# Isolation of hazardous energies audit Site: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

|  |
| --- |
| 1 Risk Management Process |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 1.1 | Hazardous energies associated with fixed plant have been identified. |  |  |
| 1.2 | Hazardous energies associated with mobile plant have been identified. |  |  |
| 1.3 | Foreseeable potential exposures to hazardous energies have been identified. |  |  |
| 1.4 | Potential exposures have considered hazardous combinations. |  |  |
| 1.5 | Hazardous energies identified have been appropriately risk assessed. |  |  |
| 1.6 | Hazardous energy control has been included in the risk assessment. |  |  |
| 1.7 | Multiple controls have been considered to compensate for human factors. |  |  |
| 1.8 | The risk assessment identified residual risk. |  |  |
| 1.9 | The risk assessment is reviewed periodically or when there is change or modifications to the plant, equipment, or tasks being performed. |  |  |
| 1.10 | The risk assessment is completed by relevant and competent people. |  |  |

 |
| 2 Management of isolation – fixed plant |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 2.1 | Hazardous energy control has been considered in the design of plant. |  |  |
| 2.2 | There is a system to uniquely identify all plant components. |  |  |
| 2.3 | There is an authorised procedure for the management and isolation of hazardous energies. |  |  |
| 2.4 | The isolation methods are appropriate to the risk. |  |  |
| 2.5 | Roles and responsibilities associated with hazardous energy isolation are clearly allocated. |  |  |
| 2.6 | Access to and isolation of high voltage electrical supply is only conducted by an authorised HV operator. |  |  |
| 2.7 | Site procedures include contractor involvement and competency requirements for work on isolated plant. |  |  |
| 2.8 | Isolation procedures include isolation during equipment inspection. |  |  |
| 2.9 | Fixed plant isolation points allow for lock out. |  |  |
| 2.10 | The isolation procedures require all personnel working on or inspecting fixed plant to apply a personal lock to hazardous energy isolation point/s. |  |  |
| 2.11 | There is a system in place to protect employees when partial or complete energisation is required for adjustment or fault finding. |  |  |
| 2.12 | Inadvertent access to partially energised equipment undergoing inspection or repair is controlled. |  |  |
| 2.13 | An internal audit and review process is in place for isolation processes. |  |  |
| 2.14 | Adequate supervision of workers is provided as is necessary to enable them to perform their work in such a manner that they are not exposed to hazardous energies. |  |  |

 |
| 3 Management of isolation – mobile plant |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 3.1 | Hazardous energy control has been considered in the design of plant. |  |  |
| 3.2 | There is an authorised procedure for the management and isolation of hazardous energies associated with mobile plant. |  |  |
| 3.3 | Roles and responsibilities associated with hazardous energy isolation are clearly allocated. |  |  |
| 3.4 | Site procedures include contractor involvement and competency requirements for work on isolated plant. |  |  |
| 3.5 | Mobile plant isolation points allow for lock out. |  |  |
| 3.6 | The isolation procedures require all personnel working on or inspecting mobile plant to apply a personal lock to hazardous energy isolation point/s. |  |  |
| 3.7 | Immobilisation of mobile plant and grounding of hydraulic attachments is part of the isolation process. |  |  |
| 3.8 | There is a system in place to protect personnel when partial or complete energisation is required for adjustment or fault finding. |  |  |
| 3.9 | Inadvertent access to partially energised equipment undergoing inspection or repair is controlled. |  |  |
| 3.10 | Adequate supervision of workers is provided as is necessary to enable them to perform their work in such a manner that they are not exposed to hazardous energies. |  |  |

 |
| 4 Permit to Work Systems |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 4.1 | There is a permit to work (PTW) system in place. |  |  |
| 4.2 | The permit to work system identifies the nature and scope of the works being undertaken. |  |  |
| 4.3 | The permit to work system includes the unique identification for the item(s) of plant to be isolated. |  |  |
| 4.4 | The permit to work system clearly identifies the precautions to be taken and details the required isolations. |  |  |
| 4.5 | The permit to work system provides a system and record of controls that details the methods, checks and authorisations for isolations. |  |  |
| 4.6 | The permit to work system provides controls for impact on other personnel and processes. |  |  |
| 4.7 | The permit to work system provides for a formal handover to another shift or work group. |  |  |
| 4.8 | The permit to work system provides a process for identifying, assessing and responding to changes. |  |  |
| 4.9 | The permit to work system includes work that requires partially or completely energised systems. |  |  |
| 4.10 | The permit to work system links subsidiary permits. |  |  |
| 4.11 | The permit to work and associated documentation is displayed at the work location. |  |  |
| 4.12 | There is a system in place for personal isolations. |  |  |
| 4.13 | There is a system in place for group isolations. |  |  |
| 4.14 | There is a system in place for a second person to independently verify the integrity of the group isolations. |  |  |

 |
| 5 Locking and tagging |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 5.1 | Plant is designed with suitable isolation lock-out points. |  |  |
| 5.2 | Isolation locks are provided specifically for the isolation of hazardous energies. |  |  |
| 5.3 | Personal locks are uniquely keyed. |  |  |
| 5.4 | Removal of personal locks by other persons in extenuating circumstances has been risk assessed and included in site procedures. |  |  |
| 5.5 | Tags are utilised to provide information in conjunction with isolation and personal locks. |  |  |
| 5.6 | Tags are used in the correct application. |  |  |
| 5.7 | The information on tags is legible and complete. |  |  |
| 5.8 | Contractor requirements for personal locks comply with the site standard. |  |  |
| 5.9 | Multiple point isolations incorporate the use of a centralised locking station. |  |  |

 |
| 6 Training and competency |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 6.1 | Training needs analysis identifies the need for competency in the conduct of hazardous energy isolation and personal locking. |  |  |
| 6.2 | An up-to-date training matrix is maintained that specifies who has what competencies and when they were achieved. |  |  |
| 6.3 | There is a current listing of authorised isolators. |  |  |
| 6.4 | The training is competency based. |  |  |
| 6.5 | Competency re-assessment occurs periodically. |  |  |
| 6.6 | Line supervision has access to up to date isolation competency information. |  |  |
| 6.7 | The training is delivered by suitably competent personnel. |  |  |
| 6.8 | Training and assessment material directly reflects site procedures and practices. |  |  |
| 6.9 | Contractors are trained in site procedures. |  |  |

 |
| 7 Record keeping |
|

|  |  |  |  |
| --- | --- | --- | --- |
| **Point** | **Standard** | **Standard met** | **Comments** |
| 7.1 | Training records are kept and available. |  |  |
| 7.2 | Procedures have an allocated ownership. |  |  |
| 7.3 | Procedures are periodically reviewed. |  |  |
| 7.4 | A record is kept of issued permits and related sign on / sign off documents. |  |  |
| 7.5 | Internal audit processes include assessment of the quality of completed documentation. |  |  |

 |