

EXCAVATION PERMIT

IS 17893 : 2023 — Annex D (Clause 3.4)

i) SI No. : _____

ii) Work Clearance From (h/date) : _____

To (h/date) : _____

iii) Issued to (Department/Section/Contractor) : _____

iv) Exact Location of Work (Area/Unit/Equipment No. etc.) : _____

v) Name of Permittee : _____

Date : _____

Signature of Permittee : _____

vi) Please tick the type of permit required:

Normal	Shutdown	Construction

D-1 Details of Department and Exact Location of Excavation

D-1.1 Asset Custodian Department : _____

Date : _____

D-1.2 Exact location of excavation (attach marked up drawing) : _____

In Plant Area	Tank Dyke	Along Pipe way	Along Cable way
Across Road/Footpath	In Open Ground	Across Drainage Flume	Others

D-2 Size of Excavation (approx.) — Deep (m) : _____

Wide (m) : _____

Long (m) : _____

D-3 Purpose : _____

D-4 Commencing Date/Time : _____

Expiry Date/Time : _____

D-5 Executing Department : _____

Contractor : _____

D-6 Name of Permittee with Designation : _____

Telephone No. : _____

Signature: _____

D-7 & D-8

D-7 Permission is granted as described above D-1.1 to D-6.

D-8 Excavation Clearance is Obtained and Attached — SI No. : _____

D-9 Associated Permits/Safety Requirements

Table 14 — Tick as applicable.

SI No.	Associated Permits/Safety Requirements	Tick
i)	Cold work permit	
ii)	Hot work permit	
iii)	Confined space permit (Depth > 1.2 m)	
iv)	Hand excavation only	
v)	Provide warning sign	
vi)	Provide flashing light (flameproof in case of hazardous area)	
vii)	Barricade	
viii)	Provide shoring	
ix)	Batter the sides to 45 degree or less	
x)	Provide fire extinguisher	
xi)	Provide means of access	
xii)	Excavated soil 1 m away from edge, Min	
xiii)	Body harness/lifeline	
xiv)	Gumboot/safety suit	
xv)	Any other (specify)	

D-10 Expected Residual Hazards: 1. : _____

2. : _____

D-11 Mechanical Excavation Allowed Only For : _____

Permit Issuer Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____	HOD of Issuing Dept. Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____
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Notes

- 1. The permit must be obtained one day in advance. Keep the excavation clearance attached with permit.
- 2. Permit must be available at site all the time during the work.
- 3. Permit shall be in triplicate. Original shall be for permittee, first copy for issuer and second copy for fire station.
- 4. The permit shall be issued normally for a period not exceeding 7 days with renewal in each shift. However for shut down units/facilities, it can be issued for a maximum period of 15 days with renewal in each shift and for construction activities a maximum period of 30 days.
- 5. The PPE such as safety helmet, safety shoe, boiler suit and hand gloves is mandatory for work.
- 6. Daily safety toolbox talk including key point tipping to contractor personnel shall be carried out by permittee before commencement of work and the record of same shall be maintained.

Excavation Clearance

(THIS IS NOT AN EXCAVATION PERMIT)

SI No. : _____

Permittee : _____

Signature : _____

Name : _____

Date : _____

D-12 Exact Location of Work (Area/Unit/Equipment No. etc.) : _____

D-13 Description of Work : _____

D-14 Sketch of the Area of Excavation Enclosed.

D-15 Permission is Solicited From (h/date) : _____

To (h/date) : _____

D-16 Signature of Executer : _____

Name and Designation of Executor : _____

D-17 to D-24: Underground Services Check

D-17 Underground Power Cable

D-17: Existing () Not existing ()

D-17.1 Permission Given: Yes () No ()

D-17.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-18 Underground Telecommunication Cable

D-18: Existing () Not existing ()

D-18.1 Permission Given: Yes () No ()

D-18.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-19 Underground Firewater Line

D-19: Existing () Not existing ()

D-19.1 Permission Given: Yes () No ()

D-19.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-20 Underground Oil/Sewer Line, Drinking Water Line, Above Ground Open Drain

D-20: Existing () Not existing ()

D-20.1 Permission Given: Yes () No ()

D-20.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-21 Underground Computer Cable

D-21: Existing () Not existing ()

D-21.1 Permission Given: Yes () No ()

D-21.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-22 Underground Product Line, Utility Line

D-22: Existing () Not existing ()

D-22.1 Permission Given: Yes () No ()

D-22.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-23 Underground Instrument Cable

D-23: Existing () Not existing ()

D-23.1 Permission Given: Yes () No ()

D-23.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-24 Underground Cathodic Protection Cable

D-24: Existing () Not existing ()

D-24.1 Permission Given: Yes () No ()

D-24.2 Precaution, if Any : _____

Signature : _____

Date : _____

D-25 Instruction

- D-25.1 The excavation clearance is required for all excavations including road and dyke cutting. Obtaining this clearance is prerequisite for EXCAVATION PERMIT.
- D-25.2 This clearance shall be obtained for a maximum period of 15 days, except at construction sites, non-operational areas, where it shall be for a maximum period of 1 month.
- D-25.3 This clearance shall be kept attached with excavation permit at site.
- D-25.4 The clearance shall be issued in triplicate, original for permittee, first copy for issuer and second copy for fire station. The clearance shall be initiated by executor.
- D-25.5 On issue, original copy will be with executor, duplicate copy with fire station and triplicate copy with area in-charge/GSI (Gas Safety Inspector).
- D-25.6 The clearance by area in-charge/GSI shall be given just before clearance by shift fire safety officer (FSO) and registration at fire station. At last shift FSO will also check that clearances from all other dept. have been received.
- D-25.7 This clearance shall be considered issued after registration at fire station.
- D-25.8 When job is completed, the receiver shall collect all the copies, and enclose them with closed copy of excavation permit before handing over to permit issuer. Permit issuer in turn after closing the permit will return the same to fire station.
- D-25.9 For cutting of road in addition to this clearance, format for road closure and excavation permit shall be required. The road closure format shall be filled and submitted to fire station by the executor at least one day before starting the work.
- D-25.10 All road cuttings shall be properly barricaded with precautionary signs and alternate routes shall be displayed at the site by the executor.
- D-25.11 Duly signed "Do's and Don'ts during excavation work" shall be integral part of excavation permit. All points mentioned in "Do's and Don'ts" must be complied at site.

D-26 Do's and Don'ts During Excavation Work (To be Attached with All Excavation Permits)

Permit No.- _____

D-26.1 Do's

- D-26.1.1 Ensure that clearance has been obtained from various departments in prescribed form for all excavation works.
- D-26.1.2 Ensure that excavation permit and clearance has been obtained for excavation work and the same is valid.
- D-26.1.3 All excavations and open trenches must be barricaded around the opening. Warning lamp can be used for operating area and roads during darkness (use FLP type fixture in hazardous area).
- D-26.1.4 There must be sufficient and safe means of access and escape for excavated sites.
- D-26.1.5 Excavation area should be free from fumes/gases heavier than air because it may cause asphyxiation or poisoning. All excavation of depth 1.2 m or more should be treated as confined space and permit for entry into confined space should be obtained.
- D-26.1.6 Excavation to a depth of 1 m or more shall be cut stepped back to give a suitable slope or securely held by bracing so as to avoid the danger of side to collapse.
- D-26.1.7 All trenches 1.2 m or more in depth shall at all times be equipped with at least one ladder for each 30.48 m length of excavation or fraction thereof. All such ladders shall be extended from bottom of the trench to at least 1 m above the surface of the ground.
- D-26.1.8 Barricading of 1 m height (with red and white band/self-glowing caution boards) should be carried out for excavation beyond 1.5 m depth.
- D-26.1.9 All cutting shall be carried out from top to bottom.
- D-26.1.10 Special precautions are required for using mechanical excavators inside refinery as it requires hot work permit to operate the same in operating areas of refinery (except on roads).
- D-26.1.11 Practice of giving permission to cut half road and utilizing half road for movement of vehicle should be avoided, unless the conditions mentioned under Don'ts are complied.
- D-26.1.12 Use suitable PPE as per job requirement mentioned in work permit.
- D-26.1.13 Inform all incidents to your supervisor and fire station immediately.

D-26.2 Don'ts

- D-26.2.1 Under no circumstances under cutting to be carried out.
- D-26.2.2 Excavated earth shall not be dumped within 1 m of the edge of the excavation or depth of the trench, whichever is more.
- D-26.2.3 Excavated earth should not be dumped on nearby pathway/approaches, on product/steam line, in front of emergency facilities such as fire hydrants/monitor, fire alarm points, inlet of foam pourers etc and on OWS man hole covers.
- D-26.2.4 No vehicle should be allowed to go too close to the edge of the excavation because it may cause side collapse. Maintain at least 2 m distances from the edge of the excavation. Adequate and well-anchored stop blocks should be provided on the surface for vehicle being driven reversed into the excavation.
- D-26.2.5 No mechanical excavation is to be carried out up to a depth of 1.5 m from the ground level in operating areas. In such cases manual excavation is required to be carried out up to a depth of 1.5 m from the ground level.
- D-26.2.6 No one should be allowed to move on edge of excavation.

(Signature of Receiver)	(Signature of Issuer)
Signature : _____ Date : _____	Signature : _____ Date : _____
Name : _____	Name : _____
Designation : _____ Tel No. : _____	Designation : _____ Tel No. : _____