|  |  |  |
| --- | --- | --- |
| 1 | Name of Project | Introduction of a mobile steam-generating unit (water-tube direct-flow steam boiler) for performing the emergency response and remedial actions on water pipelines when the outdoor temperature is below 0°C |
| 2 | Term of implementation of the project | 1 |
| 3 | Applicant organisation proposing the project | MINSKVODOKANAL UE |
| 4 | Objectives of the Project | Reducing the risks of stopping the water supply to consumers, prompt restoration of pipeline sections and water dispensing equipment in case of freezing |
| 5 | Tasks planned to be performed within the framework of the project implementation | 1. Purchase of a mobile steam-generating unit (water-tube direct-flow steam boiler)2. Use of a mobile steam-generating unit when performing the emergency response and remedial actions on water-supply networks |
| 6 | Target groups | Legal entities and individuals of the city of Minsk |
| 7 | Brief description of the measures within the project | 1. Purchase of a mobile steam-generating unit.2. Training of the personnel  |
| 8 | Total volume of financing | Approximately 3,800 US dollars per unit of equipment |
| 9 | Source of financing | Volume of financing (in US dollars) |
|  | Donor’s funds | Approximately 3,800 US dollars per unit of equipment |
|  | Co-financing | 5% for training the personnel that is 190 US dollars |
| 10 | Location of the project implementation(region/district/city) | Minsk region, city of Minsk |
| 11 | Contact person:Initials, surname, position, phone, e-mail address | I.V. Suvorov, Deputy Operations Manager – Head of the Maintenance and Power Engineering Department of Minskvodoprovod Enterprise, +375293155250,suvorov\_iv@minskvodokanal.by |
| 12 | Justification  | During the continuous long-term operation of water utilities and water dispensing equipment, it was found that ambient temperatures far below 0°C cause the soil freezing and, as a consequence, the formation of ice blockages in water supply systems located at a small depth (shallow depth of pipelines under the ground, shallow depth of wells) or installed above ground level (stand-pipe). This leads to failure of uninterrupted water supply and makes it necessary to carry out measures for warming up frozen sections of the pipeline or stand-pipes to eliminate the ice blockages.Due to the large branching and quantity of water utilities, their different territorial location and presence of other communications, buildings, driveways and other obstacles around the problem areas, as well as for the purpose of increasing the efficiency and mobility of the ice blockage elimination, it is necessary to use the most mobile and efficient equipment. One of such solutions consists in the use of mobile gas-fuelled steam-generating units. Due to the design features, this equipment is mobile, stand-alone (does not require additional power sources) and quickly installable at the place of work as well as compact and productive, which makes it possible to deliver it to and install at the place of freezing in a short time and to eliminate the ice blockage and restore the consumer's water supply by quickly warming up the “frozen” section of the pipeline or water dispensing equipment with hot steam. |
| 13 | Results of implementation of the project | The prompt use of the new heating equipment will reduce the time required for eliminating the restoration of water supply to consumers in case of freezing of pipelines, water dispensing equipment, and reduce the extent of damages from the effects of water expansion during the freezing. |