

## **SAFETY REQUIREMENTS FOR EXCAVATION WORK IN THE ARTERIAL GAS PIPE PROTECTION ZONE**

1. The safety requirements for excavation work in the arterial gas pipeline protection zone (hereinafter referred to as the Requirements) must be followed by all personnel performing pipeline recovery, trench installation and priming work and maintenance of the excavation works.
2. It is prohibited to perform any work in the protection zone of the arterial gas pipeline (hereinafter - AGP) without the written consent of the owner of the AGP to perform works in the existing natural gas transmission system objects and / or equipment and their protection zone.
3. Individuals, who have received written permission (consent) to work in the gas pipeline protection zones, must ensure the safe execution of works and are responsible for maintaining the technical condition of gas pipelines.
4. AGP recovery work, which is done to prevent accidents or malfunctions in the natural gas transmission system, or to eliminate their consequences, may be carried out at any time without prior notice to the landowners or users, who are later notified of the work done. In the case of scheduled (repair, reconstruction) recovery of AGP, when the gas transmission is terminated or restricted, the natural gas transmission system user shall be notified thereof in accordance with the procedure established by legal acts.
5. When performing and maintaining earthworks in the protection zone, checks shall be made to ensure that the prescribed statutory distances from the AGP and its facilities are complied with, whether the earthworks do not damage the AGP, its insulation, closing devices, other equipment, or the AGP are not loaded with construction materials and mechanisms.
6. Persons, who perform excavation work, after finding cables, pipes or other equipment not specified in the technical documentation shall immediately cease these works, take measures to preserve them, and notify the nearest operator of the engineering networks and the local authority if the latter has received permission for excavation work or those works were combined.
7. With the presence of a representative of AB 'Amber Grid', markers are inserted over the refitted AGP axle every 25 meters, indicating the depth of the installed gas pipeline, in the gas pipeline turning points and in places where the ground will be manually lifted every 5 m. Points of intersection of AGP with other communications (communication cables, etc.) are also marked.
8. Work near AGP is only possible under the direct supervision of the work supervisor and in the protection zone of the power and communication cables - only under observation of the representatives of the companies operating these communications.
9. At the intersection of AGP with other communications, the gas pipelines shall be disconnected at a distance of at least 2 m from the side wall of the gas pipe and at least 1 m above the flooring communications (gas pipeline, communication cable, etc.). Condensate collectors, closing devices, etc., fitted with AGP, are retracted 2 m in all directions from the welds of these devices to the gas pipeline. The rest of the ground is manually recovered.

10. If there is a fertile layer of soil above the trench it must be removed. The minimum width of the fertile soil layer to be removed is equal to the trench width at the top, plus 0.5 m on both sides of the trench. Maximum - must not exceed the AGP protection zone. The fertile soil layer is pushed into temporary prism-shaped collections by the bulldozer. It is not allowed to mix a fertile soil with mineral soil. It is forbidden to cover green plantations, underground engineering wells, signs, equipment, roads.
  11. It is forbidden to mechanically uncover gas pipelines after detection of gas leakage, unless it is impossible to do so due to frost or poor soil (clay, rocky or swampy). Work must be performed manually, reducing the current gas pressure by 10 percent, complying with occupational safety and health requirements, using collective and personal protective equipment.
  12. It is prohibited to have unauthorized persons, who are not directly involved in the work of the machinery, in the working area of the working mechanisms (excavators, bulldozers).
  13. It is forbidden to keep machinery and materials on the trench slope.
  14. The work supervisor shall immediately terminate the work in the event of dangerous circumstances occurring during the operation of the AGP recovery, trench installation and priming using the machinery in case of dangerous circumstances, unexpected unfavourable changes in meteorological or other conditions and the performance of the work specified in the Instruction.
  15. In any case, when performing AG recovery, trench installation, and backfilling operations, unexpectedly detected underground installations, communications, explosives, and ammunition that were not warned, an explosion hazard, or other unforeseen events require immediate ceasing of work and reporting to the head. After assessing the current situation, the work supervisor reports the potential accident to the System Management Centre.
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