## THENJIWE SUPPLIES & REPAIRS

| Reference Number    | TSR/RA/009 |
|---------------------|------------|
| Implementation Date | 03.12.2018 |
| Revision Number     | 0          |
| Povision Data       | 02 12 2019 |

## TASK SPECIFIC RISK ASSESSMENT LDV OPERATION



## Hazard, Risk, Environmental & Ergonomical Assessment

| mazara) n                       | riazara, mon, ziren erinara a zigerieniear, nesessinene |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------|---|------------------------|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Contract Name                   |   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
| Contract Name                   |   | Task to be Performed   | Operating a LDV on site |  |  |  |  |  |  |  |  |  |  |  |  |
| List Risk Assessment Team Names | Training Required                                       | Risk Assessment No.    | TSR/RA/009              |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 | General Induction                                       | Revision No.           | 0                       |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 | HIRA  | Date of original issue |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 | Toolbox Talks   | Date revised           |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 | License   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 | Medical evaluations                                     |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |   |                        |                         |  |  |  |  |  |  |  |  |  |  |  |  |

|                               |   |                                   | A                               | ssessment Matrix   |  |                                  |                                |                            |                           |                                 |            |                 |
|-------------------------------|---|-----------------------------------|---------------------------------|--|--|----------------------------------|--------------------------------|----------------------------|---------------------------|---------------------------------|------------|-----------------|
| Probability of Occurrence (P) | INJURY SEVERITY<br>POTENTIAL (IS)                   | DAMAGE / LOSS<br>SEVERITY<br>(DS) | DURATION OF<br>EXPOSURE<br>(ED) | ENVIRONMENT (E)  | HEALTH (H)   | Probability of Occurrence<br>(P) | INJURY SEVERITY POTENTIAL (IS) | DAMAGE /LOSS SEVERITY (DS) | DURATION OF EXPOSURE (ED) | ERGONOMICS /<br>ENVIRONMENT (E) | НЕАСТН (Н) | Consequence (C) |
| Common Occurrence             | Multiple Fatalities OR<br>PERMANENT<br>DISABILITIES | More than R 1 500 000             | 1<10> Days                      | Irreversible damage and/or permanent impact / National level/legal prosecution                       | Multiple fatalities  | 5                                | 5                              | 5                          | 5                         | 5                               | 5          | 30              |
| Has Happened before           | Fatal / Permanent<br>Disability                     | R 300 000 to R 1 500<br>000       | 6<10> Hours                     | Potential reversible long term damage and /Regional/Major fine                                       | Fatality   | 4                                | 4                              | 4                          | 4                         | 4                               | 4          | 24              |
| Could Occur                   | Moderate / Serious Injury                           | R 150 000 to R 300 000            | 3<6> Hours                      | Long term eco disturbance and/or<br>significant impact on local<br>community/legal notice/minor fine | case(RWC); An occupational illness requiring removal from normal work duties, (Includes removal on medical grounds, such as due to biological monitoring. Person may perform alternative work. | 3                                | 3                              | 3                          | 3                         | з                               | 3          | 21              |
| Not likely                    | Lost Time Injury                                    | R 15 000 to R 150 000             | 1<3> Hour                       | Short term and/or restricted disturbance and/or impact on the community.                             | More than Minor Illness<br>Case (MIC)  | 2                                | 2                              | 2                          | 2                         | 2                               | 2          | 12              |
| Practically Impossible        | Minor injury – No Lost<br>Time                      | Less than R 15 000                | < 1 Hour                        | Ecological stress and /or nuisance to community.   | Minor Illness Case (MIC): A disorder which only requires attention such as increased biological monitoring. Person can continue with his normal work.  | 1                                | 1                              | 1                          | 1                         | 1                               | 1          | 6               |

| CURRENT RISK                  |   |  |   |    |    |    |   |   |    | REMEDIAL   | RISIDUAL |    |    |   |   | ACTION |   |            |      |
|-------------------------------|---|--|---|----|----|----|---|---|----|--|----------|----|----|---|---|--------|---|------------|------|
| Task Steps                    | HAZARD<br>IDENTIFIED  | RISK ASSOCIATED WITH<br>HAZARD   | Р | IS | DS | ED | Е | н | С  | HOW IS HAZARD TO BE DEALT<br>WITH  | Р        | IS | DS | D | Е | н      | С | BY<br>WHOM | DATE |
| Collision with other vehicles | Speeding  | may result in injuries and<br>damage to plant                          | 3 | 3  | 2  | 2  | 2 | 2 | 14 | A maximum speed limit of 40km/hr to be implemented on site. This is to be communicated at inductions as speed signs to be placed around site. Speed limits that are marked 30km/h and lower are applicable but no speed limit will be exceeded by 40km/h on PCPPP site area. | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Tire bursting   | may result in an injury with disability.                               | 3 | 3  | 2  | 2  | 2 | 2 | 14 | Tire pressure to be checked as part of pre-use checklist. Tires to be of the same type. Pressure gauges to accompany vehicles at all times.  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Unauthorized<br>drivers   | may result in accidents, injuries and damage to plant                  | 3 | 3  | 3  | 3  | 2 | 2 | 16 | All vehicle drivers to have a valid drivers license and to have been tested and certified by the mine  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Driver fatigue  | may result in accidents, injuries and damage to plant                  | 3 | 3  | 3  | 3  | 2 | 2 | 16 | Drivers to take frequent breaks  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Not obeying road signs  | may result in injuries with disability and plant damage                | 3 | 3  | 3  | 2  | 2 | 2 | 15 | The importance of road signage and the adherence of these to be communicated via an induction  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Excessive dust resulting in poor visibility   | may result in accidents, injuries and damage to plant                  | 3 | 2  | 2  | 2  | 2 | 2 | 13 | Roads to be watered as necessary but not excessively. Foreman to monitor daily   | 2        | 2  | 1  | 1 | 1 | 1      | 8 |            |      |
|                               | Vehicle rolling<br>down a hill  | can cause damage to other plant and injuries to employees              | 3 | 3  | 3  | 2  | 2 | 2 | 15 | Stop blocks to be used when vehicle is not in use/motion. Hand brake on  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Not obeying traffic<br>management plan  | may lead to injuries and damage to property                            | 3 | 2  | 2  | 2  | 2 | 2 | 13 | Traffic management plan/layout and its changes to be communicated to all LDV drivers.  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Lack of maintenance   | may result in injuries and<br>damage to plant                          | 3 | 2  | 2  | 2  | 2 | 2 | 13 | All vehicles to be serviced at intervals recommended by the manufacturer or responsible engineer in charge of the LDV.   | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Lock out of LDV's<br>not followed   | may cause injury and disability  | 3 | 2  | 2  | 2  | 2 | 2 | 13 | All LDV operators to make sure they lock<br>out there vehicles when exiting out of<br>there LDV on site and place there stop<br>blocks under the back tire.  | 2        | 1  | 1  | 1 | 1 | 1      | 7 |            |      |
|                               | Alcohol and drug<br>abuse when<br>operating an LDV  | May cause serious injuries<br>and/or fatalities and damage<br>to plant | 3 | 4  | 3  | 2  | 2 | 3 | 17 | No operator of an LDV will use and drink<br>alcohol while operating his LDV. All to<br>comply with rules and procedures on the<br>mine construction site.(Zero Tolerance)  | 2        | 2  | 1  | 1 | 1 | 1      | 8 |            |      |
|                               | Operator not<br>doing his pre-use<br>checklist before<br>using his LDV.                               | may cause injuries with disability                                     | 3 | 4  | 2  | 2  | 3 | 3 | 17 | Load to be guided by means of guide ropes and all employees to stand well clear of the load being lifted. Work area to be barricaded. Task to be supervised by a competent supervisor.   | 2        | 2  | 1  | 1 | 1 | 1      | 8 |            |      |
|                               | LDV not using the<br>dedicated roads<br>without the<br>necessary safety<br>requirements on<br>the LDV | may result in injuries and<br>damage to plant                          | 3 | 3  | 2  | 2  | 2 | 2 | 14 | All LDv's travelling on a road marked in a red zone will comply with all safety requirements till and when there vehicles are equipped with the mine standards to travel as safely on the haul roads and other roads that is marked in a red zone area.                      |          | 1  | 1  | 1 | 1 | 1      | 7 |            |      |

| Injury as a result of<br>no airbags in a<br>collision | No airbags<br>installed in older<br>vehicles                           | may cause injuries and<br>disabilities                        | 3 | 2 | 2 | 2 | 2 | 2 | 13 | 40km/hr speed limit on site to be implemented resulting in a reduced overall average speed of ,say,30km/hr .Seat-belt usage monitoring to be installed as part of the tracking system. These controls to be communicated to all drivers. Preventative collision controls 1.1 to 1.9 also applies as they prevent a collision in the first place reducing the risk.     | 2 | 2 | 1 | 1 | 1 | 1 | 8 |  |
|---|--|---|---|---|---|---|---|---|----|--|---|---|---|---|---|---|---|--|
| 3.Injury as a result of<br>no ROP in an accident      | No approved Roll<br>Over Protection<br>installed in 2 by 4<br>vehicles | may cause a serious injury,<br>disabilities and/ fatalities   | 3 | 2 | 2 | 2 | 2 | 2 | 13 | 40km/hr speed limit on site to be implemented resulting in a reduced overall average speed of ,say,30km/hr .Seat-belt usage monitoring to be installed as part of the tracking system. LDV movement to be separated from haulage teams where possible. Access roads to be maintained. Pre-start checks to be carried out. Road signage to be installed and adhered to. | 2 | 1 | 1 | 1 | 1 | 1 | 8 |  |
| Collision with pedestrians                            | Pedestrians  | may cause injuries and<br>disabilities                        | 3 | 3 | 2 | 2 | 1 | 2 | 13 | Pedestrians to adhere to designated pedestrian routes. High visibility clothing  | 2 | 2 | 1 | 1 | 1 | 1 | 8 |  |
|   | Excessive dust resulting in poor visibility                            | may cause injuries and<br>disabilities and damage to<br>plant | 3 | 3 | 2 | 2 | 1 | 2 | 13 | Roads to be watered as necessary but not excessively. Foreman to monitor daily   | 2 | 1 | 1 | 1 | 1 | 1 | 7 |  |
|   | Speeding   | may cause serious injuries.                                   | 3 | 3 | 2 | 2 | 1 | 2 | 13 | A maximum speed limit of 40km/hr to be implemented on site. This is to be communicated at inductions as speed signs to be placed around site.  | 2 | 1 | 1 | 1 | 1 | 1 | 7 |  |