

General Requirements For Construction Work In The Vicinity Of Gas Main

1. Notification of work should be circulated as stipulated in the Excavation Permit issued by Highways. The same procedure should also be followed for construction site other than Highways' area.
2. Contact HKCG at least 3 days in advance for excavation adjacent to gas pipe. Site meeting to be arranged whenever required. HKCG could be contacted via 29631811 or 28806999 in case of emergency.
3. When excavation is to be carried out adjacent to a gas main, the exact alignment and profile must be ascertained by a series of hand-dug trial holes.
4. BORING AND DRILLING IN THE VICINITY OF GAS MAIN IS STRICTLY PROHIBITED. HKCG must be consulted first should this work be required.
5. No excavator is allowed for excavation at 1 meter around the gas pipe.
6. Construction activities require naked fire must not be applied within 3 meters proximity of exposed gas pipe(s) without prior approval under proper management procedures, such as permit to work, etc.
7. Do not encase, even temporarily, part or all of our gas pipes in any form of concrete structure.
8. No machinery should sit directly above our C.I. gas pipes.
9. The velocity and amplitude of vibration acting on the gas pipe by the work must not exceed 25mm/s peak particle velocity and 0.2mm respectively.
10. The velocity and amplitude of vibration acting on the gas governor by the work must not exceed 13mm/s peak particle velocity and 0.1mm respectively.
11. Vibration monitoring records should be forwarded to HKCG for reference.
12. Excavation running close and parallel to the gas pipe should be avoided. Should such excavation be required, discussion/agreement must be sought from HKCG.
13. Suspension of gas pipe to be agreed with HKCG.
14. The gas pipe would normally have a cover of 450mm and 900mm in footpath and carriageway respectively. However, there are cases where gas mains have cover less than the before stated figures. Steel protection plates would normally be laid on top of shallow cover pipe. Due care should be given in subsequent excavation with the presence of steel plate.
15. Report any damage, even superficial, to HKCG for remedial action.
16. Access to HKCG's installations should be maintained at all times for regular inspection and emergency repair.

17. The work should not leave any gas pipe being enclosed in confined spaces.
18. Sufficient clearance to be maintained for both safety and maintenance purpose. Normally, 600mm and 300mm clearance is required for steel and all other gas pipe respectively.
19. Exposure of PE pipes should be avoided as far as practicable. Where exposure of PE pipes is inevitable, fire resistance protection wrapping of the exposed PE pipes should be installed and agreed with HKCG prior to application.
20. In case of emergency, contact HKCG at 28806999 which is manned 24 hours. If a gas leak is suspected, immediately stop work and evacuate the site personnel from the trenches. It should be noted that gas might travel through underground drains or conduits to other areas of the site. Evacuate the personnel from these areas if this is suspected.
21. HKCG should be consulted prior to any cutting or removal of a decommissioned gas pipe. As there may be residue gas inside a decommissioned gas pipe, cutting should only be employed by mechanical cutter or hack saw. In all circumstances, oxy-acetylene cutting SHOULD NOT be employed for cutting a decommissioned gas pipe.
22. Should there be settlement expected to be caused by the work, the predicted settlement contour should be forwarded to HKCG for assessment of the impact.
23. For plantation work with tree guard installation, the exact location and depth of the gas pipe should be confirmed by hand-dug trial holes prior to the driven of the tree guard into the ground to avoid damage of gas pipe underneath.
24. Due care should be given to the ancillary equipment attached to the gas main. Cathodic protection is installed for corrosion-resistant purpose and it has some cables linking from the gas pipe to the anodes and connected in a junction box placed in a pit. The anodes are normally installed at 1m away from the pipe whilst the anodes junction boxes would be installed at footpath at a distance from those gas main laid under carriageway.
25. The Code of Practice "Avoiding danger from gas pipes" has been prepared by the Gas Authority and approved and brought into effect in accordance with the provisions of section 9 of the Gas Safety Ordinance Cap 51 (the Ordinance). Its purpose is to provide practical guidance in respect of the requirements of the Ordinance and the Gas Safety (Gas Supply) Regulations (the regulations) concerning the avoidance of damage to gas pipes. These requirements are more specifically defined in regulation 23A of the regulations as follows-

"23A. Works in the vicinity of gas pipes

- 1) No person shall carry out, or permit to be carried out, any works in the vicinity of a gas pipe unless he or the person carrying out the works has, before commencing the works, taken all reasonable steps to ascertain the location and position of the gas pipe.*
- 2) A person who carries out, or who permits to be carried, any works in the vicinity of a gas pipes shall ensure that all reasonable measures are taken to protect the gas pipe from damage arising out of the works that would be likely to prejudice safety."*