## Activity: Loading, Unloading & Transportation of Explosives

### Site: SMC

### Department: Mining

### Standard Operating Procedure

**SOP No.:** IMFA/SOP/SMC/MINING/04  
**Revision:** 00  
**Effective Date:** 19.6.14  
**No. of Pages:** Page 1 of 4

|----------|-----------------|----------------------------------------|----------------------------|----------------------|---------------------|
| 1        | Pre-start checking of Explosive Van | **Quality** –  
  i) The driver will check the conditions of Explosive Van.  
  ii) OH&S –  
  i) Vision problem  
  ii) Fire due to short-circuiting  
  iii) Environment –  
  i) Oil spillage  
  ii) Air pollution (smoke) due to fire  
  iii) Air pollution (smoke) | i) Check the followings:  
  a) fuel and oil  
  b) brakes and steering system  
  c) tyre condition  
  d) working order of all the safety features  
  e) earth continuity chain.  
  e) fire extinguisher in order  
  ii) Keep the cab window, rear view mirror clean so as to ensure clear vision at all times.  
  ii) Check that electrical wirings are securely fastened and there is no loose connection.  
  i) Check for any leakage in the feed line or fuel tank.  
  ii) Keep the inside of cabin clean and free of oil and grease.  
  iii) See the condition of explosive van for excessive smoke coming out from the exhaust. | Driver  
 Driver  
 Driver/ Auto electrician | DOC.NO. WI/OPRN/03  
 DOC.NO. HIRA/MINING/04  
 Aspect No.16  
 Aspect No.17  
 Aspect No.19 |
| 2        | Loading of explosives to the Explosive Van | **Quality** –  
  i) No extraneous material will be transported with explosives.  
  ii) In the explosive van no tools or tackles of steel material will be transported with the explosive material. | | Blaster | DOC.NO. WI/OPRN/03 |
<table>
<thead>
<tr>
<th>3</th>
<th>Transportation of Explosives to the charging site</th>
</tr>
</thead>
</table>
| **OH&S –** | i) Skin Infection  
ii) Explosion |
| i) During carriage of explosives, hand gloves shall be used.  
ii) While loading/unloading, ensure no spillage of explosives from the case/container. |
| **Environment – Nil** |
| **Quality –** | i) Authorised persons will travel in the explosive van.  
ii) Loading, unloading & transportation of explosives  
iii) Transportation of detonator  
iii) Traveling of explosive van in the haul road |
| i) Do not allow unauthorised persons to travel in the explosive van.  
ii) While explosives are being loaded or unloaded or transported shall always be under the charge of a competent person who shall be experienced in handling of explosives and fully conversant thereunder.  
iii) Detonators shall not be transported with any other explosives. Detonator shall be secured in a wooden box and carried in a locked condition.  
iii) During transportation the explosive van will travel with a red flag to attract the attention of other vehicle on the road. |
| **OH&S –** | i) Accidental opening of door  
ii) Out break of fire and explosion  
iii) Collision |
| i) Do not carry excess persons in the explosive van.  
ii) Smoking/fire/artificial light or any article capable of causing fire shall not be allowed in the explosive van.  
iii) Follow all the road signs and traffic rules and |
| **Environment – Nil** |
| Driver  
Driver  
Driver |
| **DOC NO.** | HIRA/MINING/04  
WI/OPRN/03  
HIRA/MINING/04 |
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Loading, Unloading &amp; Transportation of Explosives</th>
<th>SITE</th>
<th>SMC</th>
<th>DEPARTMENT</th>
<th>Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOP NO.</td>
<td>IMFA/SOP/SMC/MINING/04</td>
<td>REVISION</td>
<td>00</td>
<td>EFF DATE:</td>
<td>19.6.14</td>
</tr>
<tr>
<td>NO. OF PAGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Page 3 of 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Unloading of Explosives</th>
<th>Quality –</th>
<th>OH&amp;S –</th>
<th>Environment - Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>i) Explosive will not be left unattended.</td>
<td>i) The explosives will not be unloaded at a bench just below the working bench where machines are operative.</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i) After unloading from explosive van, the explosives will not be left unattended.</td>
<td>ii) The explosive van will be stationed at a safe distance from the charging site. It will not be allowed to approach or take turn in a bench which has no barrier.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv) Do not overtake any other vehicle on the road</td>
<td>iii) The explosive materials will be unloaded and shifted carefully to the blasting sites.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>v) Drive defensively and under control.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>v) Do not approach short cut or pass through crowded area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Driver</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Driver/Blaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOC.NO.</td>
<td>W/OPRN/03</td>
<td>DOC.NO.</td>
<td>HIRA/MINING/04</td>
<td></td>
</tr>
</tbody>
</table>
### STANDARD OPERATING PROCEDURE
#### FORM NO.HSE/CORP/4

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Loading, Unloading &amp; Transportation of Explosives</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>SMC</td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td>Mining</td>
</tr>
</tbody>
</table>

| SOP NO.   | IMFA/SOP/SMC/MINING/04 | REVISION | 00 | EFF DATE: | 19.6.14 | NO. OF PAGES | Page 4 of 4 |

**NOTE:**

**SIX DIRECTIONAL HAZARD IDENTIFICATION DURING JOB:**

In addition to the above SOP, a 6-directional hazard identification sheet shall be used before start of the job. While executing the job at site, any hazards from six directions (NORTH, SOUTH, EAST, WEST, TOP, BOTTOM) to be assessed based on physical observation, common sense & experience. Controls shall be taken for any hazards thus identified.

**TRAINING RECORD OF SOP:**

The Training on this SOP with six directional hazards is to be imparted to concerned employee and contract workers by Shift In-Charge / Deptt. Head as applicable. The Training Record to be maintained in a register with signature of the individual employees before starting of the job.