

**Key Control Data Sheet**

Procedure Number: RSK-PRO-KCD-195

Scope of Application: Ok Tedi Mining Limited

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Document Owner: Manager – OHS & Training

**Why is the Control Important** – Properly planned and controlled vehicle recovery that makes use of professional vehicle recovery contractors in the first instance (where available) or where these services are not available is carried out by trained personnel, using appropriate recovery equipment (e.g. strops that do not store energy) rated for the vehicle being recovered, attached to rated anchor points, which are inspected before use and with exclusion zones in place within the path of the vehicle recovery are critical to preventing injury to personnel arising from failure of recovery equipment or unplanned movement of vehicles during recovery.

**Exemption** – Nil.

**Operational Requirements**

## Performance Metrics

|  |  |
| --- | --- |
| Where they are available to provide assistance or for vehicle recovery in difficult terrain in the first instance either a) Certified tow truck / tilt tray or b) Specialist heavy vehicle towing contractor are used | Recovery plan in place covering: Assessment of load against recovery equipment capability. Recovery equipment must be rated for the vehicle being recovered. Selection of anchor points. Determination of exclusion zones. Agreed signals between drivers during pull, and agreed recovery point location where towing/ winching stops. |
| Recovery kit available with rated shackles, recovery strops, for vehicle and vehicle recovery instructions / procedures covering: correct use of recovery strops or winch, identification of recovery attachment points on the vehicle. NOTE: Snatch type straps not to be used (including for light vehicle recovery). | Anchor point on recovery vehicle and recovered vehicle exceeds the load rating of the weakest item for the recovery equipment. Recovery strops attached securely to a load rated component (e.g. tow hooks, engineered recovery device). |
| Recovery equipment and attachment points inspected before use for damage or defects. | Exclusion zone in place within the path of the vehicle recovery. Only the drivers of the recovery vehicles are in those vehicles. No go safety zones for assistants and onlookers established to the side of the line of recovery. |

## Utilisation

Continuous during the vehicle recovery activity.

## Safety Critical Defeat Requirements

No defeats allowed.

## Testing & Verification

Recovery equipment and attachment points inspected before use for damage or defects. Damaged equipment must be removed from service and not used.

## Maintenance

Recovery equipment maintained according to the manufacturer’s specifications by suitably qualified and trained person.

## Training & Competency

Competency based training in vehicle recovery using recovery strop or vehicle winch.

Competency based training in recovery of bogged vehicle.

Competency based training in vehicle towing.

Permit issuers – requirements to inspect and verify exclusion zones and protective barriers in place.

**Task Requirements**

The following are the key day to day requirements operators/maintainers and supervisors must follow to ensure the control is being used correctly.

## Task Requirements

|  |  |  |
| --- | --- | --- |
| No. | Supervisor | Operator/Maintainer |
| 1 | Arrange for recovery of vehicle by either a) Certified tow truck / tilt tray or b) Specialist heavy vehicle towing contractor where available and practical to use | Obtain Permit to Work for vehicle recovery on OTML site. |
| 2 | Verify that any person required to conduct vehicle recovery operations is trained and assessed competent in conduct of those operations. | Only undertake vehicle recovery activities if trained in use of recovery equipment and its limitations. |
| 3 | Provide recovery kit rated for the vehicle mass with instructions for use for OTML vehicles operating off-road. | Prepare vehicle recovery plan. |
| 4 | Issue Permit to Work for vehicle recovery activities on OTML site. | Establish exclusion zone for vehicle recovery activity. Only the drivers of the recovery vehicles are in those vehicles. No personnel stand between vehicles connected by a recovery strop under tension. No stepping over cable or strop under tension or load. |
| 5 |  | Inspect condition of recovery equipment and attachment points before use. |
| 6 |  | Attach recovery strop, cable, bar or chain securely to a load rated component (e.g. tow hooks, engineered recovery device). |
| 7 |  | Conduct vehicle recovery in a manner that prevents shock loading of recovery equipment. Use lowest gear available in recovery vehicle. Apply power smoothly and slowly to recovery vehicle. |
| 8 |  | Use only approved vehicle recovery equipment strop, cable, bar or chain supplied for the vehicle type. Rated for the vehicle being recovered. |
| 9 |  | Don't remove recovery strop, cable, bar or chain until both vehicles are stationary and secured. |
| 10 |  | Stop work if personnel enter exclusion zone during recovery operation. |

## Skills Requirements

Licence to operate vehicle or mobile equipment, as required by local regulations.

## Permits

Permit to Work issued for vehicle recovery operations.

## Task Specific PPE Requirements

No additional requirements.

## Special Task Related Tooling

Recovery kit available with rated shackles, recovery strops, for vehicle.

**Design Requirements**

## Design Standard

Attachment points for vehicle recovery secured by high tensile bolts.

Vehicle winch:

Winch secured to vehicle by high tensile bolts.

Winch attached to vehicle in approved position.

Winch fitted with shear pin.

## Safety Parameters

Recovery strop must not store energy (stretch less than 5%).

Snatch type straps not to be used (including for light vehicle recovery)

Vehicle recovery strop has a Minimum Breaking Strength that is 2 times total weight of stuck vehicle (to take into account resistance to motion for stuck vehicle)

Working load limit of any shackle used in recovery equipment must exceed recovery strop strength

Rated load for frame mounted tow hook, hitch receiver must exceed recovery strop strength.

Rated load for winch attachment point on vehicle must exceed winch capacity.

## Design Life

Not applicable.

## Safe Separation

Personnel other than the two drivers located to the side outside a distance of 1.5 x the length of the recovery strop.

## Special Requirements

Attachment points:

Bumpers, bull bars, or tie down eyes are not used as recovery points unless rated for that purpose

Recovery strops:

Recovery strops not used in parallel (unless fitted with strain load indication)

Appropriate sized recovery winch used where proper use of a recovery strop is unsuccessful.

Recovery winch:

Vehicle hood / bonnet is raised when using a front mounted winch, if in the vehicle during winching.

Winch rope / cable not hooked back on itself during winching.

Winch rope / cable not attached to a vehicles tow ball, axles or suspension for winching.

One person controls the winch.