Introduction

Tip Head operations is a high risk activity due to the frequent interaction between Heavy Vehicles and Powered Mobile Plant; as well as pedestrians and Light Vehicles. The consequence of these risks could be fatal. The company will mitigate this risk by conducting thorough risk assessments and by implementing standardised controls.

Proper management of the tip head is also a critical customer service and productivity issue.

This Tip Head Standard should be read in conjuction with other procedures when refered to throughout this document.

Purpose

The purpose of this document is:

1. Provide the process to identify and document interactions relating to people, traffic, site conditions and risks associated with those interactions on **Alex Fraser Recycling** controlled sites.
2. Provide guidance on implementing management standards for controlling Tip Head hazards for **Alex Fraser Recycling** controlled sites.
3. Ensure inspections are conducted to ensure personnel responsible for implementation of controls are meeting their commitment to maintaining a safe work environment.
4. Provide a reference for best practise replicable tip head management that allows our customers to be able to safely and efficiently dispose their construction and demolition waste in the same customer focused manner, regardless of site.

Scope

This Tip Head Management Standard applies to all Alex Fraser fixed sites and includes compliance from employees, contractors, visitors and Member of the Public (MOP).

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Definitions

Acronym	Meaning
ACM	Asbestos Containing Material
AFG	Alex Fraser Group
ALARP	As Low As Reasonably Practicable. The ALARP principle is that the residual risk shall be ALARP. For risk to be ALARP it must be demonstrated that the cost involved in reducing the risk further is grossly disproportionate to the benefit gained.
Benchmark	A **benchmark** is a permanent mark established in a field to use as a reference point. A benchmark can be a concrete base in which an iron bar is fixed, indicating the exact place of the reference point.
BOM	Bureau of Meteorology
Class 4 Material (Victoria Only)	A combination of material that contains bricks, rubble, concrete, rock and other approved recyclable materials that is suitable for use as base material, once compacted, will provide a viable working surface for plant & equipment.
CH 19 **CH 20** **CH 21** **CH 68**	UHF Radio Channels used on various site: Channel 19 General Site – Archerfield and Nudgee Channel 19 Crushing Plant - Clayton, Epping & Laverton Channel 20 General Site - Laverton Channel 21 General Site - Clayton and Epping Channel 68 Sales Floor Clayton, Epping & Laverton
Driver Indemnity Deed	Deed of Agreement or liability waiver. This Form is an agreement between the driver of a vehicle that requires some sort of assistance from Alex Fraser in order to make remedial repairs or help (i.e. MOP with damaged tailgate – AFG Excavator to lift or push to get the MOP's vehicle off the Tip Head), or if the Load Inspector deems the Load unsafe to be tipped off, the Driver Indemnity agreement needs to be completed and signed by the Driver of the vehicle, prior to assistance.
Excavator Operator	A member of the Alex Fraser team that has received training is experienced and competent to operate an excavator
GNSS	Global Navigation Satellite System
Hazard	Anything (including work practices or procedures) that has the potential to harm the health or safety of a person.
Heavy Mobile Equipment (HME)	Any mechanically or electrically driven machine capable of moving under its own power that requires a driver or operator such as excavators, skid steers, wheel loaders, forklifts.
Heavy Vehicles	Any vehicle over 4.5 GVM, but excluding Powered Mobile Plant e.g. Wheel Loaders, Excavators.
Light Vehicle	Any vehicle weighing less than 4.5 tonnes gross vehicle mass (GVM), as per Australian road rules. E.g. four wheel drive, utility, car.
Load Inspector	A trained member of the Alex Fraser team that has the designated authority, training and experience to manage the movement of vehicles at the Tip Head

Loader Operator	A member of the Alex Fraser team that has received training is experienced and competent to operate a wheel loader.
MOP	Member of the Public
Pedestrian	Any person travelling on foot. **Note: -** *The term 'Pedestrian' used in this Standard, referes to a Truck Driver out of the vehicle to 'Open' the tailgate of the tipping body(s), prior to raising the body!*
Physical Barrier	A barrier used to separate Pedestrians and Vehicles
Reduced Level	A Reduced Level is the vertical distance between a survey point (Point of interest) and the adopted level datum
Risk	The likelihood that a person may be harmed or suffer adverse health effects if exposed to a Hazard.
RL	Reduced Level
Site Pulse	Site Pulse is the Trimble Site Positioning Solution system and related Software for producing visual mapping from recorded data. Contact: 1800 SITECH (1800 748 324)
Site Traffic Management Rules	A documented set of site specific rules used to control the interactions between Vehicles, Mobile Plant and Pedestrians.
Site Traffic Plan	A map of the site showing the flow of Pedestrian and Vehicle movements including illustrations of the layout of barriers, UHF zones, walkways, signs, exclusion zones and general arrangements to warn and guide traffic around, past, or through the work site.
Site Traffic Zones • **Green Zone** • **Yellow Zone** • **Red Zone**	Site Traffic Zones are identified in the AFG Traffic Management Standard. • **Green Zone** - An area where pedestrians do not interact with any vehicles. • **Yellow Zone** - An area where Pedestrians can interact with Vehicles at low speed exposed to a hazard. • **Red Zone** - An area predominantly used by heavy vehicles and/or Powered Mobile Plant
Standard Control	A control defined in this Standard
SWMS	Safe Work Method Statement
TBM	Temporary Benchmark
Temporary Benchmark	As far as **TBM** is concerned, it is the Benchmark whose elevation is unlikely to change and we can measure various aspects of our survey like chainage, elevation of other desirable points etc.
Tip Face	Is the term used to describe the face or vertical slope/batter where raw materials are pushed over the edge of the tip-off and processing level (Pad).
Tip Head	An area of ground that is designated for use by Members of the Public to unload trucks, truck and trailers, bin trucks and semi tippers of loads containing concrete, asphalt, bricks, rubble and other approved recyclable materials. Once raw materials have been processed, the material is pushed over the Tip Face.

Tip Head Daily Incident Report Register	Is a spreadsheet for the Load Inspector to record various non-compliance or violations of Site Rules and other actions taken by AFG Employees.
Trimble GPS System	Trimble is a Company that develops systems and equipment using Global Navigation Satellite Systems (GNSS) receivers, and software. SITECH is an Australian distributor of the Trimble system and support network.
UHF	Ultra High Frequency radio (Two-way)
Unsafe Load	Is determined by either the Weighbridge Operator, or by the Load Inspector during the load acceptance process. Examples of an 'Unsafe' load is where large pieces of material are unevenly place in the tipper body, or overloaded (over Gross Weight Limit) for the vehicle.
Vehicle	Any Heavy Vehicle or Light Vehicle.
Visitor	A person who does not normally work onsite.
Weighbridge Operator	A trained member of the Alex Fraser team who manages incoming and outgoing loads for payment and gives directions to truck drivers where to proceed on site
Work Order	The term Work Order in this document relates to a manual process of creating a folder where data will be stored from a recording session.
10 metre Rule	The 10 metre(m) Rule is an important Standard Control to be maintained on all Alex Fraser permanent sites. It is an administrative control and does not replace the need for higher order controls.

Hazards on Tip Head

Hazards	Controls
Collision *Vehicle to Vehicle *Vehicle to Powered Mobile Plant	1. Driver's Licences (National Licence), 2. Site Rules – Instructions given to MOP / Visitors by AFG Employees (i.e. Weighbridge, Load Inspector, Machine Operators), 3. 10 metre Rule (i.e. maintain 10 metres between vehicles and Powered Mobile Plant), 4. Flashing light fitted on all Company Powered Mobile Plant; vehicles, MOP / Visitors have flashing light fitted. 5. Two-way radio's fitted in all Company Powered Mobile Plant, MOP / Visitors have two-way radio's fitted or hand-held radios. Positive communication must be established between MOP and Site Mobile Plant.
Pedestrian struck by Vehicle or Powered Mobile Plant *Note: - Pedestrian refers to Truck Drivers' on foot to open tailgate(s) on Tip Head.*	1. Company Induction and training of Operators / Employees regarding Site Rules, 2. Site Rules – Instructions given to MOP / Visitors by AFG Employees (i.e. Weighbridge, Load Inspector, Machine Operators), 3. 10 metre Rule (i.e. maintain 10 metres between vehicles and Powered Mobile Plant), - Pedestrian must remain within 1.5 metres of their vehicle. 4. Flashing light fitted on all Company Powered Mobile Plant and vehicles, MOP / Visitors have flashing light fitted; issued magnetic flashing light unit (loan – return to weighbridge on exit) or use of the vehicle's indicators on Hazard function.

Hazards	Controls
	5. Two-way radios fitted in all Company Powered Mobile Plant, MOP / Visitors have two-way radios fitted or issued hand-held radios (loan – return to weighbridge on exit), 6. Restriction on closing Tailgates on Tip Head (i.e. designated Tailgate closing area off Tip Head, away from Powered Mobile Plant / Vehicles), 7. Passengers or pets are not to exit the vehicle at any time.
Tipper or Trailer Roll-Over on Tip Head Pad: • Too much slope/angle on Tip Head floor/pad, • Soft or muddy ground surface • Poorly maintained bunds at Tip Face • Truck with 'Unsafe load', • High Wind - Gusting	1. Maintain floor level to site specific design, including stability on Tip Head Pad: a. A Cross-fall slope of greater than 84mm over any 2.4 metres identified on the tipping floor, shall trigger a hazard report to be raised immediately by notifying Site Management. Site Management shall give instructions on immediate actions to be taken to mitigate the hazard. 84mm over any 2.4 metres equates to an approximate a 2^0 degrees slope b. A Cross-fall slope of greater than 126mm over any 2.4 metres identified on the tipping floor, shall trigger an incident report to be raised immediately by notifying Site Management. The area shall be isolated immediately from the Tipping Public (MOP). 126mm over any 2.4 metres equates to an approximate a 3^0 degrees slope. 2. High winds or gusty conditions shall be monitored by the Load Inspector in consultation with Site Manager/Supervisor. The Manager/Supervisor may: a. Restrict or change tipping areas; b. Certain configuration of vehicles (i.e. Semi tippers / Quad Dogs); may be stopped from tipping onsite, *and or* c. Close the Tip Head completely if needed. 3. Tip Head Loader Operator shall: a. Maintain the height of bund or windrows on the tip-off pads, with the height of a safety bund or windrow must be at least half the diameter of the tyre of the largest vehicle to use onsite. b. Tip Face bund or windrow shall be a minimum distance of 2 metres from the 'Tip Face' and the height of a safety bund or windrow must be at least half the diameter of the tyre of the largest vehicle to use onsite to prevent trucks tipping close to, or over the 'face'. 4. 10 metre Rule (i.e. maintain 10 metres between vehicles and Powered Mobile Plant), 5. Procedure for unloading a truck deemed to have an 'Unsafe Load'
Contaminated loads Tipped off on Tip Head	1. Reject load at Weighbridge, if identified, 2. Reject load at Load Inspectors station, if identified, 3. After tipping off, if load is identified as contaminated, reload vehicle in accordance with Waste Acceptance Criteria. 4. Follow Asbestos Management Procedure for removal of small quantities of ACM.

1.0 Traffic Management

1.1. Site Traffic Management

The AFG Traffic Management Standard is the overriding document referenced in developing site-specific Traffic Management Plans.

Each site has specific traffic management plans to manage the interactions of vehicles, mobile plant and pedestrians.

Traffic interaction on the Tip Head is managed by the Load Inspector and the Tip Head mobile plant Operators.

Management controls are:

- Signage and speed limits posted leading to Tip Head,
- Speed limits on Tip Head,
- Regulated movement of vehicles on the Tip Head,
- Instructions given to vehicle drivers by the Load Inspector and Tip Head mobile plant Operators,
- Two-way communication protocols,
- Drivers to remain within 1.5 metre of their vehicle when opening their tailgate(s)
- 10 metres Rule:
  - 10m clearance between pedestrians and any moving Powered Mobile Plant,
  - 10m clearance between pedestrians and any moving Heavy Vehicle,
  - 10m clearance between Light Vehicles and any moving Powered Mobile Plant

Exceptions to *The 10m Rule* are:

a) If on a Roadway as defined in the Site Traffic Management Map; or,
b) If separated by a Physical Barrier; or
c) As provided in Section 3.4, Standard Control Areas, of the AFG Traffic Management Standard.

If *The 10m Rule* cannot be maintained a SWMS must be completed for the task

2.0 Traffic Management Standard

For the construct roadway, and control of traffic related hazards, refer to the AFG Traffic Management Standards. The Traffic Management Standards include some of the following topics:

- Road Construction
- Site Traffic Rules
- Traffic Hazards and Controls (Coloured Zoned areas, i.e. Red, Yellow & Green)
- Pedestrian related hazards and Controls
- Vehicle and Mobile Plant parking
- Tipping and Loading areas
- Signage
- Lighting
- Training information

Reference Documents
AFG Traffic Management Standard

3.0 Weighbridge Operator

The Weighbridge Operator is the first line in identifying possible hazards relating to the in-coming load.

For example:

- The Weighbridge Operator can use the closed-circuit cameras to look at the load in the tipper body for possible:
  - Prohibited materials (i.e. ACM, Cement or fibre sheeting/piping, etc.). At this point, the Weighbridge Operator can refuse entry, and advise the driver the load cannot be accepted, due to the identification of a prohibited material. This removes the hazard of producing crushed products that contain asbestos fibres or dust.
  - A truck that is over-loaded, or load unevenly, which can cause the tuck to become unstable during the tipping process. At this point, the Weighbridge operator can contact the Load Inspector, informing them of the truck details, which is of concern. The load Inspector will then complete their responsibilities regarding the "Unsafe Load" process.

3.1. Weighbridge Operators' Responsibilities

The following statement is a small section, extracted for the ***"Weighbridge Incoming Process"***.
Please refer to the ***"Weighbridge Standard Operating Procedures List"*** for all other responsibilities of the Weighbridge Operator.

Weighbridge operator is responsible for ensuring the following actions:

- Asks the truck driver if there are any banned or restricted items (i.e. asbestos, cement sheets/pipes/pits, timber, rubbish, etc.)
- Checking the load for any banned or restricted items, and for unsafe loading of the vehicle via the CCTV;

  a) Reject load based on visual inspection of load – informs the driver and directs driver to site exit;
- Accept load - Asking the truck driver if they have;
  - Been onsite before, if the answer is **No**, then Weighbridge Operator must contact the Load Inspector, informing them of the vehicle that has a Driver that has not been onsite before, also give a copy of the site safety rules to the driver. Contacting the Load Inspector alerts them that the person driving the vehicle has not been onsite before.

  - Flashing amber light or hazard lights and if they are working,
  - UHF radio – place on correct channel for site (site specific),
  - Hard hat/helmet,
  - High visibility vest/top,
  - Safety boots

- Inbound trucks must drive under dowsing bar (where in place) before driving to tip face,
- Inform the driver that the use of mobile phones is restricted while onsite, or must use a "hands free" device,
- Direct driver to Tip Head.

Reference Documents
Weighbridge Incoming Process
Weighbridge Standard Operating Procedure List
AFG Safe Use of Mobile Phones Standard
SOP UHF Radio Communication

4.0 Load Inspector Responsibilities

To provide and maintain a safe work area for the interaction between MOP vehicles, site equipment and personnel. Thus enabling customers' expectations on minimum queuing times and tipping in large unconfined areas to be achieved.

4.1. Incoming Load Acceptance

The Load Inspector is responsible for ensuring the following actions:

- Complete a visual check of load to identify loads content, and if the load is safe to tip-off,
- If the Load Inspector cannot see into the tipper body or bin, the Load Inspector shall tell the Tip Head machine Operator to check load for contaminated materials after tipping off,
- Reject load based on visual inspection of load: Refer to Section 4.4.2
  - Take photos of the load, ensuring the items for the rejection of the load are clearly identifiable in the photos. These photos shall be used as evidence, when communicating with customers to why the load or loads were rejected from an AFG recycling facility.
  - Inform the driver and directs driver to site exit,
  - Informs Weighbridge Operator of rejected load for site records and to prevent driver returning with the load,
  - Insert record in Tip Head Incident Register, or phone app
- Deems the Load 'unsafe': - Refer to Section 5.1
- Accepts load, Table 1 – Waste Acceptance Criteria

Table 1 – Waste Acceptance Criteria

Suitable Materials	
• Clean Concrete with re-enforcing steel and up to 5% class 4 asphalt or rocks	• Concrete or ceramic Pavers and Tiles
• Clean asphalt or chippings	• Mixed loads – a combination of material that contains brick, rubble, tiles, asphalt, concrete, fines etc. – Class 4 (Vic)
• Bricks (concrete or clay)	• Macadam – combination of asphalt and stone (Vic)
• Clean rock with minimal clay (Laverton & Epping only)	• Clean rock (Archerfield & Nudgee only)

• Ballast – free from asbestos (Archerfield & Nudgee only)	• Solid Concrete Washout (currently Nudgee only)

- Confirms driver has appropriate PPE, UHF radio and flashing amber light – *Vehicle shall be refused entry to Tip Head if driver does not have any of the mandatory safety equipment, Driver shall be instructed to leave the site.*

- Explains Tip Head Rules:
  - No use of mobile phone while on the site,
  - UHF radio on site specific channel,
  - Wait for Tip Head machine Operator to give directions on tip-off area,
  - Maintain a 10-metre clearance between all other vehicles and mobile equipment,
  - Remain within 1.5 metre of the vehicle when on the ground, opening the tailgate(s)
  - Passengers and or pets are not allowed to exit the vehicle while on the Tip Head or Tailgate area,
  - Seat belts must always be worn,
  - Stay in truck while the tipper body (hoist) is raised,
  - Fully lower the tipper body before driving away from Tip Head,
  - Do not get into the tipper body while on site (i.e. to clean out stuck debris),
  - Drive off the Tip Head to Tailgate closing area, (i.e. off the Tip Head),
- May hold trucks from entering the Tip Head if pad is busy or congested,
- Maintains a visual (where possible) of Tip Head activities, to manage truck movement and compliance to Site rules.
- Close Tip Head or partial areas if needed in consultation with Site Manger/Supervisor for reasons of:

  a) Weather conditions,
     - High winds (Speed of 40 km/h or greater – Refer: 4.3 Weather and Site Conditions, Table 2, Figure 6 - Willy Weather app);
       - Monitor wind using the windsock for direction and indication of strength,
       - Use phone to access current conditions on Bureau of Meteorology (BOM) or other web site with weather information.
     - Heavy rain;
       - Monitor access ramp and pad conditions,
       - Arrange maintenance through Site management.
     - Poor visibility
       - Fog / heavy rain
       - Smoke

  b) Pad/floor conditions are not to specified tolerances,

  c) Incident or tasks requires an area to be isolated to complete the task safely,

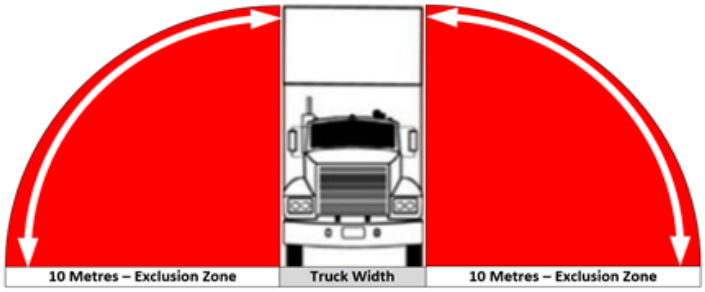
  d) Unloading a vehicle deemed “Unsafe”,

- Inform Site Supervisor when Tip Head is becoming congestion with incoming vehicle.

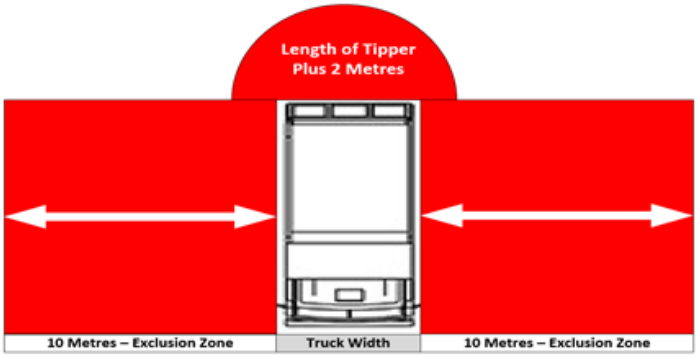
Figure 1 – Tip Head Directions

Figure 2 - Distances to Be Maintained

Figure 3 – 10 Metre Rule



Front View – Safety



Top View – Safety Zone

Figure 4 – Visual of 10 Metre Clearance Zone

Reference Documents
SOP Load Inspector Tasks
RI SWMS Load Inspector

AFQ SWMS Load Inspector
SOP UHF Radio Communication
SOP Handling Unsafe Loaded Trucks
SOP Raw Feed Acceptance Criteria
Tip Head Risk Assessment

4.2. Tip Head Inspections

The Load Inspector is responsible for completing visual checks of the Tip Head to ensure the site conditions are safe for employees and members of the public.

Load Inspector:

- Shall check all action point on the 'Load Inspector - Daily Logbook' (figure 5), for each day of the work week, and shall be signed off by the Site Manager/Supervisor,
- Shall immediately inform the Site Manager or Supervisor of any non-conformance items, and shall ensure rectification on Non-conformance,
- Close Tip Head or partial areas in consultation with Site Manager/Supervisor if needed for reasons of:
  - Weather conditions,
  - Pad/floor conditions are not to specified tolerances,
  - Incident or tasks requires an area to be isolated to complete the task safely.

If a significant change to the Tip Head is needed or planned, then the load Inspector shall complete a Risk Assessment in consultation with site management. The Risk Assessment shall be recorded on the AFG Risk Assessment Tip Head form. Following the approval of changes to the Tip Head, a toolbox will be held to discuss the changes and actions implemented with the relevant workgroup.

Alex Fraser
Load Inspector - Daily Log Book

This log must be completed for each day of material acceptance and handed to the supervisor on completion of each week

Location:			Week Commencing:			
Tick each box that complies with requirement			Cross each box that does not comply			
	Check					
Daily Check Tasks	**1st Day**	**2nd Day**	**3rd Day**	**4th Day**	**5th Day**	**6th Day**
Date:						
Clear Load Inspector Initials						
Tip Face free from undercuts (check on way)						
All floors are level (84mm over 2.4 m)						
Bunding construction adequate in height						
No steel protruding from floor						
Full tiphead visible from Load inspector hut						
If any of the above conditions are not met, the area must be closed off and site management advised						
Tip head not congested						

Figure 5– Load Inspector – Daily Log Book

Reference Documents
Load Inspector Daily Logbook Checklist
SOP Load Inspector Tasks
Risk Assessment Tip Head

4.3. Weather and Site Conditions

The Load Inspector is responsible for monitoring weather and site conditions that may impact the safety of employees and members of the public. The management of visible dust onsite is another major concern, as dust impacts the neighbouring properties and can result in Environmental fines. The Load Inspector shall visually monitor dust generated onsite, and advice the Site Manager that water suppression is required, due the environmental conditions.

Site Manager will inform the Load Inspector of forecasted weather fronts, in ordered to maintain and plan for safe tip head conditions.

The following action points shall be considered:

Table 2 – Weather and Site Conditions

Condition	Action
Dust generated by wind, vehicle or mobile plant movement	Advise Watercart to spray down effected area Dousing bar must be operational (Victoria) – If dousing is out of service, an additional watercart may be needed to manage dust suppression.
High Winds – Speed of 40 km/h or greater	The Tip Head shall move to a watch and act status. Site management is to be notified. • Consultation between Site Management and Tip Head personnel, regarding actions to be implemented shall be noted in the Tip Head Logbook. Additional items to consider; • Monitor wind strength and direction to assess actions that may be required – refer to figure 6 Willy Weather app, • Alter tipping direction for wind direction, • Restrict higher risk tasks (i.e. Semi Tippers, Quad Dogs), • Restrict number of trucks tipping on Tip Head, • Close Tip Head to Tipping
Wet weather conditions	• Construct and maintain access ramps to a ensure vehicles can get to the Tip Heads in all weather conditions, through maintenance of ramps.
High volume of Incoming Raw materials	Consult with Site Manager / Supervisor in actions to be taken; • Hold trucks back from entering Tip Head, • Implement additional machine.

Reduced Visibility	Limit traffic entering Tip Head • Reduced visibility due to fog or smoke

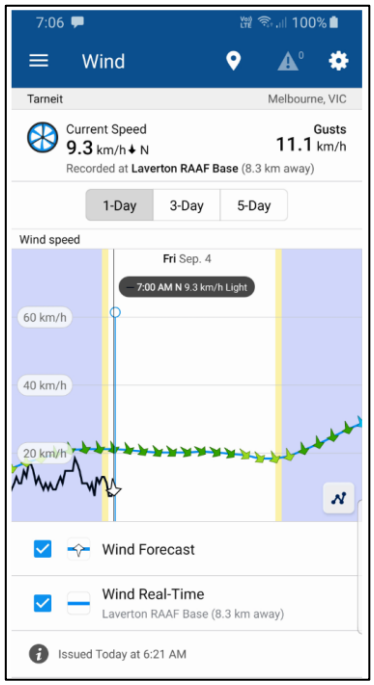


Figure 6– Willy Weather – Weather forecast app

4.4. Load Inspections

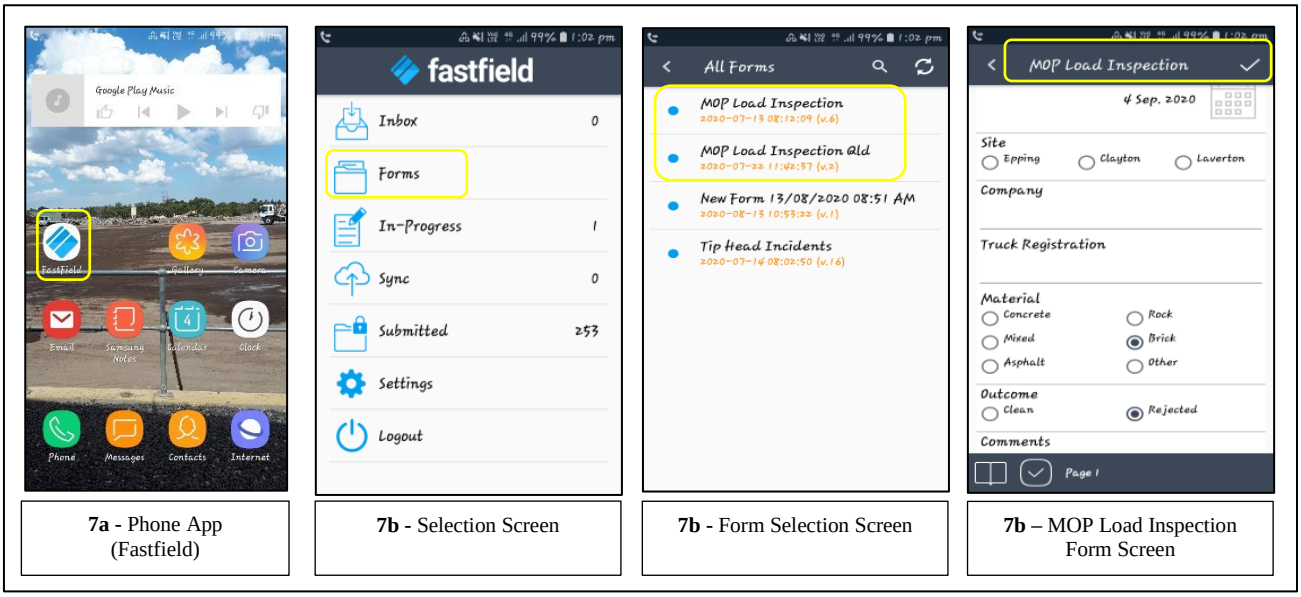
As raw feed materials containing asbestos can be mixed in with general incoming demolition materials, it is extremely important that visual checks of the incoming loads are conducted by the Load Inspector. Remembering, that asbestos containing materials (ACM) comes in many forms, and there are many other products that can be confused as ACM items. Therefore, any items within the load that the Load Inspector deems to look as though the product containing asbestos (ACM), the load Inspector shell reject the incoming load.

ACM can be harmful to your health if exposed to airborne fibres through the crushing process. Visual inspection of all raw feed materials is required to ensure banned or contaminated materials are either reloaded onto the vehicle that tipped off the load, isolated when identified, safely removed from the processing stream, and when possible.

4.4.1. Random Load Inspections

Each site shall perform random inspections on incoming loads to monitor compliance of raw material acceptance.

- The frequency of Random Inspections is a minimum of four inspections for each shift for each site.
- The Member of Public, ACM Load Inspection shall be recorded using the Fast field phone application. **Figure 7**



7a - Phone App (Fastfield) | **7b** - Selection Screen | **7b** - Form Selection Screen | **7b** – MOP Load Inspection Form Screen

Figure 7 - Member of Public, ACM Load Inspection Register

4.4.2. Rejected Load from Inspections

Where a load is rejected through an inspection, the Load Inspector shall take a photo of the load that clearly shows the source of the banned or contamination material or item. These photos are used as evidence to support Alex Fraser waste acceptance criteria when corresponding with the customer, tables 3 and 4.

Table 3 – Unsuitable Waste

Unsuitable Materials			
• Rubber tyres	• Plastic	• Flammable liquids	• Fire extinguishers
• Timber	• Liquid wastes	• Animals	• Gas bottles
• Explosives	• Plant matter	• Batteries	• Household wastes
• Textiles	• Paper	• Plaster board	• Regulated wastes
• Any materials containing fire ants must be rejected			

Table 4 – Banned Waste

Banned Materials - Examples of asbestos include:	
Asbestos	Asbestos Containing Materials: ▪ Fibrocement sheeting ▪ Vinyl & linoleum flooring ▪ Vinyl & linoleum flooring ▪ Pipe lagging ▪ Gaskets ▪ Caulking & expansion joint materials
Refer Asbestos Handling & Disposal SOP	

Reference Documents
Random Load Inspection
Member of Public, ACM Load Inspection Register

5.0 Unsafe Load

5.1. Load Inspector Deems the Load Unsafe to Tip-Off

- Deems the Load ‘unsafe’:
  a) Instructs driver to move to a safe area,
  b) Completes Driver Indemnity Form,
  c) Completes Take 5 with Tip Head machine Operator,
  d) Set up safety barriers around truck and excavator for duration of unload process (if required),
  e) Unloads tipper body with excavator, either a partial or the whole load as deemed by machine operator,
  f) After load has been removed safety, driver instructed to the Tailgate closing area, off the Tip Head.

Reference Documents
SOP Load Inspectors Task
Driver Indemmnity Deed
SOP Handling Unsafe Loaded Trucks
SWMS Assisting Trucks in Closing Tailgates

6.0 Tip Head Design

6.1. Tip Head Plan

- Each site shall have a board with the Tip Head image (Overlay) that can used to 'marked-up' condition or changes relevant to the Tip Head as required. Whiteboard markers shall be used to highlight any changes to site conditions.
- Risk assessment for truck tipping areas at the Tip head:
- Area to identified and marked on the Site Map, indicating minimum area for tipping. Refer to Figure 8 - Example of Site Map with Notes

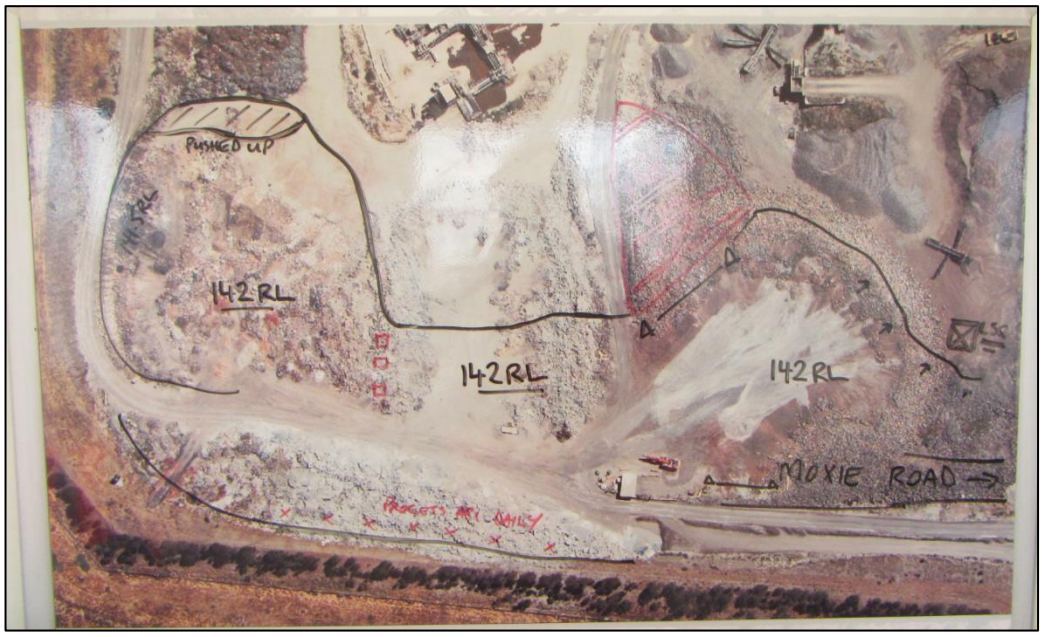


Figure 8 - Example of Tip Head Plan with Notes

The Load Inspector will manage the tip head in accordance with the Tip Head Plan. The plan will detail the working direction and stocking direction for the various raw feeds. The plan is the accountability of the Site Manager and will clearly articulate how the Tip Head will be constructed and managed.

Each site will have a Tip Head Plan available at the Load Inspectors Station. The plan articulates the working methodology for the tip head. The plan is used at daily tip head meetings and other communication forums to ensure all personnel involved in the tip head are aware of how the tip head is to be constructed and worked.

The plan should be agreed monthly for each individual site and articulates clear guidance as to show the sites tip head working methodology. The plan is used at Tip Head meetings and other communication forums to ensure all site personnel are aware of how the tip head is being managed. The plan will reference tip head levels and areas to ensure compliance.

The plans will be well documented and allow the tip head history to be monitored so raw feed stockpiles areas are preserved for future processing.

The Tip Head Plan drawing shall be marked up indicating as a minimum:

- Any areas where remedial works are required,
- Areas that needed to be barricade off or restrict access to members of the public,

- Tipping areas,
- The RL's that are to be maintained on each pad (i.e. Rock, Concrete, Class 4, RAP), refer to *Figure 8 Example of Tip Head Plan with Notes*.

6.2. Tip Head Extension

The raw feed tip head is a very dynamic area and changes depending on the quantity of incoming raw feed as well as the rate at which the raw feed is crushed for sales and sales stocking. The ability of the raw feed stockpiles to accommodate surges in both incoming rates and crushing rates, while still providing an efficient and safe area for customers and operations to function is paramount. Vertical stockpile extensions as well as horizontal extensions require planning to ensure standard compliance.

Any planned raw feed extension must complete a risk assessment to ensure conditions are maintained.

Reference Documents
AFG Tip Head Extension Risk Assessment

6.3. Communication

Communication between all vehicles and mobile plant is essential to maintaining a safe work environment on the Tip Head. All mobile plant, heavy and light vehicle on the Tip Head must have two-way radios on relevant UHF channel (**Table 5**), prior to accessing the Tip Head.

Vehicle drivers are instructed to listen to their two-way radio for further instruction from the Tip Head machine Operators, on where to position their vehicles and tip off their load.

If positive radio communication between parties cannot be established, then the vehicle or mobile plant trying to initiate communication, shall wait until a confirmation on proposed action.

Table 5 – Two-way Radio Channels

Site	UHF TWO-WAY RADIO CHANNELS			
	Tip Head	Sales Floor	Crushing Plant	Pugmill
Clarinda Recycling (Vic)	21	68	19	-
Epping Recycling (Vic)	21	68	19	-
Laverton Recycling (Vic)	20	68	19	67
Archerfield (QLD)	19	-	-	-
Nudgee (QLD)	19	-	-	-

6.4. Safe Clearance between Equipment

The minimum safe distance is as follows:

- 10m clearance between pedestrians and any moving Heavy Mobile Equipment,
- 10m clearance between pedestrians and any moving Heavy Vehicle,
- 10m clearance between Light Vehicles and any moving Heavy Mobile Equipment

Drivers shall remain within 1.5 metres of their vehicle when on the ground, opening the tailgate(s).

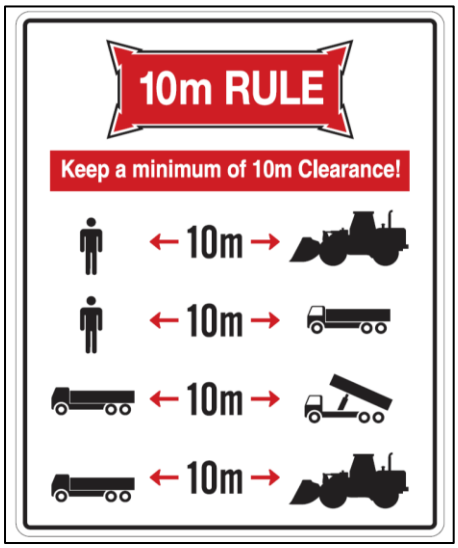


Figure 9 – 10 Metre Rule

Figure 10 - Distances to Be Maintained

Reference Documents
SOP Load Inspectors Task
Driver Indemmnity Deed
SOP Handling Unsafe Loaded Trucks
SWMS Assisting Trucks in Closing Tailgates

7.0 Heavy Mobile Equipment and Operators

7.1. Heavy Mobile Equipment

Powered Mobile Plant must be fitted with adequate safety and warning devices including:

- Reversing alarms and cameras
- Lighting
- Flashing lights
- Two-way radios
- Mirrors

These devices must be maintained in working order, including keeping all windows clean.

7.2. Machine Operators Responsibilities

Before commencing operations for the shift, each The Tip Head Equipment Operator must:

- Complete daily inspections of their machine to ensure their machine in a safe condition for operation,
- Complete an inspection of the Tip Head, with the Load Inspector and discuss the plan for the shift.
  - Any areas that require action to fix a hazardous condition (i.e. sloping ground, soft/muddy, etc.), shall be “marked” up on the Tip Head Plan (Refer 6.1), and the area(s) shall be barricaded off to prevent tipping in those areas.

Please refer to the ***“Wheel Loader and Excavator Standard Operating Procedures List”*** for all other responsibilities of the Wheel Loader and Excavator Operators.

7.2.1. Incoming Loads

The Tip Head equipment operators are responsible for the follow actions:

- Maintaining positive two-way communications with Load Inspector, trucks and other mobile plant on the Tip Head,
- Maintain the 10-metre safe clearance distance (Figure 11),
- Give clear directions to drivers on tip-off locations,
- Stop drivers from tipping off their loads, if:
  a) The truck cabin is not aligned to the tipper body (Semi Tippers - Figure 12), *or*
  b) If Operator notices the tipper body looks to be leaning with too much angle from the centreline of the chassis (Figure 12).
- Assisting in the removal of materials for tipper bodies, deemed an 'unsafe load', by the Load Inspector,
- Visual check of load contents for banned or other restricted materials after load is tipped off,
- Informing Load Inspector of contaminated loads found during floor cleaning/push up,
- Reloading of banned or other restricted materials when identified.

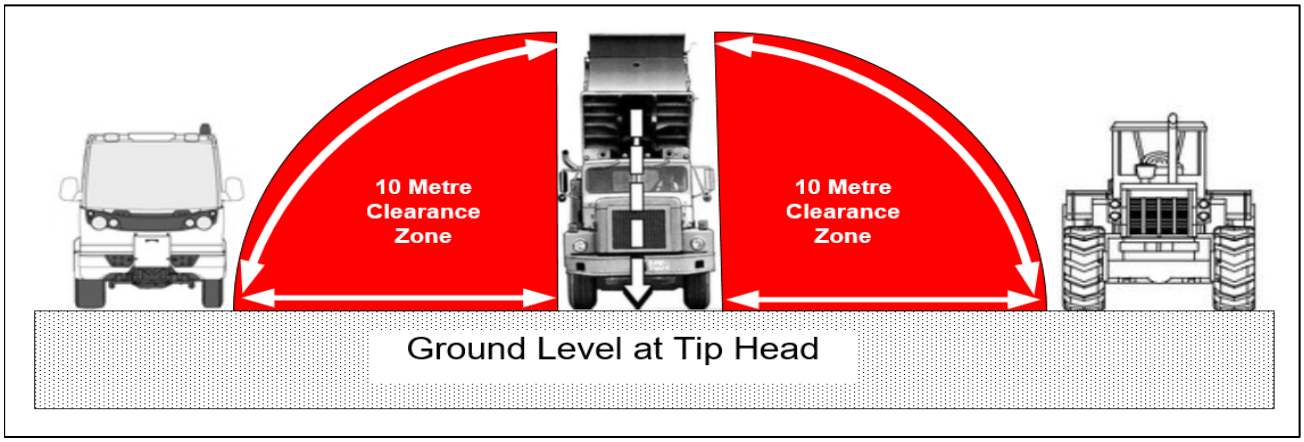


Figure 11– Maintain a 10 Metre Clearance between Trucks and Mobile Equipment

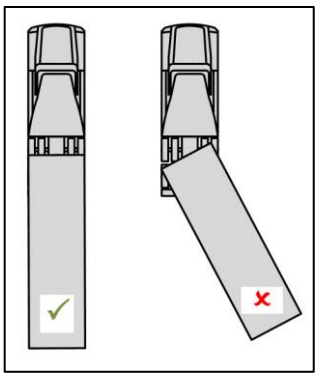


Figure 12 – Semi Tipper (Prime mover, not Aligned with Tipper Body

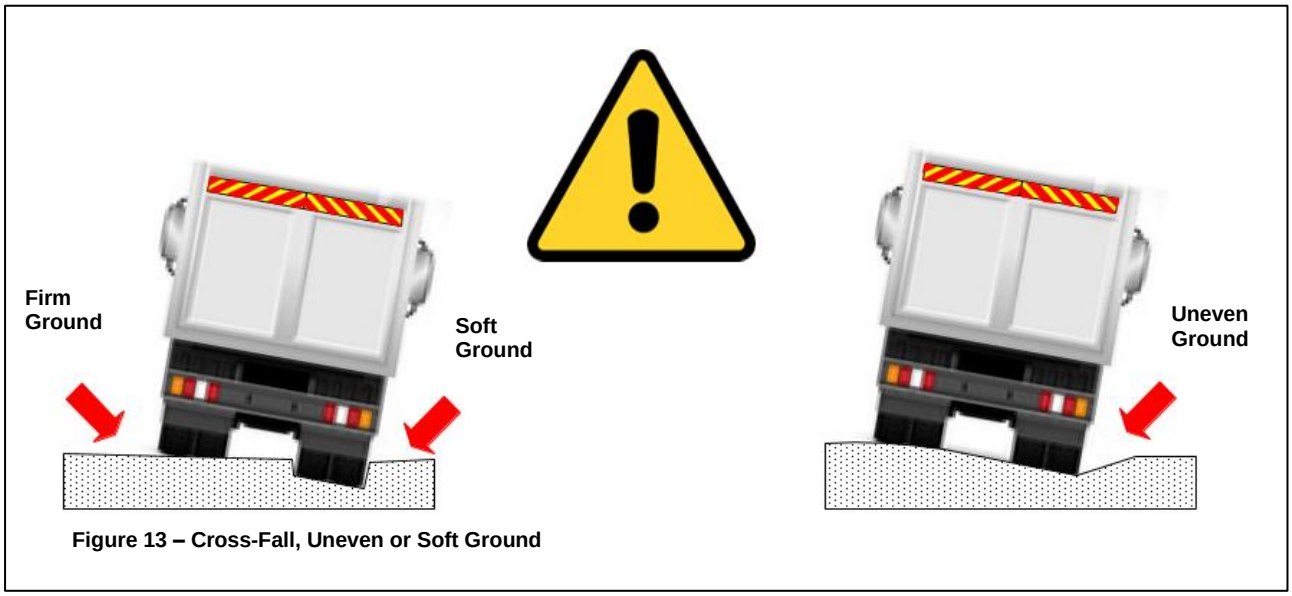


Figure 13 – Cross-Fall, Uneven or Soft Ground

Reference Documents
RI_SWMS_Wheel_Loader_Operation
Wheel_Loader_SOP
SOP Handling Unsafe Loaded Trucks
SWMS Assisting Trucks in Closing Tailgates

7.3. Maintain Tip Head Floor

The Tip Head equipment operators are reasonable for the follow actions:

- Maintain floor level to site specific design, including stability on Tip Head Pad
  - a) A Cross-fall slope of greater than 84mm over any 2.4 metres identified on the tipping floor, shall trigger a hazard report to be raised immediately by notifying Site Management. Site Management shall give instructions on immediate actions to be taken to mitigate the hazard. 84mm over any 2.4 metres equates to an approximate a 2^0 degrees slope.
    - Where a cross-fall moves greater than 84mm over 2.4 metre distance, a hazard report must be completed and submitted immediately to the Site Manager/Supervisor.

Figure 14 – 84mm over any 2.4 meters equates to an approximate a 2^0 degrees slope

b) A Cross-fall slope of greater than 126mm over any 2.4 metres identified on the tipping floor, shall trigger an incident report to be raised immediately by notifying Site Management. The area shall be isolated immediately from the Tipping Public (MOP). 126mm over any 2.4 metres equates to an approximate a 3^0 degrees slope.

Figure 15 – 126mm over any 2.4 meters equates to an approximate a 3^o degrees slope

- The Load Inspector is responsible for closing or preventing access to that sections of the Tip Head.
- Report remedial actions required to the Load Inspector for inclusion in the Daily Logbook Checklist,
- Maintain a safety bund or windrow between the Tip Head Floor and the Tip Face, the height of a safety bund or windrow must be at least half the diameter of the tyre of the largest vehicle to use onsite and approximately 2 metres from the Tip Face, Figure 16.

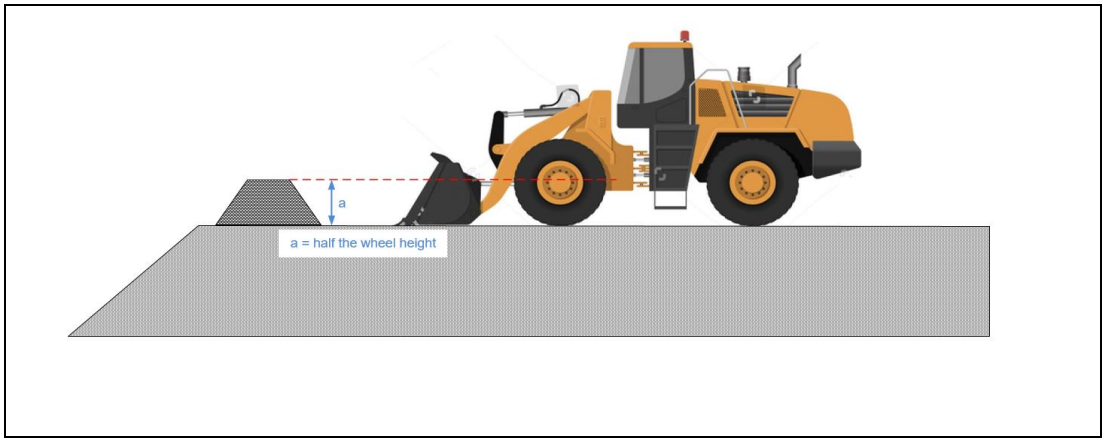


Figure 16 – Safety Bund / Windrow between the Tip Head and Tip Face

Reference Documents
Load Inspector Daily Logbook Checklist
SOP Load Inspector Tasks
Risk Assessment Tip Head
AFG Traffic Management Standard

8.0 Global Positioning System (GPS)

8.1. Site Pulse (GPS)

To assist in managing Tip Head Levels, each site has a wheel loader fitted with a GPS positioning system, which can give accurate 'Live' data to the Operator while operating the machine. Live data refers to either a plus or minus measurement from a given data reference level (i.e. Benchmark / RL) (Figure 17).

For setup and operation of the GPS Trimble System, refer to the GPS Trimble Operation Manual.

The Trimble Operation Manual contains the following:

- Setting up unit
- Operation
- Data Recording
- Exporting Data
- Mapping Reports – Tip Head Contours

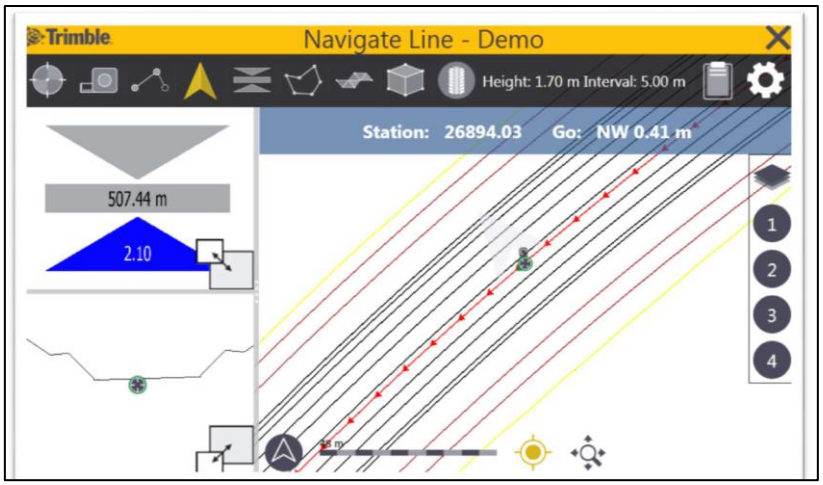


Figure 17 – Level indicator on GPS Trimble Tablet

8.2. Contingency for Tip Head Loader Breakdown (GPS Trimble System)

As machine breakdown is unavoidable, each state will have one additional back-up GPS unit, which can be mounted onto a site-based vehicle as a backup to enable recording of data to allow the site to still provide the Tip Head loader operator with a tool to determine the level of the Tip Head floor. The back-up GPS units shall be kept at a central location between all sites. This will allow the GPS unit to be transferred quickly to the site that requires the back-up GPS unit.

Each Site Manager will arrange for a site-based utility to be setup in preparation to be able to install the back-up GPS unit at short notice.

If GPS units are down for more than 48 operational hours, then other arrangements need to be made, (i.e. Hire or use of handheld laser level).

- Where a handheld laser level configurations is used, then the area to be surveyed must be isolated from mobile traffic to protect the personnel on the ground.
- Each site shall have a benchmark on the Tip Head as a reference point for use when required to use a handheld laser level. (refer to figure 18 – Example of a Benchmark / Reference Level (RL))

- Areas that are outside of the required tolerances, shall be identified; risk assessed; isolated to prevent vehicles from tipping if necessary; and findings recorded on the Load Inspectors Daily Logbook Checklist.
- Changes to Tip Head traffic movement or areas requiring isolation from MOP's while remedial actions to mitigate hazards shall be marked up on the Tip Head Site Plan. Site Management shall discuss how to manage the Tip Head with Tip Head Personnel.

Figure 18 – Benchmark / RL Example

There are various terms used relating to a given level as a reference in surveying. Each of the following terms is just a different way of expressing the height or elevation above the point adopted as the site datum (starting point) for the purpose of establishing and maintaining levels.

- RL = Reference Level (i.e. RL 142 metres above sea level)
- BM = Benchmark (i.e. BM 142 metres above sea level)
- TBM = Temporary Benchmark (i.e. TBM 142 metres above sea level)

9.0 Referenced Documents

Reference Documents	
AFG Traffic Management Standard	http://connect/ControlledDocuments/Operational%20documents/AFG_Traffic_Management_Standard.docx
Site Traffic Management Procedure	http://connect/ControlledDocuments/Operational%20documents/Site_Traffic_Management_Procedure.docx
AFG Risk Management Standard.	http://connect/ControlledDocuments/Operational%20documents/AFG_Risk_Management_Standard.docx
AFG HESQ Risk Matrix	http://connect/ControlledDocuments/Operational%20documents/AFG_HSEQ_Risk_Matrix.xlsx
AFG Risk Management Process Flowchart	http://connect/ControlledDocuments/Operational%20documents/AFG_Risk_Management_Process_Flowchart
AFG Incident Report Form	http://connect/ControlledDocuments/Operational%20documents/AFG_Incident_Report_Form.docx
AFG Incident Response Guide for Managers	http://connect/ControlledDocuments/Operational%20documents/AFG_Incident_Response_Guide_for_
Incident Notification Matrix	http://connect/ControlledDocuments/Operational%20documents/AFG_Incident_Notification_Matrix.xlsx
AFG Incident Management Guide	http://connect/ControlledDocuments/Operational%20documents/AFG_Incident_Management_Guide.docx
AFG_Asbestos_Management_Procedure	http://connect/ControlledDocuments/Operational%20documents/AFG_Asbestos_Management_Procedure.docx
AFQ_Load_Containing_Asbestos_NAV_Process	http://connect/ControlledDocuments/Operational%20documents/AFQ_Load_Containing_Asbestos_NAV_Process.docx
RI SWMS Load Inspector	http://connect/ControlledDocuments/Operational%20documents/RI_SWMS_Load_Inspector.docx
AFQ SWMS Load Inspector	http://connect/ControlledDocuments/Operational%20documents/AFQ_SWMS_Load_Inspector.docx
SOP UHF Radio Communication	http://connect/ControlledDocuments/Operational%20documents/SOP_UHF_Radio_Communication.docx
SOP Load Inspector Tasks	http://connect/ControlledDocuments/Operational%20documents/SOP%20Load%20Inspector%20Tasks.docx
Load Inspector Daily Logbook Checklist	http://connect/ControlledDocuments/Operational%20documents/Load%20Inspector%20Daily%20Log%20Book%20Checklist.docx
Tip Head Risk Assessment	http://connect/ControlledDocuments/Operational%20documents/AFG%20Tip%20Head%20Risk%20Assessment.docx
Tip Head Extension Risk Assessment	http://connect/ControlledDocuments/Operational%20documents/AFG_Tip_Head_Extension_Risk_Asessment.docx
Driver Indemmnity Deed	http://connect/ControlledDocuments/Operational%20documents/Driver_Indemnity_Deed.docx

SOP Handling Unsafe Loaded Trucks	http://connect/ControlledDocuments/Operational%20documents/SOP_Handling_Unsafe_Loaded_Truck.docx
SWMS Assisting Trucks in Closing Tailgates	http://connect/ControlledDocuments/Operational%20documents/RI_AFQ_SWMS_Assisting_Trucks_In_Closing_Tailgates.docx
AFG Safe Use of Mobile Phones Standard	http://connect/ControlledDocuments/Operational%20documents/AFG_Safe_Use_of_Mobile_Phones
AFR Tip head Daily Incident Report Register	http://connect/ControlledDocuments/Operational%20documents/AFR%20Tiphead%20Daily%20Incident%20Report%20Register.xlsx
Weighbridge Incoming Process	http://connect/ControlledDocuments/Operational%20documents/Weighbridge_Incoming_Process.docx
RI_SWMS_Wheel_Loader_Operation	http://connect/ControlledDocuments/Operational%20documents/RI_SWMS_Wheel_Loader_Operation.docx
Weighbridge Standard Operating Procedure List	http://connect/ControlledDocuments/Operational%20documents/RI_Weighbridge_Operator_SOP_List.docx
Wheel_Loader_SOP	http://connect/ControlledDocuments/Operational%20documents/AFG_Wheel_Loader_SOP.docx