**Permit to Work**

Permit to work procedures cover specific activities, which are potentially hazardous unless the risks have been assessed and adequate precautions have been taken to prevent danger.

No one may undertake any of the specific activities unless a permit to work has been issued and their name is included on the permit.

The conditions of any permit must be compiled with fully – if they cannot be met the work shall be suspended and reason brought to the attention of the manager or his nominated deputy immediately.

**Persons Authorised to Issue a Permit to Work**

Only the following people may issue a permit to work or a clearance certificate:

* Site manager
* Fitter

The permit to workbooks are normally kept in the site managers office and the fitting shop.

**Issue of Permit to Work**

Before issuing a permit to work the person doing so shall:

* Assess the risks involved.
* Where possible discuss the work with the people carrying it out before drawing up a permit.
* Detail the precautions to be taken this may be a separate document attached to the permit.

Ensure that the people carrying out the work fully understand the precautions to be taken and the need to suspend work if the conditions of the permit cannot be complied with. This will be achieved by a briefing session with the people carrying out the work before the permit is issued; the briefing is to be carried out by the person drawing up the permit. Where this is not possible one of the other people authorised to issue permits shall carry out the briefing.

The person in charge of the work shall be identified on the permit, that person shall ensure that everyone covered by the permit fully compiles with the conditions. The location and description of the work shall be stated. The precautions to be taken shall clearly be stated.

**Permit to Work Activities**

Any of the following activities require a Permit to Work issuing before they may be carried out by anyone on site:

* Electrical work on apparatus supplied above 110 volts.
* Any work at height where a fall of more than 2 metres could occur.
* Any excavation outside of the extraction area of the quarry.
* Hot works by contractors on site.
* Hot works by NRS employees outside designated areas.
* Work near any overhead power cables.
* Entry into any confined spaces including: any storage bins, cold feed hoppers, any crusher chute, any crusher cavity, all fuel and bitumen tanks, tunnel section.
* Any work which requires the dismantling of bitumen lines.

If for any reason you cannot comply with the conditions contained in any permit, suspend work and contact your supervisor.

**Risk Assessment and Method Statements**

Risk assessments must be completed for any task, except where the risk is first considered and viewed to be insignificant.

A risk assessment is used to identify the foreseeable risk(s) of injury or ill health that may occur when work is to take place and then to control the risk(s)to the lowest practicable level.

The process is quite simple and involves covering three things:

* The hazards associated with the task.
* How likely hazards are to cause injury or ill health (probability), and the worst possible injury or ill health condition that could occur (severity.
* The measures that ned to be taken to reduce the likelihood that injury or ill health will occur.

An example could be work in a noisy area: exposure to noise affects hearing, as a result hearing damage is likely so the control measure that should be taken would be to wear hearing protectors such as ear plugs or earmuffs.

**Completing the Risk Assessment and Method Statement**

Before starting any work, you must ensure that a risk assessment has been completed for the task.

An example of a risk assessment is shown below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Task/Activity | Who’s at risk | Hazards Identified | Control measures and method statement | Severity | Probability | Risk Rating | comments |
| Crusher repairs | Fitters and Assistants | Lifting  Laceration or trapping  Unintended start up.  Access/egress | Mechanical lifting equipment.  Gloves, PPE  Isolation procedure  Platform, managers rules | 3  3  5  5 | 3  3  2  2 | 9  9  10  10 | Refer also to managers rules and policy |

**Task/Activity** – the work to be done – for long or complex tasks the process should be broken down into smaller elements so that an assessment is completed at each stage of the task.

**Who is at risk** – clearly identify those people or group of people who are affected at each stage of the job, it may also include those not actually working or involved with the task, but who could be affected by it.

**Hazard Identified** – a hazard is something that has the potential to cause harm and these should be listed in this column.

**Control measures and method statements** - the control measures are the precautions that are required to minimise the risk of injury. This section is probably the most important and accurately identifying the control measures will ensure that the work can proceed safely. A method statement simply identifies the work sequence and may cover tasks that are deemed to have a low risk rating but are important in the work sequence.

**Severity** – the severity is the work possibly injury (or ill health condition) that could result from the activity; the severity is given a score between 1-5.

1. Little or no risk of injury or ill health.
2. Minor injury that could require first aid treatment but would not require absence from work and would not stop work continuing.
3. More serious injury or ill health that could result in the person being absent from work and may be reportable under RIDDOR 95\*.
4. Major injury condition (reportable under RIDDOR 95\*)such as a fracture of a major bone, loss of consciousness, dislocation of a joint. Could include a serious ill health condition.
5. Fatal injury to one or more people or an ill health condition that could result in death.

**Probability** – how likely something will happen. Probability ranges from extremely unlikely or improbable to certain. The probability of an event happening is given a score between 1 and 5, and these are:

1. There is little or no risk of injury or ill health. Only under rare and unforeseen conditions is there the likelihood of injury or ill health, this should be the aim of all workplace activities.
2. Remote possibility, if other factors were present, injury or ill health might occur but the probability is low.
3. Possible, the incident may happen if additional factors precipitate it but it is unlikely without the other factors.
4. The event is probable; the effects of people or of other factors could cause the event (injury or ill health), but is unlikely without additional factors.
5. If the task continues then it is certain that an injury or ill health will occur.

**Risk rating** -the risk rating is a numerical value given to the task after all the current control measures have been taken into account. The risk rating is calculated by multiplying the probability by the severity. The risk is deemed to be :

* LOW - between 1 -10
* MEDIUM – between 11-15
* HIGH – between 16-25

You should aim to reduce the risk rating to the lowest practicable level, normally less than 10.

**Comments** – use this column to refer to specific managers rules, procedures, permit to work, requirements etc that may apply to the task. The other documents may identify additional control measures that must be used.

**Hazards and Possible Control Measures that could be used.**

**Hazards** – anything with the potential to cause harm are always going to be encountered in the workplace. Many hazards are common and are likely to be found in many work activities. This list is not exhaustive, but it does identify the more common ones, with suggested control measures.

However, it remains the responsibility of the person completing the risk assessment to consider all foreseeable risks and identify measures that are required to control them.

A permit to work would be required in some of these examples, use of specific plant or equipment will require the user to trained.

|  |  |
| --- | --- |
| Hazard | Possible control measures |
| Working at Height | Work only within a securely fenced area.  Obtain and use a mobile access platform(trained, authorised operator).  Use fall arrest equipment (harness -trained person, equipment inspected)  Restrained system(trained, equipment inspected – note this is not fall arrest equipment).  Construct scaffold. |
| Working Over Water | Restrain system.  Buoyancy Aids.  Rescue arrangements. |
| Confined Spaces | Flammable substances/ oxygen enrichment.  Toxic Gas, fume, or Vapour.  Oxygen Deficiency.  Ingress or presence of liquids.  Solid materials that can flow.  Presence of excessive heat. |
| Stored Energy | Drain down and fully isolate compressed air systems.  Discharge and isolate hydraulic systems.  Isolate and chock rotating drums.  Control and restrain out of balance systems, such as elevating conveyors.  Control release of tension in stalled conveyors. |
| Electricity | Isolate.  Lock off.  Check effectiveness of isolation. |
| Lifting | Use mechanical lifting equipment.  Assess weight and centre of gravity of object to be lifted.  Use crane.  Manual handling, use sufficient trained people in coordinated manner. |
| Flying Objects | Remove people from the area.  Eye protection.  Hand and body protection. |
| Falling objects | Remove people from the area.  Form a barrier around the area where over head work takes place. Head protection.  FOPS fitted to plant or equipment. |
| Noise | Remove people from the area.  Acoustic enclosure.  Use hearing protection. |
| Dust or fume | Remove people from the area.  Adequate ventilation (checked/tested).  Dust or fume mask (checked/inspected).  Enclosure of the process. |
| Mobile plant | Designated vehicle and pedestrian routes.  Erect barriers to prevent access to work areas.  Use of hi vis clothing.  Provide adequate lighting. |
| Buried cables | Inspect plans.  Walk over site inspection.  Cable Avoidance Tool (CAT) scan.  Hand dig. |
| Harmful Substances | Avoid contact if possible.  Suppliers’ data sheet, complete COSHH assessment.  Use of protective clothing and equipment.  First aid measures. |
| Fire (Hot Work) | Remove flammable material.  Maintain ventilation to prevent build up of flammable gas.  Provide portable fire extinguishers.  Run out fire hoses.  Inspect the area 2 hours and 4 hours after work has been completed. |
| Trench Work | Avoid entering trench.  Use trench supports.  Install and maintain fixed barriers around worksite.  Complete regular inspections. |
| Darkness | Install and maintain adequate fixed lighting.  Install temporary lighting.  Provide hand lighting. |

**Completing the Risk Assessment**

When any task is to be undertaken you must stop and mentally assess the risks associated with that task prior to any work starting. If you foresee any significant risk then stop and do not proceed with the task. Contact your Site manager so that a written risk assessment can be produced.

The manager responsible for the plant/are where the work is to take place shall complete the risk assessment. The site manager shall consult with the employee or employees affected by, or completing the work. The site manager and employees shall form a working group in the creation of the risk assessment. All person likely to be involved in the task should understand, agree and then sign the completed risk assessment and be given a copy for reference.

Where contractors are completing the work then they should be included in the risk assessment process, the contractors should also sign and be issued with a copy of the risk assessment. If any risk associated with the task to be undertaken is not, or cannot be adequately reduced to a low risk rating by inclusion of control measures, then the task must not proceed. The site manager must then be contacted before any further works are undertaken.