# Explosives: Surface storage and management audit Site: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Date conducted:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| 1 Administrative matters |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 1.1 | A copy of each current explosive storage licence is kept on site. |  |  |
| 1.2 | All details on the explosives storage licence are correct. Ensure all explosives storages are included on the licence. |  |  |
| 1.3 | The licence holder has nominated a qualified officer. |  |  |
| 1.4 | A written record is kept of the qualified officer. |  |  |
| 1.5 | The written records of the qualified officer(s) are kept for at least two years. |  |  |
| 1.6 | The licence holder keeps a register of secure nominees. |  |  |
| 1.7 | The secure nominees must acknowledge that they have read and understood the explosives management plan (EMP). |  |  |
| 1.8 | The register of secure nominees must be current. |  |  |
| 1.9 | Records of the secure nominee register are kept for at least two years. |  |  |

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| 2 Explosives management plan |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 2.1 | There is an Explosives Management Plan (EMP) in place that describes how explosives will be kept safe and secure at that site. |  |  |
| 2.2 | There is a review date for the Explosives Management Plan. |  |  |
| 2.3 | The Explosives Management Plan identifies the site and includes a site plan. |  |  |
| 2.4 | The Explosives Management Plan contains a risk assessment regarding sabotage, theft, unexplained loss and access by unauthorised persons. |  |  |
| 2.5 | The Explosives Management Plan contains the measures to be taken to minimise those risks. |  |  |
| 2.6 | The Explosives Management Plan contains the measures to be taken to ensure that no unauthorised individual has unsupervised access to any explosive. |  |  |
| 2.7 | The Explosives Management Plan contains the measures to be taken to ensure a record is kept of the name and address of every individual who has supervised or unsupervised access to any explosive. |  |  |
| 2.8 | The Explosives Management Plan details security measures to be taken. |  |  |
| 2.9 | The Explosives Management Plan details how records will be kept of explosives received and despatched and reconciled. |  |  |
| 2.10 | The Explosives Management Plan details how records will be kept of authorised persons. |  |  |
| 2.11 | The Explosives Management Plan details the measures to ensure that explosives are only supplied to authorised persons. |  |  |
| 2.12 | The Explosives Management Plan has measures to ensure that records are kept of the details of any person to whom explosives at the site are supplied to and the details of the explosives supplied. |  |  |
| 2.13 | There are systems in place to ensure any unlawful entry or attempted unlawful entry to the site, any theft or attempted theft or unexplained loss of any explosive is investigated and reported to the Chief Officer. |  |  |
| 2.14 | The Explosives Management Plan contains the measures to be taken to ensure that structures and things used to keep explosives secure are inspected and regularly maintained. |  |  |
| 2.15 | The Explosives Management Plan contains the measures to be taken to deal with any dangerous goods incident involving explosives that might occur. |  |  |
| 2.16 | The Explosives Management Plan contains the measures to be taken to ensure that personnel are trained in the requirements of the plan. |  |  |
| 2.17 | The Explosives Management Plan contains the measures to be taken to ensure compliance with the plan. |  |  |

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| 3 Training |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 3.1 | The licence holder keeps a training matrix or equivalent. |  |  |
| 3.2 | Training matrix (or equivalent) to include details of explosives management plan (EMP) training. |  |  |
| 3.3 | Training matrix (or equivalent) to include details of emergency response training. |  |  |
| 3.4 | Mock emergency training exercises involving explosives are conducted on an annual basis. |  |  |
| 3.5 | Explosives awareness |  |  |
| 3.6 | There is a training program for the roles of blast guard and blast controller. |  |  |
| 3.7 | Blast guards and blast controllers are adequately trained and competent in their roles. |  |  |
| 3.8 | The shotfiring personnel have been trained and tested in writing for the initiation method used (e.g. signal tube firing, electric and/or electronic blasting). |  |  |
| 3.9 | Those involved in disposing explosives are adequately trained. |  |  |
| 3.10 | Training matrix (or equivalent) to include training details for the various tasks involving explosives personnel may undertake. |  |  |
| 3.11 | The training matrix is current and complete. |  |  |

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| 4 Magazine construction – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 4.1 | Explosives magazine is of a suitable construction. |  |  |
| 4.2 | A shade roof is fitted to all portable and relocatable magazines. |  |  |
| 4.3 | Earthing of less than 10 Ohm (at diagonal corners for relocatable magazines) checked and recorded by an electrician. |  |  |
| 4.4 | Where required (when magazine is located in a vulnerable or an area susceptible to lightning strikes) that it is fitted with lightning finials. |  |  |
| 4.5 | Magazine keys can only be removed from the door when in the locked position. |  |  |
| 4.6 | Door restraint is provided. |  |  |
| 4.7 | Air vents in place with weather protection and suitable gauze covering the openings. |  |  |
| 4.8 | Exterior surface of magazine is in a sound condition. |  |  |
| 4.9 | Inside of magazine is in a good condition. |  |  |
| 4.10 | Maintenance program for the magazines. |  |  |
| 4.11 | No maintenance work involving hot work is allowed unless the magazine is empty and sterilised of all explosives and a hot work permit has been issued. (Procedure should include that no explosives are to be returned to the magazine for at least 8 hours after the hot work has been completed). |  |  |
| 4.12 | Electrical wiring fit for purpose. |  |  |

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| 5 Magazine compound – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 5.1 | Explosives compound is fenced. |  |  |
| 5.2 | Integrity of fence is maintained. |  |  |
| 5.3 | Monthly inspection program of the compound. |  |  |
| 5.4 | The magazine is located at least the prescribed distance from any protected works or facility. |  |  |
| 5.5 | The explosives magazine is a minimum of 10 m from any detonator magazine if no intervening mound exists. |  |  |
| 5.6 | Separation to dangerous goods. |  |  |
| 5.7 | Mounding |  |  |
| 5.8 | There is no combustible or flammable material within 8 metres of the magazine. |  |  |
| 5.9 | Vehicles within the compound. |  |  |
| 5.10 | Restricted activities within the compound. |  |  |
| 5.11 | Metal fences are electrically bonded. |  |  |

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| 6 Signage and emergency equipment – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 6.1 | ‘HAZCHEM’ signs displayed at the main entrances to the premises. |  |  |
| 6.2 | A prominent 'EXPLOSIVES' or ‘DETONATORS’ sign (as appropriate) is displayed on the magazine door. |  |  |
| 6.3 | A class 1 diamond is displayed on the magazine door. |  |  |
| 6.4 | A magazine identification number is prominently displayed. |  |  |
| 6.5 | A 'NO SMOKING' sign is prominently displayed on the compound fence. |  |  |
| 6.6 | Magazine rules are posted inside the magazine |  |  |
| 6.7 | A notice stating what kinds and quantities of explosives may be stored in the magazine. |  |  |
| 6.8 | Safety Data Sheets (SDS) |  |  |
| 6.9 | Fire Extinguishers are available inside the magazine compound (optional). |  |  |
| 6.10 | Manufacturers name and date of manufacture is displayed on relocatable magazines (optional). |  |  |

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| 7 Stock control and security – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 7.1 | A current security risk assessment. |  |  |
| 7.2 | A magazine keeper(s) has/have been appointed to control the magazine. |  |  |
| 7.3 | The appointment (of magazine keeper) is documented. |  |  |
| 7.4 | The measures that will be taken to control and monitor people’s access to explosives. |  |  |
| 7.5 | Magazine keys are locked in a safe when not in use. |  |  |
| 7.6 | The number of magazine keys are known and recorded. |  |  |
| 7.7 | Security controls for the safe. |  |  |
| 7.8 | A key register is kept in the safe. |  |  |
| 7.9 | The magazine keys are kept by the magazine keeper when removed from the safe (or secure place). |  |  |
| 7.10 | A record is kept of every individual who has access to any such explosive. |  |  |
| 7.11 | The magazine keeper maintains records of incoming and outgoing stocks. |  |  |
| 7.12 | There is a system in place where records in the stock register is kept for at least 2 years. |  |  |
| 7.13 | There is a system in place where a stocktake is conducted at least monthly. |  |  |
| 7.14 | There is a system in place that deals with discrepancies found during stocktakes. |  |  |
| 7.15 | There is a system in place for delivery of explosives and stock is promptly secured in the magazine. |  |  |
| 7.16 | The magazine is kept locked except when stock movement or other authorised activities are occurring. |  |  |

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| 8 Housekeeping – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 8.1 | A broom and doormat is provided in the magazines to keep magazines clean. |  |  |
| 8.2 | No spilt material is left in the magazine. |  |  |
| 8.3 | The magazine floor is clean and dry. |  |  |
| 8.4 | All empty packaging and other rubbish is removed from the magazine and magazine compound. |  |  |
| 8.5 | There are systems in place for concealing/ obliterating any “Explosives” markings on the packaging (word “EXPLOSIVES”, class 1 diamond) and the packaging is free from explosives before it is sent for disposal. |  |  |
| 8.6 | Ensure all explosives are kept in their original packaging or other suitable containers. |  |  |
| 8.7 | Explosives are safely stacked to a height which prevents damage to the packaging from compression (generally no greater than 2 metres). |  |  |
| 8.8 | Explosives are safely stacked so there is a gap of at least 300 mm between the top of the stack and the ceiling. |  |  |
| 8.9 | No additional unauthorised materials are stored in the magazine. |  |  |
| 8.10 | There are systems in place that no prohibited items such as two-way radios, mobile phones, etc. are brought inside the magazine. |  |  |
| 8.11 | Incompatible explosive products are not stored adjacent to each other. |  |  |
| 8.12 | There is a system in place to rotate stocks and all stock is within its shelf life. |  |  |
| 8.13 | Stock levels are within the licence limits. |  |  |
| 8.14 | No powered vehicles allowed inside a magazine unless they have been appropriately modified. |  |  |

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| 9 Emergency procedures – surface magazines |
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| **Point** | **Standard** | **Standard met** | **Comments** |
| 9.1 | There is a procedure in place to secure and evacuate the magazine during lightning storms. |  |  |
| 9.2 | There is an emergency procedure in place to deal with a fire near the magazine. |  |  |
| 9.3 | There is an emergency procedure in place to deal with a fire inside the magazine. |  |  |
| 9.4 | There is an emergency procedure in place to deal with an explosives vehicle involved in an incident where explosives are spilled (no fire). |  |  |
| 9.5 | There is an emergency procedure in place to deal with an explosives vehicle involved in a fire. |  |  |
| 9.6 | The licence holder has an emergency management plan that deals with likely scenarios. |  |  |
| 9.7 | There is a list of equipment and facilities available to deal with emergencies. |  |  |
| 9.8 | There are details of the measures taken to train people to execute the emergency management plan. |  |  |
| 9.9 | There are details of the measures taken to investigate any incident and report it to the department. |  |  |

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