taken in the event of excursions from defined limits have been documented. DCOP 403 all DCOP 406 Part d and e</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). Check database for named substances. Check site hazard survey. Has the need for monitoring and sampling (including statutory health monitoring of workers) been assessed in the Risk Assessment process? Confirm that establishment documentation describes the arrangements for monitoring and sampling about adverse health effects and environmental releases. Confirm that actions to be taken in the event of releases with MA potential are described in procedures Confirm that the technical and administrative arrangements are in place.</p>
<p>8. Environmental Remediation Long Term Remediation Arrangements. ERAs include information on potential remediation measures. Sources of assistance to deal with long term consequences of pollution incidents resulting from MAs have been identified. DCOP 405 all DCOP 406 Part d and e</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. Review ERA for environmental aspects and impacts. Verify that potential remediation measures have been defined and that potential resources and sources of assistance been identified. Have contracts been placed to provide assistance with pollution incidents? Verify that these are appropriate to the environmental aspects relating to the establishment. Investigate what specialist assistance has been sought with regard to the identification of appropriate remediation arrangements.</p>

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Topic and pass criteria	Guidance/verification method
<p>First Aid and Medical Requirements On-Site Medical Emergency. The level of medical and first aid resources has been properly assessed and justified. Medical and first aid arrangements for dealing with MAs are documented. Medical and first aid resources appropriate to the hazards and risks are in place. DCOP 406 Part d and e</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. Investigate justification for level of medical and first aid facilities (Health and Safety (First Aid) Regulations 1981 Reg 3). 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. Verify that establishment procedures describe the medical and first aid facilities available and arrangements for use in the event of an MA.</p>
<p>10. Training a. Emergency Organisation Personnel. Effective systems are in place to ensure that staff receive training within specified timescales. DCOP 406 Part c</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. These aspects have been covered in part in elements of the MAPP (Topic 4b), SR and On-Site Emergency Plan Assessment Criteria. Undertake a detailed review of training arrangements.</p>

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Topic and pass criteria	Guidance/verification method
<p>b. Awareness Training. 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. DCOP 406 Part c</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 5. Verify that appropriate training has been recorded on personal training records and that these records are kept for at least 3 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>
<p>10. Training (Continued) c. Emergency Services Familiarisation. Emergency Services have been invited to undertake familiarisation visits at least annually. Records of such visits should be maintained. DCOP 406 Part c</p>	<p>Confirm that the emergency services are encouraged to undertake a familiarisation visit to the establishment at least annually.</p> <p>Training should be undertaken in accordance with the frequencies laid down in DCOP 406 Part c and records of such training and familiarisation visits should be kept for at least 3 years.</p> <p>Verify records are maintained and kept for at least 3 years.</p>
<p>11. Exercising of Emergency Plans a. Frequency of Exercises. Emergency exercises are undertaken in accordance with DCOP 406 Part c DCOP 406 Part c</p>	<p>Confirm that there is a programme for exercising the emergency plans in accordance with the frequencies laid down in DCOP 406c and that there is evidence of compliance to the programme.</p> <p>Table Top – Yearly. Communications – Six monthly. Live (internal) – Yearly. Live (with external emergency services) – 3 yearly</p>
<p>b. Recording of Tests and Updating of Emergency Plans. Detailed records relating to emergency exercises are maintained. Recommendations made in Post Exercise Reports (PXR) have been implemented. DCOP 406 Part c</p>	<p>Confirm that arrangements exist for keeping PXR for a minimum period of 3 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>

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Topic and pass criteria	Guidance/verification method
<p>12. Maintenance of Emergency Equipment Arrangements for the Maintenance of Emergency Equipment. Inspection, testing, examination and maintenance procedures are available for emergency equipment. Equipment is inspected, maintained etc. by competent persons Records of all inspection, maintenance etc. are kept. Records indicate that inspection, maintenance etc. is undertaken at appropriate frequency. DCOP 406 Part c</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). Verify that all appropriate emergency equipment is entered onto some form of inventory or register. Verify that the inspection, testing and maintenance requirements for all such equipment are specified. Verify that records exist which demonstrate that equipment is inspected, tested and maintained to the required standards and frequencies. Verify that effective systems are in place to ensure new equipment is entered onto appropriate inspection schedules. Maintenance regimes should be in place for all emergency equipment, for example:- Water mains and emergency water tanks, firefighting equipment, stand-by generators, communication equipment, spill equipment and monitoring equipment.</p>

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Topic and pass criteria	Guidance/verification method
<p>Emergency Exercise</p> <p>Planning Phase. Confirm that the establishment has produced an exercise plan.</p> <p>Specific objectives set.</p> <p>Performance criteria for each objective set.</p> <p>Realistic scenario produced.</p> <p>Key events timeline produced.</p> <p>Directing Staff (DS) and Observers identified.</p> <p>Public warned (if appropriate).</p>	<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>

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Topic and pass criteria	Guidance/verification method
<p>1. Emergency Exercise (continued)</p> <p>Exercise Phase. Confirm that all aspects were covered.</p> <p>Participants briefed.</p> <p>DS used.</p> <p>Observers used.</p> <p>On-Site Emergency Plan activated.</p> <p>Establishment personnel mobilised.</p> <p>Emergency Control Centre (ECC) activated.</p> <p>Flow of information into and out of the ECC tested.</p>	<p>All participants should be briefed in advance.</p> <p>Verify that observers were identified and placed strategically around the establishment.</p> <p>Activating the On-Site Emergency Plan. Initial response of establishment including the sounding of alarms, local evacuation and alerting emergency services.</p> <p>Mobilising establishment personnel identified in the emergency plan as having a role to play in the event of an emergency.</p> <p>Do ECC staff understand their roles & responsibilities?</p> <p>The ECC is where the response to the emergency can be directed and co-ordinated as required by the emergency plan, within a suitable timeframe. Consideration should also be given to the possible need for an alternative ECC should the designated ECC become untenable. Is the ECC in an appropriate location?</p> <p>Are there sufficient phones, faxes, computers, desks, white boards?</p> <p>Availability & location of plans, aide memoirs, hazard data sheets, M.A. ERA, etc?</p> <p>Was it set up in timely manner? Was there control of entry and egress to the ECC?</p> <p>The flow of information into and out of the ECC will require demonstration that communication systems used by participating organisations can be received promptly and accurately. This will ensure that those at the centre have access to an up to date picture of the emergency and the current response upon which to base their decision making. What communication systems are in place – telephones, fax, sirens, radio net.</p> <p>Did the systems work? Are there dedicated personnel to undertake the comms tasks? When were phone numbers last updated? Do they include key off-site contacts?</p>

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Topic and pass criteria	Guidance/verification method
<p>Flow of information into and out of the ECC tested. (continued)</p> <p>Flow of information within the ECC tested.</p> <p>Decision making process tested.</p> <p>Liaison with Emergency Services</p>	<p>Type of link between ECC and Forward Control Point</p> <p>Did links work effectively / were they sufficient?</p> <p>Was a dedicated person appointed to perform this linkage?</p> <p>The flow of information within the ECC will require demonstration that information received is exchanged and disseminated to all parties with a role to play and in a format that can be understood and assimilated. Additionally, all decisions made within the ECC must be forwarded to relevant participants.</p> <p>How good was the process of sharing information?</p> <p>Was salient information posted on wall boards?</p> <p>Decision making involves demonstrating that advice is provided by all participating organisations to allow rational decisions to be made, which can then be implemented.</p> <p>Was a dynamic risk assessment conducted to assess on-site and off-site consequences?</p> <p>Was it timely – was it re-visited?</p> <p>What was taken into account? e.g. – chemical concerned, wind speed & direction, amount released, toxicity, harmful effects, environmental impact if any, density of population likely to be affected, knowledge of vulnerable premises, isolations completed, warnings necessary for the public.</p> <p>Were RV points considered / set up? Were safe routes established?</p> <p>Was someone designated to meet and greet the emergency services?</p> <p>If so at what location?</p> <p>Are there grab bags (site maps/hazard data sheets) located at gatehouse for emergency services?</p>

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Topic and pass criteria	Guidance/verification method
<p>Liaison with Emergency Services (continued)</p> <p>Command and Control arrangements tested.</p> <p>Emergency equipment tested.</p> <p>Mitigatory Actions to reduce off-site consequences / impact on off-site arrangements.</p> <p>Mitigatory actions to reduce any adverse effects to the environment</p>	<p>Were gate staff aware of procedure?</p> <p>Were escorts provided?</p> <p>Were emergency services properly briefed at scene / FCP?</p> <p>Command and Control arrangements will require demonstration that there are clear and effective lines of responsibility and that the participating organisations work together in a coherent and effective manner.</p> <p>Was an ECC Manager appointed?</p> <p>Was a person nominated to meet/greet personnel as they arrived at ECC?</p> <p>Were Liaison Officers from emergency services briefed on arrival at ECC?</p> <p>Did time-outs take place – were they well conducted / concise/ constructive / informative – did they result in actions to take?</p>

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	<p>Was a technical advisor part of ECC team?</p> <p>Was he/she part of call-out team?</p> <p>Was technical information readily available – either pc based or hard copy?</p> <p>Was technical information disseminated appropriately?</p> <p>Emergency equipment involves demonstrating that the equipment identified as having a role to play in the response to an emergency, is fully operational; that identified personnel are competent to operate it and that it can be deployed quickly and safely(e.g. MHE available, pre-determined access locations, etc.)</p> <p>Were implications / effects (or potential) considered?</p> <p>If so, were they sufficient / timely / adequate?</p> <p>Were implications / effects (or potential) considered?</p> <p>If so, were they sufficient / timely / adequate?</p> <p>Involvement of external environmental experts</p>

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Topic and pass criteria	Guidance/verification method
<p>Public Relations (PR) arrangements tested.</p> <p>Off-Site Emergency Plan activated (Upper Tier Sites only).</p> <p>Problem areas identified.</p> <p>Positive areas identified.</p>	<p>PR arrangements involve the need to demonstrate how information on the emergency and current response can be passed to all participating organisations and appropriate media. This may require preparing briefs for the media or providing a media briefing centre.</p> <p>Were media protocols activated – timely – who by?</p> <p>Effectiveness of a media briefing centre</p> <p>Were press statements produced – who by – were they timely – were they co-ordinated?</p> <p>Was there an exchange of PRO's between Operator and Police or other lead agencies?</p> <p>Activating the Off-Site Emergency Plan will require demonstration that there is an effective method for moving from the On-Site Emergency Plan to the Off-Site Emergency Plan.</p> <p>Problem areas identified during the exercise should be dealt with in an effective and timely manner.</p> <p>Any particularly good practices seen during the exercise should be noted and brought to the attention of the participants. If these would benefit the wider community then adequate information will be gathered on such practices and, with the permission of the establishment, passed on to the other qualifying establishments.</p>
<p>Debrief Phase.</p> <p>Hot debrief held.</p> <p>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>

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Topic and pass criteria	Guidance/verification method
<p>Records and Update of Procedures.</p> <p>Training Records kept up to date.</p> <p>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>
<p>Other Major Accident Control regulations (MACR) Issues.</p> <p>Issues raised in last MACR Assessment Report</p> <p>Issues raised have been adequately addressed.</p>	<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. Review of Major Accident Prevention Plan (MAPP) or Safety Report</p> <p>Evidence is available to show that the MAPP or Safety Report (as applicable) has been subject to periodic review in accordance with establishment procedure.</p>	<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>

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<p>c. Safety, Health, Environment and Fire (SHEF) Management Systems</p> <p>External SHEF audits and inspections are undertaken at appropriate frequencies.</p> <p>SHEF audits and inspections indicate that effective Safety and Environmental Management Systems are in place.</p>	<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>
<p>d. Specialist Inspections</p> <p>Specialist inspections are being undertaken at appropriate intervals.</p> <p>Appropriate action has been taken to address any recommendations made in the specialist reports.</p>	<p>The establishment will be subject to periodic inspections by specialist regulators e.g. Fuels & 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>