

Activity	DTH Vacuum Excavator Operations	Registration	
Task	To undertake Vacuum excavator operations as required by the project		
Prepared By:			
Reviewed by:			
1 – Communication & liaison			
DTH General Manager	Lee Castledine	01164291481 - 07715525911	
DTH Managing Director	Dave Green	01164291481 - 07715966148	
1a – Site location and contact details			
Contractor			
Contact			
Tel			
1b – Hire Dates:			
2 – Operatives contact details.			
Job Description	Company	Personnel	Contact Number
Vacuum Excavator Operator	DTH Plant Hire Ltd		
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Site to Provide			
<ul style="list-style-type: none"> • Site Induction • Welfare 	<ul style="list-style-type: none"> • First aid arrangements • Pre-task briefings 	<ul style="list-style-type: none"> • Safe working area • Sound Barriers/Barriers/debris netting 	<ul style="list-style-type: none"> • Traffic Management • Plant/People segregation
<ul style="list-style-type: none"> • Safe system & supervision/POC • PPE for their own staff 	<ul style="list-style-type: none"> • Clearly Marked out areas of Excavation • Removal of Hard surfaces for excavations 	<ul style="list-style-type: none"> • Waste disposal /safe spoil tipping area • Fuel/fueling up area 	<ul style="list-style-type: none"> • Sufficient lighting to work location (when applicable)

Minimum Gang Structure	
Structure:	The minimum gang structure for suction excavator is 2 persons .
PPE Requirements – Site Rules & Method Statement Requirements to Be Adhered to At All Times	
Hard hats	White Safety Helmet
Safety Footwear	Safety Boots with mid sole protection
Eye Protection, Either:	<ul style="list-style-type: none"> • Light eye protection (glasses) • Full face visor completes with impact safety goggles OR Mesh visor
Ear Defenders	Molds or Helmet mounted
Clothing	Must be clean (HV) High Visibility (FR) Fire Retardant, (AS) Anti-Static (ARC) Arc approved clothing supplied by DTH PLANT hire.
Gloves	Fire Retardant

Permit Requirements
Permit to Break Ground with specific areas of excavations and any known services categorized

1. Method of Work
Operation of a Vacuum Excavator to complete non-mechanical excavation of the ground.
2. Operator Allocation

In accordance with DTH plant hire safety mandate - CPCS Qualified Vacuum excavator always trained operators for operational procedures – CPCS A78F/E LGV (HGV driver)

3. Lone Working (Driver Only)

Lone working/operating of the Vacuum Excavator is strictly prohibited at DTH plant hire. In the event a Vacuum Excavator is requested by the customer (Driver Only) it is the **customers responsibility** to provide the second man. Labour provided **must** hold at minimum a General Site Operative qualification and it is the customers responsibility to provide full PPE as outlined in this MS.

ALLOWANCE MUST BE MADE FOR THE DTH DRIVER TO INDUCT PROVIDED LABOUR ON SAFETY PROCEDURES AND SAFE SYSTEMS OF WORK

4. Uncharted Services or Asbestos

In the event of coming across Uncharted services or Asbestos **all Vacuum excavating is to stop immediately, and the supervisor** is to be contacted.

- **STOP WORK**
- **REPORT**

5. Occupational Hygiene & Sharps

- Leptospirosis can be spread to Humans through water and soil contaminated with wild Animal Urine. Operators are **encouraged to wash hands thoroughly prior to Eating, Drinking, or Smoking.**
- In the event of discovering sharps (used Needles) All Vacuum Excavation works is to **STOP immediately** until the Area is clear and safe for Vacuum Excavator crew to continue.

6. Procedure Details

a) DTH plant hire Safety Rules, these rules underpin all that we do as we strive to create a safer work ethic.

- **Be fit for work.**
- **Report all unsafe events and conditions.**
- **Do not compromise safety for speed.**
- **Look out for each other and go home SAFE.**
- **Adhere to current government guideline on COVID-19.**

b) The client is to supply Red Diesel & Ad-blue

c) Vacuum Excavator Operators are not to exceed the maximum working depth of 1.2meters if the client requires a deeper excavation, the crew will need to carry out a Dynamic risk assessment with the supervisor of the area/ground to determine whether or not a box/shuttering/stepping or battering of the area is required. (Client to supply box or shuttering)

d) Vacuum Excavator crew are trained in plant vehicle marshaling and will assist each other as and when ONLY.

e) **On arrival at the working site**

- Site rules must be always maintained.
- The Vacuum excavator and supporting vehicle must be parked in a safe, responsible location and secured whenever being parked.
- Report to the site contact
- Attend the site induction if applicable – this could be a continuous hire.
- Receive a work specific pre-task briefing.
- Ensure there is a safe tipping location on site.
- Complete a point of work risk assessment for the work location, report any concerns.
- If safe to do so, proceed to the work location.
- Ensure Permit to break ground within an exclusion zone is briefed and you have a full understanding and signed before starting work.
- Complete the plant daily defect check list, report all defects, do not proceed unless safe to do so.
- Establish a safety exclusion zone, using barriers supplied by site.
- Do not start work, unless all the above have been completed, if you have any safety concerns, do not start work, and speak to the site supervisor or your line manager.

f) **Vacuum Excavator Operational Procedures**

- Operator training to a recognized national standard CPCS
- Operators to comply with training and manufacturer information at all times.
- Plastic vacuum nozzle is a mandatory requirement for all vacuum excavator operations.
- **Insulated tooling is a mandatory requirement** for all Vacuum excavator operations.
- **All tooling and remote controls must be stored in a secure location when not in use.**
- Operating the Vacuum nozzle as a digging tool or operating an Ike's (rotating drill) attachment to boom) is strictly prohibited at all times.
- **If Slew restrictors required, please speak to trained operators.**

g) **Vacuum Excavation Safe Working Area – Exclusion Zone**

- **A work exclusion zone must be in place prior to any work commencing.**
- The exclusion zone is required to protect the safety of, other workers, members of the public and the Vacuum excavator operators from other work activities on site.
- The exclusion zone must be clearly identified, preferably with barriers that provide a physical barrier to exclude third parties. Contact the site supervisor or your line manager if you have any concerns.
- The exclusion zone must include enough area, to provide adequate protection.

- It is the **sites responsibility** to provide (Task specific) Sound barriers, Debris netting or Barriers.
- All work activities must stop, and the Vacuum excavator made safe and isolated, if personnel other than the operators are required to access the exclusion zone.
- Only authorized personnel with correct PPE can enter the exclusion zone.
- **Work must not proceed, until the exclusion zone is established.**

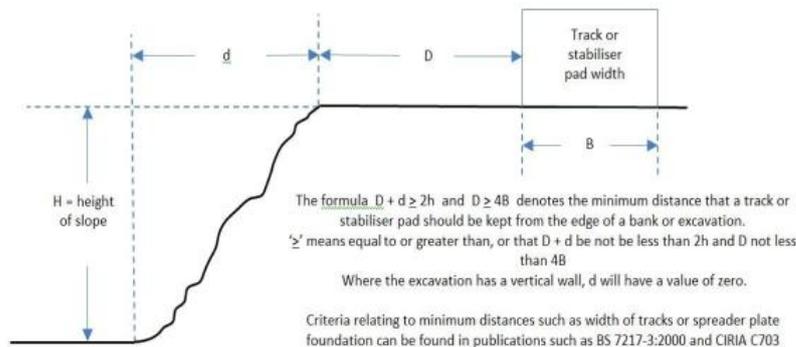
h. Excavations

Operatives, who work in association with excavations, must have the skills, knowledge, training and experience on the hazards and necessary precautions for excavation works and safe digging practices. All Vacuum excavation operatives should adhere to **employer** and **main contractor on sites H&S rules** at all times, but operators must help by being aware of their **personal H&S**.

Prior to commencing work, the vacuum excavator team must have **clear and precise information** with reference to the excavation design, including, **location of suction excavator from the excavation, existing services, access, egress, depth, width, length, requirements for stepping or battering sides**. The site excavation supervisor will brief this information to the operatives and work must not commence, until this information has been briefed and clearly understood.

If damage or unknown services are uncovered, stop work immediately, make safe area, isolate the suction excavator, and report your findings to the site supervisor.

With reference to, large HGV vehicles in close proximity to excavations, The Safe Use of Vacuum Excavators reference (Image) provides guidance for weight bearing pressures exerted through the ground. Simplifying the formula to aid understanding and providing guidance to the operators, the distance from the vehicle axle to the excavation, needs to be 1m the depth of the excavation. If the excavation is 1m deep, your vehicle axle nearest to the excavation needs to be 1m away from the edge of the excavation. If you have any concerns, do not commence work, or stop work and contact the excavation supervisor or your line manager.



If the above safe working distance cannot be maintained due to a limited space work site, such as a traffic management lane closure for hard shoulder or central reservation work. The site will follow site procedures to assess the risk of construction traffic and excavations.

Site safety information will be briefed out by the site, as part of a pre-task briefing, including excavation exclusion zones.

Excavations must be **guarded with barriers provided by site at the completion of the work or working shift**.

i) Operation of Air Tools

If the ground compaction prevents spoil being lifted by the suction excavator hose, an air lance (air pick) can be used to agitate the ground to allow the ground to be lifted by the suction force.

- Operator training to a recognized national standard CPCS
- Operators to comply with training and manufacturer information at all times.

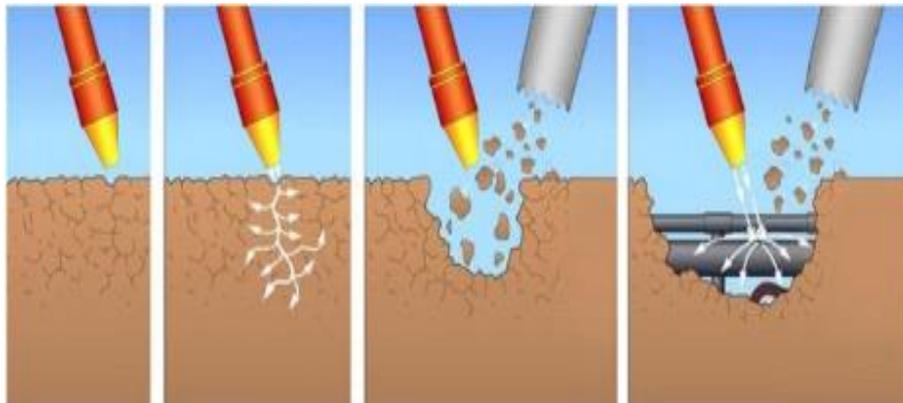
- Prior to work commencing, a point of work risk assessment will be completed assessing the work location hazards.
- **Air lance operations can introduce the risk of flying debris and where other workers, member of public or property could be injured or damaged, control measures need to be put in place.**
- **Solid barriers or debris netting must be put in place to control the risk.**

Work must not commence until all control measures are in place, if you have any concerns contact the site supervisor or your line manager.

j) Overhead powerlines

The driver must check for any overhead powerlines/bridges prior to tipping of the skip or working. if working in the vicinity of powerlines and bridges a plant authorisation form must be issued by the client to allow this work to commence. This form will detail the safety measures/restrictions and limitations for working near the overheads/bridges.

operators will need to be briefed by clients



K Blockage to The Suction Hose

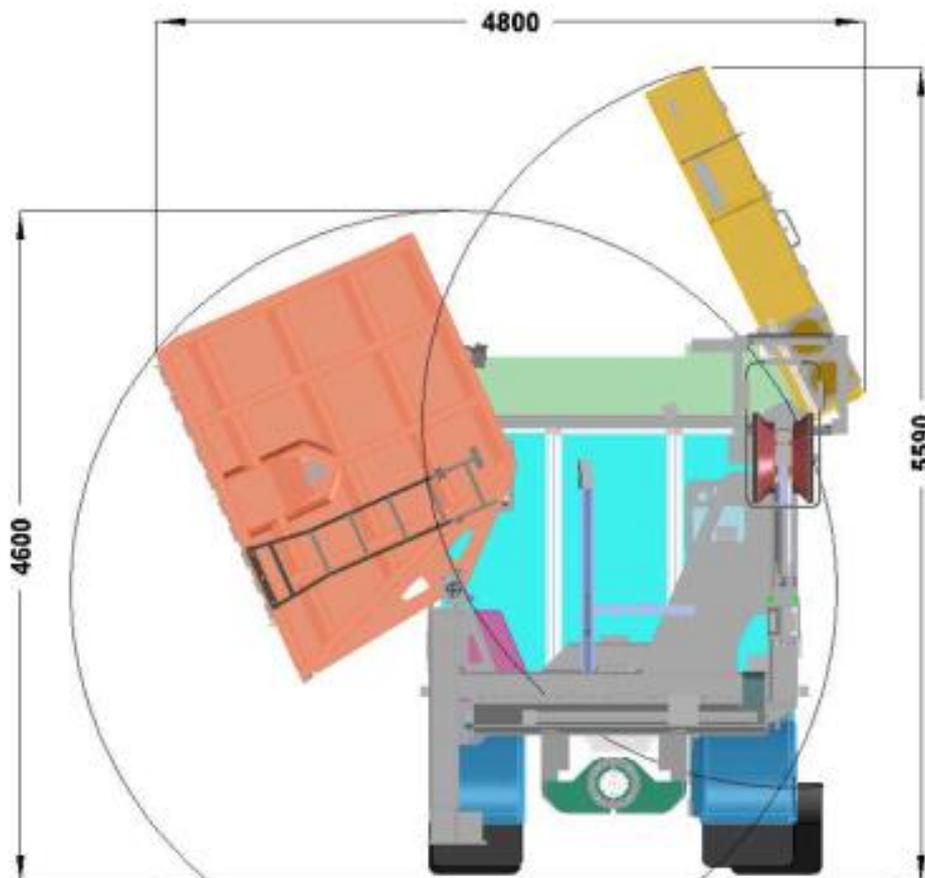
The suction hose has a 250mm inside diameter and on certain occasions material that is excavated can get lodged in the hose, causing a blockage.

The safe system of work to remove the blockage is as follows.

- Both operators to stand in a safe location and the boom will be maneuvered, with the fans engaged to dislodge the blockage.
- Most blockages occur at the point where the hose, is connected to the skip lid (height 3.6m)
- The manufacturer has fitted an inspection hatch in the lid, to access this point and to clear blockages.
- All Vacuum excavation operators are trained in clearing blockages and have the relevant Working at height and Harness qualifications to assist them should this need to be carried out.

l) Tipping Spoil from Suction Excavator.

- Operators to comply with training and manufacturer information at all times.
- Prior to commencing work, ensure a safe tipping location is available.
- The tipping location needs to be level and compacted, a safe distance from any excavation or voids, such as cellars or drainage.
- Prior to work commencing, a dynamic risk assessment is to be done by the vacuum excavator crew of work location hazards, including any overhead obstructions.
- Do not proceed and contact the site supervisor or your line manager, if you have any concerns.
- The two-operator team will establish a safe tipping zone, by marshalling any third parties at risk, to a safe location.
- Care must be observed, once the skip has been tipped, from materials that may be stuck to the top edge of the skip, that may dislodge with gravity and fall to the ground.
- This material must be removed first when cleaning the skip, utilizing the long skip tooling from a safe location.



Required free space for tipping (rear view) 10 m³ material container

m **Suction Excavator Noise Emissions – Information Provided from RSP Operation Manual**

Noise emissions

The measurement (of the sound pressure level emitted) is made on a technically comparable, representative machine.

The sound pressure level determined at over 9 measurement points around and above the machine $L_{p,m}$ is, with the suction nozzles open and at full power, $L_{p,m} = 88.5$ dB(A).

Hearing protection must be always worn when the fans and compressor are in operation, failure to do so will harm your hearing.

n **Refueling**

- All refueling activities shall be carried out at the agreed location on site Any contamination/spillage shall be reported to the Site Representative immediately, who will advise of the actions to be undertaken.

Emergency Arrangements

Fire:	The site fire emergency procedure will be briefed in the site induction.
First Aid:	When working on site, the site First Aid emergency procedures will be briefed during the site induction and will always apply.
Rescue:	In accordance with DTH plant hire, and all trained Vacuum excavator crews there must be a secondary person in the vicinity of the operation, who is trained to operate the machine in case of an emergency, where one of FIVE emergency stops can be activated.
Environmental:	<ul style="list-style-type: none"> • Oil spill kits & first aid kits are always provided with each Vacuum excavator. • Bags of absorbent granules to be available at work areas on request. • Sufficient waste oil drainage equipment and disposal procedure to be always available.
Special equipment required:	

Briefings and Supervision

Briefing	This method statement is to be briefed as part of the task briefing
Record of Receipt	A record is kept for all recipients that have read and understood the Method statement
Changes:	Requests to change a Method statement will be submitted to the document authoriser, to obtain the relevant Approvals

