

FPS Restricted Zone Handbook

I am not a fan of these comic book type illustrations as I think they automatically trigger the brain into thinking fun rather than 'someone may get killed if I don't think about this'. So, I maybe a bit biased!!

The guide starts with planning, roles and responsibilities and then runs straight into each machine / discipline. This is fine but, for me, a bit lazy. I think it needs to firstly address the WHY?

We are trying to change people's behaviours (very much like social distancing) through a 'reminding system' of barriers which needs to be consistently in place across the federation. Some pictures have barriers, others don't and I'm not sure why? The barriers (whatever they look like) demarcate the restricted zone, which is what we are trying to protect, if we protect the zone then the people and plant will be fine.

A barrier is a reminder, not a physical protection. These barriers are about keeping people and plant (piling and other trades) out NOT keeping the plant item in. Inexperienced people may not spot the hazard, experienced people may become complacent.

Protection against complacency. We become complacent when we do the same task repetitively (piling), we switch off from our environment which means we can switch off from a hazard.

Planning - On a new project there will always have a pre-start plan and programme in place. However, once on site, the plan and the programme may constantly change and therefore the need for regular, even daily planning / updating is required.

The guidance under the planning section is good, but its more 'how it works' rather than planning. I think the layout could be change to make it less wordy.

RESTRICTED ZONE

The design, layout and operation of working areas are key to ensuring that people are segregated from the risk of:

- Collision or entrapment from mobile plant or equipment;
- And, the risk of falling objects striking an individual working within the working area.

This booklet has been produced as a guide for all FPS member companies to assist them in setting up and managing effective working areas and restricted zones that may have people and various items of plant and equipment working in and around them.

FEDERATION
of PILING
SPECIALISTS



PLANNING:

When planning the work, restricted zones must be considered to ensure our staff as well as others are kept out of harm's way. A restricted zone is an area where only authorised persons can enter or stand during normal operations. It is important to remember there is a serious risk of injury or death from being struck by falling objects or from moving plant and equipment within a restricted zone.

⊗ These are identified in metres (m) and by the red zones within this booklet and can only be entered by authorised persons, and only once the plant or equipment is isolated and in a safe condition. The person who wants entry can only enter from the "green zone" and following a "Thumbs up" see below.

⊗ Depending on the ground engineering technique, spoil may be produced and will need to be stored nearby pending removal or loaded directly into tippers etc. These areas are still classed as restricted zones and still pose a serious risk of injury. These are identified by a black and white hatched zone within this booklet.

! On occasions, authorised personnel will need to enter a restricted zone to carry out

various tasks that are involved in our works. Depending on the site layout there may be other hazards to consider such as overhead structures or attendant equipment such as cranes or excavators or working nearby. These areas are identified in metres (m) and by amber zones within the workbook. The person who wants entry can only enter from the "green zone" and following a "Thumbs up" see below.

⊗ There may also be a requirement for authorised personnel to stand close to piling equipment, so they can assist in the connection of tooling or casings etc. These areas are identified in metres (m) and by a hatched amber and red zone in the workbook. The person who wants entry can only enter from the "green zone" and following a "Thumbs up" see below.

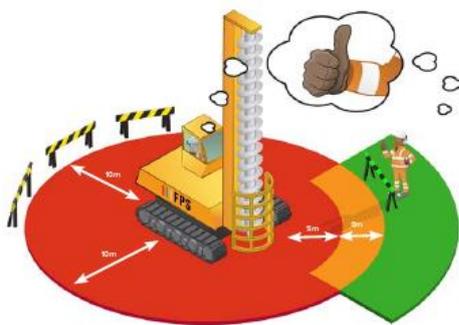
✓ As a reminder, before entering any of the areas above the authorised person must always approach and stand in an area with optimum visibility and receive a "thumbs up" off the plant operator before entering. These areas are identified as green within this book.

The Roles and responsibilities section on the 2nd page could be made much smaller and less repetitive so the operatives are more likely to read it.

Moving onto the plant items:-

The rig pictures are a bit miss leading. I understand that you cannot account for all rig types but there are more CFA and Rotary rigs operating with the cab tight up to the side of the mast obscuring the view to one side than there is with the cabs as shown. The differential between the Red / Amber and Green zones is the operator's visibility so I think the illustrations need to make this point.

CFA/RIGID INCLUSIONS RESTRICTED ZONE



- 10m as a minimum is huge, especially behind the machine. Not sure why it is 10m behind when the rotary zones are shown tight to the ballast. Is it to place the cage?
- The 5-10m does not need to be in the amber zone description.
- Would be useful to show an excavator there too.

DRIVEN PILING RIGS RESTRICTED ZONE



- ✗ **Red Zone:** The rig must be isolated (isolated means the rig cannot slew or track and the hydraulics are not able to operate) to prevent movement or rotation before entering this area. Authorised personnel only (rig attendant).
- ! **Amber Zone:** 9m piling exclusion zone. Authorised personnel only (rig attendant). Authorised persons can enter only when driver/operator has acknowledged you and it is safe to do so. Do not enter the Red Zone from this area.
- ✓ **Green Zone:** Drivers sight line (safe approach) optimum rig attendant position.

Note: The measurement for the Red Zone starts from the widest part of the machine-auger/tracks.

- I'm not sure the reasoning behind the green and amber zones. Is it driver visibility or is it being hit by the piles? To me it is unclear.
- The '9m piling exclusion zone' does not need to be in the Amber description.
- Why no barriers anywhere??

LDA RESTRICTED ZONE



- Would be useful to show an excavator there too.

D WALL RESTRICTED ZONE



-  **Red Zone:** No persons should enter this zone during operation. Authorised personnel only (rig attendant). 5m radius.
-  **Amber Zone:** Authorised persons can enter only when driver/operator has acknowledged you and it is safe to do so.
-  **Green Zone:** Rig attendant must be within the line of sight to the operator at all times. Give the 'thumbs up' recognition to the rig operator and receive a positive 'thumbs up' response before entering the Red Zone. Ideally the grab should be grounded before entering Red Zone.
-  **Black and White:** Auger spin off area/Tipper loading area.

Notes: Green Zone illustration may differ depending which side the cab is located (ie green = cab side).

This one looks the best and most complete, an excavator would complete the picture fully.

CRAWLER CRANE RESTRICTED ZONE



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-  **Red Zone:** No persons should enter this zone during operation. Authorised personnel only (slinger/signaller). 5m radius. Means of communication (thumbs up, verbal or radio contact) must be maintained at all times. Never walk beneath a suspended load.
-  **Amber Zone:** Authorised persons can enter only when driver/operator has acknowledged you and it is safe to do so.
-  **Green Zone:** Slinger/signaller must be within the line of sight to the operator during lifting operations. Give the 'thumbs up' recognition to the crane operator and receive a positive 'thumbs up' response before entering the Red Zone. Ideally the load should be grounded before entering Red Zone.

Note: Green Zone illustration may differ depending which side the cab is located (ie green = cab side).

Not a very helpful illustration. I have no idea what the amber zone is for. Again no barriers anywhere?

MEWP (BOOM) RESTRICTED ZONE



Red Zone: Keep out of this area at all times. 5m Restricted Zone, except in emergency situations.



Green Zone: Always signal 'thumbs up' to the plant operator and receive a positive 'thumbs up' response before entering Red Zone.

Note: Consideration should be made to barrier off the area beneath the boom and basket.

Overhead obstructions must be considered when platform is raised.

I think it needs to define the WHY?:-

5m around the machine to stop it becoming unstable from accidental impact from other plant (it is unlikely to slew into something).

Zone beneath the basket should not be optional.