

WORKING AROUND HYDROCABRON (GAS & FUEL) PIPELINES

Underground high pressure natural gas and petroleum oil transmission pipelines may exist within or in the proximity of your work. These pipelines operate at pressures up to 960psi and any damage to the pipeline could seriously affect both you and the community.

The most obvious and unfortunate cost of third party damage to the pipelines is injury or death.



DUSUP'S BUSINESS

DUSUP provides energy supply (Natural Gas) to Emirate of Dubai through its pipeline network and administers NOC's for the hydrocarbon pipelines of DUSUP, ENOC Group, EMDAD and Dolphin Energy within Dubai. Submission of the No-Objection Certificate is made through the e-NOC system of the Dubai government and managed by the Roads and Transport Authority. https://noc.rta.ae/RTAeNOC

The gas & fuel (hydrocarbon) pipelines covered under the DUSUP NOC system provide fuel for Dubai's:

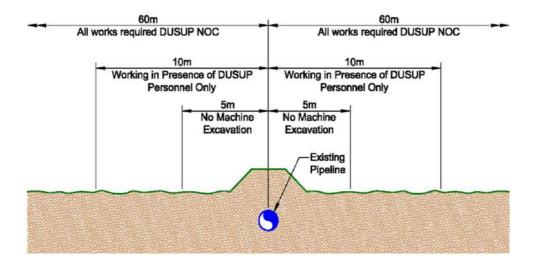
- 1. Electricity & Water Production
- 2. Industries
- 3. Airport



Remember: Pipeline safety is Everyone's Business

DUSUP NOC

DUSUP **No Objection Certificate (NOC)** is a system in place to monitor and control activities near gas & fuel pipelines/facilities.



No work within 60 meters of pipelines & within the pipeline corridor without a NOC.

Within DEWA Power Stations and EGA (DUBAL) boundary fence - DUSUP NOC required within 10 meters of DUSUP pipelines.

No work within 10 meters of pipeline without an on-site Pipeline Representative (staff from DUSUP Pipeline Department).

Excavation within five (5) meters of pipeline by hand shovel only. No pickaxes, powered digging equipment or machines allowed.

PIPELINE PATROL

DUSUP patrols each pipeline route twice a day to detect any unauthorized activities, subsidence, erosion or other issues that may affect the safe operation of the pipelines.



PIPELINE MARKERS

DUSUP Pipeline warning signs and markers indicate approximate, but not exact, locations of pipelines. Pipeline warning signs and markers provide a DUSUP emergency contact number (04 - 880 1867) to report problems.

Pipeline warning signs are installed adjacent to the pipeline berm at 250 meter intervals, e.g. KM26+250, KM26+500, etc.

Pipeline Markers are on the pipeline berm mid-way between the Pipeline Warning Signs, i.e. every 125 meters.



DUSUP WARNING SIGN



DUSUP PIPELINE MARKERS

DUSUP SIGNS





CP TEST POST







VENT SIGN

EPPCO & EMDAD WARNING SIGNS



EPPCO berm and Warning Signs



EMDAD berm and Warning Sign

DOLPHIN ENERGY WARNING SIGNS





IMPORTANT

Pipeline berms are the main protection for buried pipelines; but the pipelines maybe within the hump of berms.

When working near a pipeline berm, consult DUSUP.



UNDERGROUND CABLE, WATER & HYDROCARBON PIPELINE CROSSING A PIPELINE BY OPEN CUT:

Cable, water and other utilities must pass under the pipeline with minimum ONE meter vertical clearance between the bottom of the existing hydrocarbon pipeline and top of proposed crossing utilities.

Approved concrete slab must be provided between the existing pipeline and proposed utility.

This crossing elevation must be maintained across the entire width of the pipeline corridor.

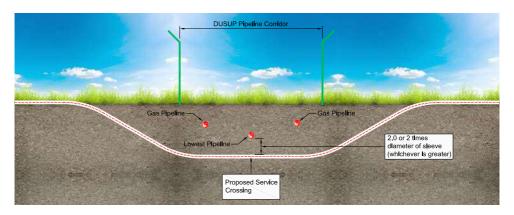


UNDERGROUND CABLE, WATER & HYDROCARBON PIPELINE CROSSING A PIPELINE BY TRENCHLESS METHOD (EXCEPT HDD):

If the sleeve/utility size is <1 meter (Dia.) : a minimum vertical clearance must be 2.0 meters.

If the sleeve/utility size is >1 meter (Dia.) : a minimum vertical clearance must be 2.0 times of the sleeve/utility.

Separate crossing requirements are applicable for Horizontal Directional Drilling (HDD) method of crossing.



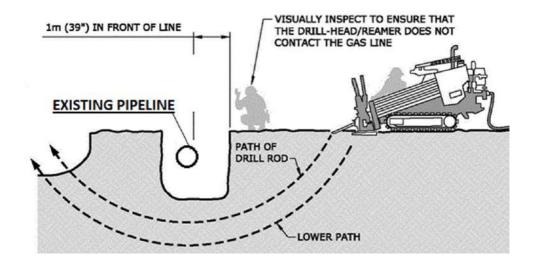
This lowest crossing elevation must be maintained across the entire width of the pipeline corridor.

UNDERGROUND CABLE, WATER & HYDROCARBON PIPELINE CROSSING A PIPELINE BY HORIZONTAL DIRECTIONAL DRILLING METHOD

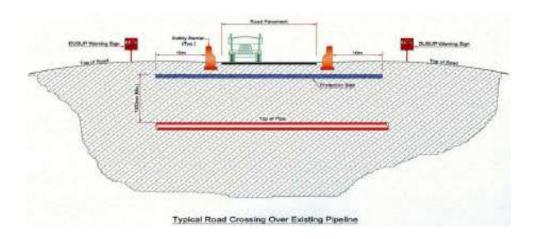
Crossing requirements for the Horizontal Directional Drilling (HDD):

Existing pipeline(s) must be kept exposed (observation pit) during the crossing of both pilot drill and reamer.

Alternatively; contractor may use approved wireline tracking system with minimum 5.0 meter vertical clearance from the proposed crossing to the existing pipeline.



ROADS CROSSING A PIPELINE



Where a roadway is to cross a pipeline, the pipeline must be protected as per DUSUP approved protection design. Pipeline protection must extend beyond the edge of the road shoulder

(or toe of the embankment whichever is greater) as follows:

- At roundabouts, elevated roads or bridge crossings 20 meters.
- At straight road sections 10 meters.

Existing pipelines within a parallel distance of 10 meters from the road shoulder must be protected with DUSUP approved protection slabs.

Roadside crash protection must be provided for 20 meters on the approach to and for 8 meters on the leaving side of a road crossing.

EXCAVATION - TRENCH PROTECTION

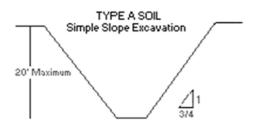
Shoring, sloping or step cutting (benching) must be provided for the excavations deeper than 1.2 meters



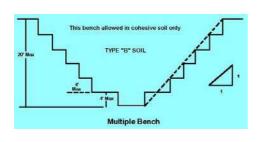
Type-A: Clay, Silty clay, or Sandy clay

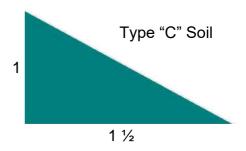
Type-B: Silts, Sandy Loams, Medium Clays, and Unstable Rock

Type-C: Granular such as gravel, sand and loamy sand (most unstable soil)



If it is decided that the soil will not be classified, then: Soil to be considered as Type "C" and; Excavations must have a slope of 1 ½ horizontal to 1 vertical (34 degrees).





Note: Soil classification and slopes as per OSHA recommendation.

DEVELOPMENTS



Temporary worker camps to be placed as far away from pipelines as possible (recommended minimum distance of 135 meters and preferred distance of 305 meters).

Any developments such as multi-story buildings or places of public assembly such as schools, mosques or hospitals within 370 meters requires a QRA review by DUSUP and may require the developer of the plot to carry out a risk assessment to study the impact of the existing and planned hydrocarbon pipelines in the proximity of the proposed development.

DUSUP CONTACTS FOR NOC WORKS

DUSUP must be informed four (4) working days in advance of any work near a pipeline.

Contact Numbers:

Primary:

Email: Work.NOC@dusup.ae

Alternate:

EMERGENCY CONTACT

DUSUP Gas Control Station (24 Hrs)

WE VALUE YOUR OBSERVATIONS

Please contact us with any observations regarding unusual activity on the pipeline corridor or facilities which may include:

Unauthorized access to facilities or suspicious activities.

Subsidence, erosion, washouts along the corridor.

Earthwork along the corridor.

Fallen or damaged marker signs

DUSUP CONTACT

DUSUP Gas Control Station (24 Hrs)

Remember: Pipeline safety is Everyone's Business

REMEMBER

No job is so important and No service is so urgent that we cannot take time to perform our work safely.

SAFETY is about ensuring freedom from unacceptable risk.





THINK

SAFETY IS EVERYBODY'S BUSINESS