



<b>Subject:</b>	Health & Safety IT
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## Assignment 1 (25%) - Microsoft Forms

<b>Issue Date:</b>	As stated on Moodle
<b>Submission Date:</b>	As stated on Moodle

### Assignment Outline

In this assignment you will create an on-line survey to capture the prestart checks undertaken by a site dumper operator. The platform for the on-line survey is to be Microsoft Forms, which is available through your Office 365 Student Subscription.

### Background Information

The HSA has a published document for Site Dumper Prestart checks. This document is available in the assignment pack, and is available for download [here](#). An image is also shown in Fig ??

### Usability

Your final survey is intended to be deployed on site, for usage checks by drivers. As such you should consider the following in the design and implementation of your survey:

- Questions should be short and easy to read
- Responses should be clear and unambiguous

# Site Dumper Prestart Checks

### External Walkaround Checks

- Check that the vehicle is level & check for any visible damage to the machine
- Check that tyres are correctly inflated & are not damaged (e.g. no bulges, tears etc.)
- Ensure wheel nuts are in place, correctly fitted & secured
- Remove any obstructions & loose material from the accelerator, footbrake & footwell (floor) area
- Check skip for damage & ensure front skip pins are in place & undamaged
- Check decals in place & legible
- Check underneath the vehicle for fluid leaks
- Check hydraulic rams & pipe/hose are in good condition, secured in place & not leaking
- Check the fuel cap & hydraulic cap are in place & in good condition
- Check when cold engine oil, coolant, water, brake fluid, transmission oil & hydraulic oil for levels & leaks etc
- Check steps & hand holds are in good condition
- For dumpers with cab ensure suitable mirror(s) (including convex mirror) are secure & aligned correctly

### Load Security

- Ensure the vehicle is loaded within load limits
- Ensure the skip is fully lowered & the load is distributed evenly & doesn't block the driver's view of the road ahead

### If intended to be used on Public Roads

- Check that all lights & indicators are in place, undamaged, clean & in good working order i.e. headlights, rear lamps, stop lights & number plate lights
- Ensure registration plate is secure, clean & clearly visible
- Ensure rear view mirrors are undamaged & clean (on dumpers with cabs)
- If the dumper capacity is less than 3m<sup>3</sup> ensure you do not travel loaded more than 1km on a public road to & from the site you are working on
- If the dumper capacity is greater than 3m<sup>3</sup> with a travelling speed capability less than 55kph ensure you have a Local Authority special permit with you when you travel any distance with a load on a public road



### Driving Position Checks

- Ensure seat is properly secured to machine
- Check safety belt(s) are accessible, in correct position & working correctly
- Turn on engine & check all instrument gauges & warning lights working
- Check handles for all hand controls are secure & that controls are working

- Check steering, handbrake & footbrake are working correctly
- Check reversing alarm & flashing beacons are in place & in good working order
- Ensure the windows are clean & wipers working properly (on dumpers with cabs)
- Operator should wear a high visibility vest/jacket & safety helmet (on dumpers with no cab)

### Roll Over Protection

- Ensure adequate Roll Over Protection (ROPs) is securely in place (retrofitted ROPs must be CE marked to BS4744 & BS EN 13501)
- ROPs with a folding capability (the folded position used for limited headroom access only in controlled conditions e.g. on a solid level surface) must have the pins & spill keys securely in place

Note: Always consult with the manufacturer's manual and follow all checks required.



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Figure 1: Dumper Prestart Checks

- Where failures are detected by the operator, additional information should be captured

## Functionality

The following functionality must be included in your deployment:

- Driver Name and Employee Number
- Dumper Registration
- All items as per the HSA document
- Appropriate Branching to capture comments on failed checks
- A branch specifically implemented for 'Use on Public Roads'
- A specific multi line input field for group testing feedback.

## Testing

Testing of your deployment will be done in two stages

1. Author Testing - You should test your deployment rigorously before proceeding to the next stage
2. Group Testing - Your Deployment will be tested by all other members of the class, and you will be expected to test all other deployments.

## **Group Testing Feedback**

Group testing will be implemented to improve your deployment prior to final submission. All feedback is to be:

- Specific, meaningful & constructive
- Impersonal
- Process Orientated

## **Submission**

This is a relatively complex submission, that will comprise many parts. The parts are as follows:

1. Link to Microsoft Form (with a .txt file)
2. Screen-shots of the form before group testing, numbered appropriately
3. Screen-shots of the form after group testing, numbered appropriately
4. Excel file containing all responses, including comments from group testing

All parts are to be compressed into a single zip folder complete with logical sectioning. The link to the form URL can be included in a simple text file in the submission.