

## TASK RISK ASSESSMENT

ENTER COMPANY NAME

**TASK TITLE:** Expansion of Naimat Phase-v Project

**Date:**

**Activity** Fabrication, Welding, cutting and grinding

**TRA. No.**

**Location:**

**Description:** Fabrication, cutting, grinding and welding.

| S/<br>No | HAZARD                                                                   | HAZARD EFFECT                                     | RISK<br>EVALUATION<br>(Refer to<br>Evaluation<br>form) |   |    | CONTROLS                                                                                                                                                                                                            | ACTION TO BE TAKEN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                 | RESIDUAL<br>RISK |   |   | AL<br>AR<br>P<br>Y/<br>N |
|----------|--------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------|---|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------|---|---|--------------------------|
|          |                                                                          |                                                   | S                                                      | P | R  |                                                                                                                                                                                                                     | DESCRIBE ACTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | MANPOWER                                        | S                | P | R |                          |
| 1.       | Untrained Personnel                                                      | Personnel Injury                                  | G                                                      | 7 | 8  | 1. Skilled personnel.<br>2. Use of standard manual handling technique.                                                                                                                                              | 1. Continuous monitoring of activities.<br>2. Adhere to Equipment Handling procedure.<br>3. Ensure to barricade the area with signage and barricade tape.                                                                                                                                                                                                                                                                                                                                                               | SPA: Welding Supervisor<br>2. Safety Supervisor | G                | 2 | 3 | Y                        |
| 2.       | Electric shock due to damaged cable & current leakage of welding machine | Fatality, Permanently disability, Personal Injury | E                                                      | 8 | 11 | 1. GCM/TBT<br>2. Use check listed equipment,(Generator, Electrical DB)<br>3. Damaged cable shall not allowed,<br>4. Cables must be heavy duty industrial type.<br>5. Cable management<br>6. Connection through ELCB | 1. Conduct GCM/TBT before starting the activity<br>2. Ensure the checklist of specified Electrical DB, Generator, and welding machine is filled and verified.<br>3. Ensure Cables and receptacle are not damaged<br>4. Male / Female connectors, switches, electrical terminations etc. to be ensured.<br>5. Cables are in minimized condition and secured from sharp edges<br>6. Ensure ELCB is installed and confirm proper earthing<br>6. Avoid contact of welding electrodes with scaffolding/ conductive material. | SPA: Welding Supervisor.<br>Safety/Fire Watch   | E                | 2 | 3 | Yes                      |
| 3.       | Tripping Hazards (cables, materials etc.)                                | Personnel Injury                                  | G                                                      | 8 | 9  | 1. Area housekeeping. Escape route should remain unobstructed; cables away from pedestrians walkway.<br>3. Area barricading.                                                                                        | 1. Make sure the cables & material are properly placed to avoid tripping hazards.<br>2. Clearly mark escapes routes. Follow good cable layout practices, minimizing tripping hazards & cable damages.<br>3. Avoid unauthorized entry of non-essential personnel in working area barricading.                                                                                                                                                                                                                            | SPA: Welding Supervisor.<br>Safety/Fire Watch   | G                | 2 | 3 | Yes                      |

|    |                                                    |                                            |   |   |   |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                          |   |   |   |     |
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| 4. | Grinder disc<br>( sparks, Damaged)                 | Personal Injury/<br>fetal, cut piercing    | F | 5 | 7 | Grinder checklist must<br>be filled and verified by<br>competent person<br>Use guard with grinder ,<br>PPE, Face Shield,<br>Cordon off work area<br>1. Competent grinder<br>man / fitter.<br>3. Proper disc<br>tightening | Grinder disc speed rating shall be<br>compatible with that of grinder.<br>1. Proper Use of Grinder with firmly<br>gripped.<br>2. Use Face Shield and Leather Gloves for<br>Grinding,<br>3. Make sure a safety guard is installed on<br>the grinder.<br>4. Grinder inspection to be carried out as<br>per the checklist.<br>5. Daily inspection of the grinder by the<br>user.<br>6. Ensure the disc is properly tightened. | SPA: Welding<br>Supervisor.<br>Safety/Fire<br>Watch      | F | 2 | 4 | Yes |
| 5. | Welding Light/ UV<br>rays from welding.            | Impair eyesight                            | G | 4 | 5 | PPEs compatible for<br>welding etc.<br>minimum persons while<br>performing welding job                                                                                                                                    | 1. Advise the personnel to not look<br>directly towards the welding arc.<br>2. Eye wash bottle. Fresh water available.<br>3. Fully cover the working area with hood.<br>4. Restrict unauthorized entry.<br>Face shield / screen, heat retardant gloves.                                                                                                                                                                    | Safety/Fire<br>Watch<br>Welding<br>Supervisor.           | G | 2 | 3 | Yes |
| 6. | Smoke in result of<br>welding                      | Eye Irritation,<br>Lungs health<br>effects | G | 8 | 9 | Adequate Ventilation.<br>Welders shall be<br>provided regular<br>breaks.                                                                                                                                                  | Covered area with some open points on<br>the upper side for ventilation<br>implemented on site.<br>At every half an hour 10 min rest is given<br>to welders to release exhaustion.                                                                                                                                                                                                                                         | PA Supervisor<br>(SPA)<br>HSE Supervisor<br>Safety Watch | G | 1 | 2 | Yes |
| 7. | Spark/ welding<br>Spatters                         | Personal<br>injury/Burn,<br>Fire           | F | 7 | 9 | Loose clothing<br>prohibited<br>Cover-up particular job<br>area with fire retardant<br>tarpaulin or fire<br>blankets<br>Proper Housekeeping<br>PPEs compatible for<br>welding (heat retardant<br>gloves, welding hood)    | Welder/Fabricator shall not wear any<br>loose combustible materials like towel,<br>scarf etc.<br>Cordon off the affected area by means of<br>covering with fire blankets or fire<br>retardant tarpaulin.<br>Surface must be clean from combustibles<br>like cotton rags, gloves, wooden pieces<br>etc.<br>Welding Hood, Welding Gloves to be<br>ensured.                                                                   | PA Supervisor<br>Safety Watch<br>(SPA)<br>Fire Watch     | F | 2 | 4 | Yes |
| 8. | Contact with a hot<br>surface (during<br>welding). | Burn                                       | H | 6 | 6 | GCM, Area cordon off,<br>don't touch the welding<br>surface.                                                                                                                                                              | Leather gloves use unauthorized entry not<br>allowed in the work area.                                                                                                                                                                                                                                                                                                                                                     | Supervisor,<br>Safety Watch<br>Medic Man.                | H | 5 | 5 | Yes |
| 9. | Falling object/Fall<br>from height                 | 1. Personal injury<br>2. Asset loss        | F | 7 | 9 | 1. PPE's<br>2. Proper storage of<br>tools<br>3. Proper material<br>handling<br>4. Install toe Boards                                                                                                                      | 1. All the workforce required to use<br>mandatory PPE's<br>2. Barricade the area where erection of<br>scaffolding is in progress<br>3. Restrict the unauthorized entry                                                                                                                                                                                                                                                     | SPA: Scaffolding<br>Supervisor<br>Safety<br>Watchman,    | F | 2 | 4 | Yes |

|     |                                                                         |                                                                                |   |   |   |                                                                                                                                   |                                                                                                                                                                                                       |                             |   |   |   |     |
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|     |                                                                         |                                                                                |   |   |   |                                                                                                                                   | 4. Proper railing system should be erected to prevent the falling of personnel.<br>5. All the material should be brought. up/down with sack and rope<br>6. Don't drop or throw materials from height. |                             |   |   |   |     |
| 10. | Biological Hazards<br>(Snakes, Bees, wasps, mosquitoes & Other insects) | Bite of insect and snake may lead to fatal.<br>(malaria, Dengue, Skin allergy) | E | 6 | 9 | 1. Snake bite Kit.<br>2. GCM/TBT<br>3. Snake sighting protocols<br>4. Insect repellents<br>5. Emergency vehicle with alert driver | 1. Don't handle snake yourself, call security person<br>2. Apply insect repellents<br>3. Don't put hand where you cannot see<br>4. Avoid working alone<br>5. Avoid working in poor light areas        | Supervisor,<br>Safety Watch | E | 2 | 4 | Yes |

**GENERAL COMMENTS:**

1. TBT will be conducted prior to job start.
2. Proper PPE's are mandatory for all workers.
3. Housekeeping of the area should be carried out on prior basis.
4. Supervisor full time must be available.
5. Stand by vehicle must be available at site to rescue the victim.
6. Entry of unauthorized persons is not allowed in the work premises.

**Abbreviations**

SPA: Single Person Accountable  
 GCM: General Conversation Meeting  
 PA: Performing Authority  
 ELCB: Earth Leakage Circuit Breaker  
 DB: Distribution Board

|                                                                       |                  |                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NAME OF TEAM MEMBERS</b>                                           | <b>SIGNATURE</b> | <b>RISK ASSESSMENT APPROVAL</b><br>I'm satisfied that the safeguard put in place will reduce the level of Risk to an acceptable level and the Task/Action is permitted to proceed.<br><br><b>Reviewed by:</b> _____<br><br>Date: _____ Time: _____ |
| (Construction Manager)<br>(Piping In-charge )<br>HITRA (HSE Engineer) |                  |                                                                                                                                                                                                                                                    |
| HE = Hazard Effect; P = Probability                                   |                  | <b>Authorizing</b><br><br>Signatory: _____ DATE: _____                                                                                                                                                                                             |