UKRAINE DISTRICT HEATING ENERGY EFFICIENCY PROJECT

Public Utility "Miskteplovodenerhiya"

Environmental and Social Management Plan (ESMP)

(for category B projects)

Kamyanets-Podilskyi

2018

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INTRODUCTION

The central aim of the Project is to satisfy the needs of consumers in Kamyanets-Podislkyi with quality and sufficient services for heat supply, uninterruptible delivery of heat carrier to consumers, and reduction of alarm conditions.

A long-term strategic investment plan (summarized in Table 1) is aimed at supporting the indicated heat supply development goals:

- Enhancing satisfaction and comfort of clients;
- Financial profits;
- Modernization of infrastructure.

Table 1

Long-term strategic investment plan

Investment Component	UOM	Estimated Value in Mill. USD with VAT
Construction of a heat and power station at the address: Krypiakevycha St., 3, with installation of: - solid fuel boilers; - gas fired boilers.	 2 pcs 2 pcs	10.26
Rehabilitation of the Ø 500mm heat network, from: - Krypiakevycha St. to Hrushevskoho Ave.; - Hrushevskoho Ave. to Timiriazieva St.	 667 m 2.5 km	2.0
Installation of IHSs and arranging/construction of premises	70 pcs	2.0
Technical supervision	-	0.4
Operating costs	-	0.7
Altogether	-	**15.36**

Project Goals:

- Improving level of heat supply services to consumers;
- Reducing consumption of natural gas at the expense of using alternative fuels (agro pellets, wood chips);
- Decreasing a negative impact upon environment (liquidation of HPS).

Purpose of development of ESMP

The purpose of development of ESMP is to ensure fulfillment of all necessary measures and actions in order to minimize a potential impact of the project upon environment and population.

The Environmental and Social Management Plan (ESMP) analyzes environmental and social matters connected with selected components in the district heating sector, in accordance with the requirements of the World Bank regarding ensuring of environmental protection and population protection.

The main tasks of ESMP are:

1) Determination of measures to mitigate negative and enhance positive, environmental and social impacts;
2) Determinations of measures on monitoring and control;
3) Determination of an institutional structure that will be charged with implementation of ESMP;
4) Determination of a schedule of work and the cost of work;
5) Development of an institutional ability and training.

Installation of new energy-saving equipment at the objects, as well as installation of IHSs, will lower consumption of electric energy and fuel, the number of breakdowns, losses of heat and environmental pollution.

Apprehended measures to soften the influence on the environment are as follows:

- Pipe routing at a required depth;
- Conduct of performance and commissioning works and sticking to parameter charts for the purpose of ensuring ecologically optimum conditions for fuel combustion;
- Quality control of boiler houses and IHSs operation.

Necessary demands regarding energy saving in the building and technological parts will be placed on the Project, and namely:

- Application of energy-saving equipment and pre-insulated pipes will be planned;
- Effective utilizers of energy will be installed in the technological part: hence increased efficiency of installations and gas emission reduction.

This Project is ecologically admissible.

I. LEGISLATION BASE, LICENSES AND AUTHORIZATIONS

The most general and important, by significance, frame law, according to which the entire ecological legislation of Ukraine is built, is the *Law of Ukraine "Upon the natural environment defense"*, as adopted on June 25, 1991.

The preamble and article of Law 1 formulate objectives and tasks of the ecological legislation, which provides for conduct of such an ecological policy that would be directed at conserving the environment harmless for wildlife and abiocoen to exist; protecting life and health of population from negative influence conditioned by pollution of the natural environment; achieving harmonious interaction of society and nature; preserving, rationally using and recreating natural resources. The mission to achieve these objectives is put upon the ecological legislation, whose assignment includes regulation of social relations connected with the objects of legal protection as defined in Article 5 of the Law. Such objects include all components of the environment and all the aggregate of the natural resources.

Powers of the legislative and executive sectors of state jurisdiction in the sphere of environmental protection are fixed in this Law.

1.1 Atmospheric Air

Atmospheric air is one of the basic vital elements of the environment. Relationships on the field of atmospheric air protection are regulated by the Law of Ukraine No.2707-XII as of 16.10.1992 "Upon protection of atmospheric air".

This Law is aimed at preserving a favorable state of atmospheric air, ensuring rational use of atmospheric air for industrial needs, its restoration and improvement for ensuring ecological safety of human life and activities, as well as preventing harmful impact upon the environment. The Law establishes universal for Ukraine standards of ecological safety of atmospheric air, to which referred are maximum allowable concentrations (MAC) of pollutants in the atmospheric air, allowable levels of acoustic,

electromagnetic, ionizing and other types of a harmful physical and biological impact upon the atmospheric air.

1.2. Water Legislation

Water relationships are regulated in Ukraine by the *Water Code* (adopted on June 6, 1995, No.213/95-VR) and other legislative acts. Their goal is to ensure conservation and scientifically grounded, rational use of waters; renewal of water resources; protection of waters against pollution, choking up and depletion; prevention of water harmful actions and liquidation of their aftermath; improvement of state of water objects, as well as protection of water-consumers' rights.

The code defines that waters (water objects) are exclusively the property of the people of Ukraine and are only granted for use.

The Water Code defines competence of the legislative and executive organs of power in the sphere of regulation of water relationships and participation in them of people and their associations. The Code regulates issues of standardization and regulation, as well as all issues regarding use and protection of waters. In the Code defined are the basic provisions on control, monitoring and assessment of waters, as well as on economic regulation of use of waters. Particularization of these provisions is done in bylaws on introduction of bio-testing within the water quality control system (1992), on the procedure for conducting state monitoring of waters (1996), on the procedure for charging a fee for specific use of water resources (i.e. for withdrawal of water from water facilities and discharge of return water therein) and for use of waters for the needs of waterpower engineering and water transport (1999). The Cabinet of Ministers also approved the procedure for development and confirmation of norms on the limits for discharge into the water facilities of pollutants and the list of normed substances (1996), as well as the Rules for protection of inland sea waters and the territorial sea against pollution and choking up (1996), and the Rules for protection of surface waters against pollution with return waters (1999).

1.3. Legislation on Animal World

Relationships in the sphere of protection, use and reproduction of the animal world in the territory of Ukraine (except for domestic animals) are regulated by the Law of Ukraine *"Upon animal world"* (1993, as revised in 1996) and other legislation acts. Their aim is to preserve and improve the habitat of wild animals, ensure the conditions for constant existing of the whole species and population diversity of animals in the state of natural freedom, captivity or in semi-free conditions.

The Law defines the objects of animal world, which refer to the natural resources of national importance. An entity titled to the national ownership of the animal world is the state in the person of the Verkhovna Rada of Ukraine. The Law establishes the right of collective and private title to separate objects of the animal world. The Law formulates the main requirements and principles of protection, rational use and recreation of the animal world; rights and duties of people with regard to this sphere.

The Law fixes the forms and types of use of the animal world objects, and duties of users.

Specific sections of the Law are dedicated to issues of protection of the animal world, its monitoring, state accounting, cadaster and control.

The Law lists types of breaches of laws, which cause a disciplinary, administrative, civil and criminal responsibility.

Corresponding instructions for the control bodies and nature users have been elaborated.

1.4. Legislation on Natural Sites and Object of Specific Protection

The legislation of Ukraine on natural sites and objects of specific protection (nature-conservation legislation) includes the Laws of Ukraine "Upon nature-protection fund of Ukraine" (1992) and "Upon an exclusive (maritime) economic zone

of Ukraine" (1995), a Provision on the "Red Book of Ukraine" (1992), and other legislation acts.

These acts define legal bases for nature-protection activities in the territories (water areas) that are subject to specific protection. These acts regulate issues of classification, patterns of ownership, types of use, management, nature-protection requirements, and responsibility for breach of laws.

The main current legislative ecological and technical normative documents and standards in the sphere of environmental protection and rational use of natural resources pertinent to the project:

- Code of Ukraine upon the bowels of the earth (dd. July 27, 2994);
- Water Code of Ukraine (dd. June 6, 1995);
- Land Code of Ukraine (dd. October 25, 2001);
- Law of Ukraine "Upon environmental impact assessment" (dd. May 23, 2017);
- Law of Ukraine "Upon environmental protection" (dd. June 25, 1991);
- Law of Ukraine "Upon atmospheric air protection" (dd. October 16, 1992);
- Law of Ukraine "Upon protection of population and territories against emergency situations of technological and natural character" (dd. June 8, 2000);
- Law of Ukraine "Upon heat supply" (dd. June 2, 2005);
- Law of Ukraine "Upon waste products" (dd. March 5, 1998);
- Law of Ukraine "Upon ensuring of sanitary and epidemic welfare of population" (dd. February 24, 1994, No.4004-XII);
- Enactment of the Cabinet of Ministers of Ukraine "Upon approval of a Provision on the order for realization of state registration in the field of atmospheric air protection" (dd. December 29, 1993);
- Enactment of the Cabinet of Ministers of Ukraine "Upon the order of development and approval of standards on the maximum allowable level of influence of physical and biological factors of stationary contamination sources upon the atmospheric air state" (dd. March 13, 2002);

- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of the Order for development and approval of standards on the maximum allowable levels of pollutant emissions form stationary sources” (dd. August 6, 2004);
- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of standards on the maximum allowable levels of pollutant emissions form stationary sources” (dd. June 26, 2006);
- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of the technological standards on the maximum allowable levels of pollutant emissions form thermal power plants whose capacity exceeds 50MW” (dd. June 26, 2006);
- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of the Methods to calculate the extent of compensation of damages caused to the state as a result of supernormal air pollutant emissions” (December 10, 2008);
- Decree of the Ministry of Environmental Protection of Ukraine “Manual on a comprehensive assessment at the regional level” (November 14, 2008);
- Council Directive 96/61/EC “Upon a blanket prevention and control of contamination” (dd. September 24, 1996);
- Directive 2001/42.EC of the European Parliament and Council “Upon assessment of impact on the environment caused by certain projects and programs” (dd. June 27, 2001);
- Resolution of the European Council upon a Green Book on urban environment (dd. January 28, 1991);
- DSN 3.3.6.039-99 State Sanitary Norms. Industrial general and local vibration (issued in 1999);
- DSN 3.3.6.037-99 State Sanitary Norms on industrial noise, ultrasound and infrasound (issued in 1999);
- DSP-201-97 State Sanitary Rules on protection of atmospheric air in populated areas (against contamination with chemical and biological substances);
- DBN V 1.1-31:2013 “Protection of territories, residential buildings and facilities against noise” (issued in 2014);

- Enactment of the Cabinet of Ministers of Ukraine “Upon approval of the Order for submission of a waste product declaration and its formats”(dd. February 18, 2016, No.118);
- Enactment of the Cabinet of Ministers of Ukraine “Upon approval of the Order for detection and registration of abandoned waste” (dd. August 03, 1998, No.1217);
- Enactment of the Cabinet of Ministers of Ukraine “Some issues of collection, transportation, storage, processing (re-processing), disposal and/or neutralization of spent greases (oils)” (dd. December 17, 2012, No.1221);
- Enactment of the Cabinet of Ministers of Ukraine “Upon approval of the Rules for providing services for removal of domestic waste” (dd. December 10, 2008, No.1070);
- Enactment of the Cabinet of Ministers of Ukraine “Upon approval of criteria, by which assessed is the degree of risk from conduct of business activities on handling hazardous waste, which requires licensing” (dd. November 09, 2016, No.804);
- Instructions of the Cabinet of Ministers of Ukraine “Upon approbation of the Concept on the National waste handling program for 2013 – 2020” (dd. January 03, 2013, No.22-r);
- Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (adopted on March 22, 1989);
- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of the List of equipment, for which norms have been developed, on the maximum allowable levels of pollutant emissions from stationary sources” (dd. August 16, 2004);
- Decree of the Ministry of Environmental Protection of Ukraine “Upon approval of the Instructions on the order and criteria of state registration of objects that cause or may cause a harmful impact upon human health and atmospheric air, on the types and scopes of pollutants emitted in the atmospheric air” (dd. May 10, 2002).

1.5. List of Required Authorizations and Licenses under Environmental Legislation

During project implementation, the work on the following will be simultaneously carried out:

- Obtaining a license for excavation works (laying of the heat network);
- Obtaining a license from Derzhbudinspektiia (State Building Inspection) for execution of works;
- Developing of the EIA (Environmental Impact Assessment) section of the Project;
- Obtaining Expert Findings on the Project Documents subject to EIA;
- Developing a report on inventory of air pollutant emissions;
- Developing documents which ground volumes of emissions, for obtaining a permit on air pollutant emissions by stationary sources;
- Obtaining a conclusion of a state sanitary and epidemiological examination;
- Obtaining a permit on air pollutant emissions by stationary sources, for the new boiler house. Approximate term of validity of the permit: 10 years;
- The Law of Ukraine dd. 09.04.2014, No.1193-VII, “Upon amendment of legislation acts of Ukraine regarding reduce in number of licensing documents”, which came into force as of 26.04.2014, annulled the license for waste placement and the limits for creation and placement of waste.

According to Article 17 of the Law of Ukraine “Upon waste products” as legally revised, economic agents in the sphere of handling of wastes must have a license for handling wastes (a license for carrying out operations in the sphere of handling of wastes, if their business leads to accumulation of wastes, for which GWAI (General Waste Accumulation Index) exceeds 1000)/

Economic agents in the sphere of handling of wastes, whose business exclusively leads to accumulation of wastes, for which GWAI ranges from 50 to 100, must file a Waste Declaration on a yearly basis.

- Adjusting the license for production and supply of heat energy.

II. CHARACTERISTIC OF THE EXISTING HEAT SUPPLY SYSTEM

Public Utility “Miskteplovodenerhiya” (PU MTVE) is the only provider of district heating services in the city of Kamyanets-Podilskyi. The largest consumer of heat generated by PU MTVE is the population, whose portion in realization of thermal energy is 79%; the second – by volume – category is the budget consumers (20%). The portion of the commercial consumers is not big (1%).

The district heating supply services are provided to 22963 subscribers, of which:

- Population: 22759 ;
- Budget: 45;
- Other consumers: 159.

The Utility owns 14 boiler houses and 1 HPS with the total number of heat-generating plants equaling to 45 units, 23 CHS (Central Heating Stations) and 12 DTU (District Thermal Units) to supply the city with the centralized hot water supply (the year of putting of boiler houses and HPS into operation is indicated in Table 2). The length of two-pipe heat networks is 60,3 km, of them pipes to supply water to buildings: approximately 15,1 km.

The urban heat networks from the main heat supply sources (boiler houses at Timiriazieva 123, Mykoly Hordiichuka 2, HPS, Pushkinska 29, Kniaziv Koriatovychiv 56) are cross-feed, which make it possible, in case of emergency, to ensure heat supply of certain urban boroughs from another source.

Diagrammatic layout of HPS, boiler houses and heating stations of Public Utility “Miskteplovodenerhiya” is shown in Fig.1.

Fig.1. Layout of HPS, boiler houses and heating stations

Table 2.

Період експлуатації котелень КП «Міськтепловоденергія»

No.	Boiler house address	Year of commissioning
1	Timiriazieva St., 123	1974
2	Mykoly Hordiichuka St., 2	1978
3	Vokzalna St., 83 a	2014
4	Vokzalna St., 43	2000
5	Suvorova St., 20	2004
6	Molodizhna St., 24	2004
7	Hrushevskoho Ave., 50	2008
8	Tatarska St., 15	1994
9	Kniaziv Koriatovychiv St., 56	2012
10	Tsenskoho St., 5	2013
11	Pratsi St., 4	2013
12	Pushkinska St., 29	2014
13	Matrosova St., 17 a	2015
14	Franka St., 30	2015
15	Franka St., 42 (HPS)	1962

III. CHARACTERISTIC OF THE PROJECTED ACTIVITY AND THE AREA IN WHICH THE PROJECT WILL BE IMPLEMENTED

3. 1. General Characteristic of the projected activity

The coordinated investment program is aimed at rehabilitation of an ineffective district heating system, achieving material saving and introducing improvements. Rehabilitation provides for the following components, with extra advantages and savings:

- Construction of a new HPS
- Closing down of the ineffective HPS and connection of the existing clients to the new HPS
- Installation of 70 Individual Heating Substations (IHS)
- Reduction of losses in distribution of heat and increase in efficiency of district heating at the expense of rehabilitation of the heat networks using pre-insulated pipelines.

The existing HPS is unprofitable because of superpower, non-optimal location relative to heat loads and too long length of heat networks.

Optimal location of the new HPS at Krypiakevychs 3 in the center of heat loads and rehabilitation of the heat networks with substitution for pre-insulated pipes of a much smaller diameter will make it possible to essentially reduce losses in the network and lead to positive economic and ecologic impact.

All buildings that will consume hot water and heat generated by the newly built HPS will be equipped with IHSs and heat meters. IHS installation in buildings will make it possible to more qualitatively distribute heat within a building and lead to reduction of heat consumption.

3.1.1. Component 1: Closure of the unprofitable HPS and construction of a new HPS

Component description:

The existing HPS is the largest heat-generating plant at the company and produces over 50% of the total heat consumption of the city. The HPS installed capacity is 132 Gcal composed of 4 boiler units 33 Gcal each, and the connected capacity is only 40 Gcal. Two (2) boiler units are enough to supply the needs for heat energy, but the existing boilers have long ago outlived their useful life deadline; all auxiliary systems were built for the capacity of 4 boilers, which is why operation of these systems needs additional expenses and a significant number of service personnel.

The reason for these systems to still work is that this HPS produces both heat energy, and electric energy. There are 2 steam turbines at HPS with the capacity of 6MW each: one turbine, TG-1 R6-35/5M1, installed in 1991, and the other one, TG-2 AR6-5, installed in 1958. The turbine installed in 1958 has over 400 000 operation hours and in the nearest future it will be cut off; besides, the turbine does not have sufficient heat load, whereby production of electric energy does not make proper advantages. Its further operation requires system modernization.

This HPS was built for the 7 closest industrial enterprises which, during the Soviet period, consumed heat energy in the form of steam and hot water of high pressure; however, at the time being the enterprises either changed their line of business, or are closed; but HPS is working in the mode of combined generation of heat and electric energy, at which the basic product of generation is heat energy, and production of electric energy is minimal (30% of the capacity) and limited to the existing heat load.

At large, the existing HPS units are too big, their condition, due to a long period of operation and physical tear and wear, is very bad (conductive to accident). The boilers and auxiliary systems (water treatment systems, pumps, fans, as well as valves and pipes) were installed in 1962 and have long ago outlived their resource; they constantly require emergency repairs; the measuring and process control systems are morally obsolete (low accuracy class, an old hardware base, no use of microprocessors, frequency regulators of the tele-monitoring systems etc.). Operation of such an HPS, because of tear and wear and frequent failures of the

equipment and control system, is dangerous and requires that personnel frequently interfere with the systems operation and that the personnel increase in number to ensure a minimal sufficient level of safe operation. Thus, extension of operation of the existing HPS with the physically depreciated and morally obsolete equipment will require, in future, considerable investments, and advantages of savings will not lead to alternative with the lowest cost.

Besides, a part of the existing 1400m long Ø600mm heat network from HPS has been operated since 1983, and a part of heat network, with the diameter of 400mm to 500mm and length of 2.9km, has been operated since 1968 and is actually in an emergency state today.

At the same time, as a result of diminution of heat consumption due to closure of industrial enterprises in the city, improvement of systems for regulating heat supply thanks to installation of IHSs and metering devices, the existing boiler houses of the city micro-districts have turned out to be underutilized.

Taking into consideration irrational location of the existing HPS on the edge of the city, the emergency state and necessity of replacing its depreciated heat networks of big diameter, underutilization of district boiler houses, it is reasonable to shift part of utilization of the existing HPS to district boiler houses (at Mykoly Hordiichuka 2, Timiriazieva 123 and Kniaziv Koriatovychiv 56), and replace the existing HPS itself by a modern heat and power station of a small capacity (40MW) located in the center of heat loads (Krypiakevycha St., 3) which will make it possible to considerably cut length and diameters of the heat network pipelines, reduce losses in the heat networks and costs of electric energy for transportation of the heat carrier, as well as renew the HPS equipment in full.

The priority in replacing capacities is construction of a new HPS at Krypiakevycha St., 3 (the boiler house's disposition is shown in Fig.2).

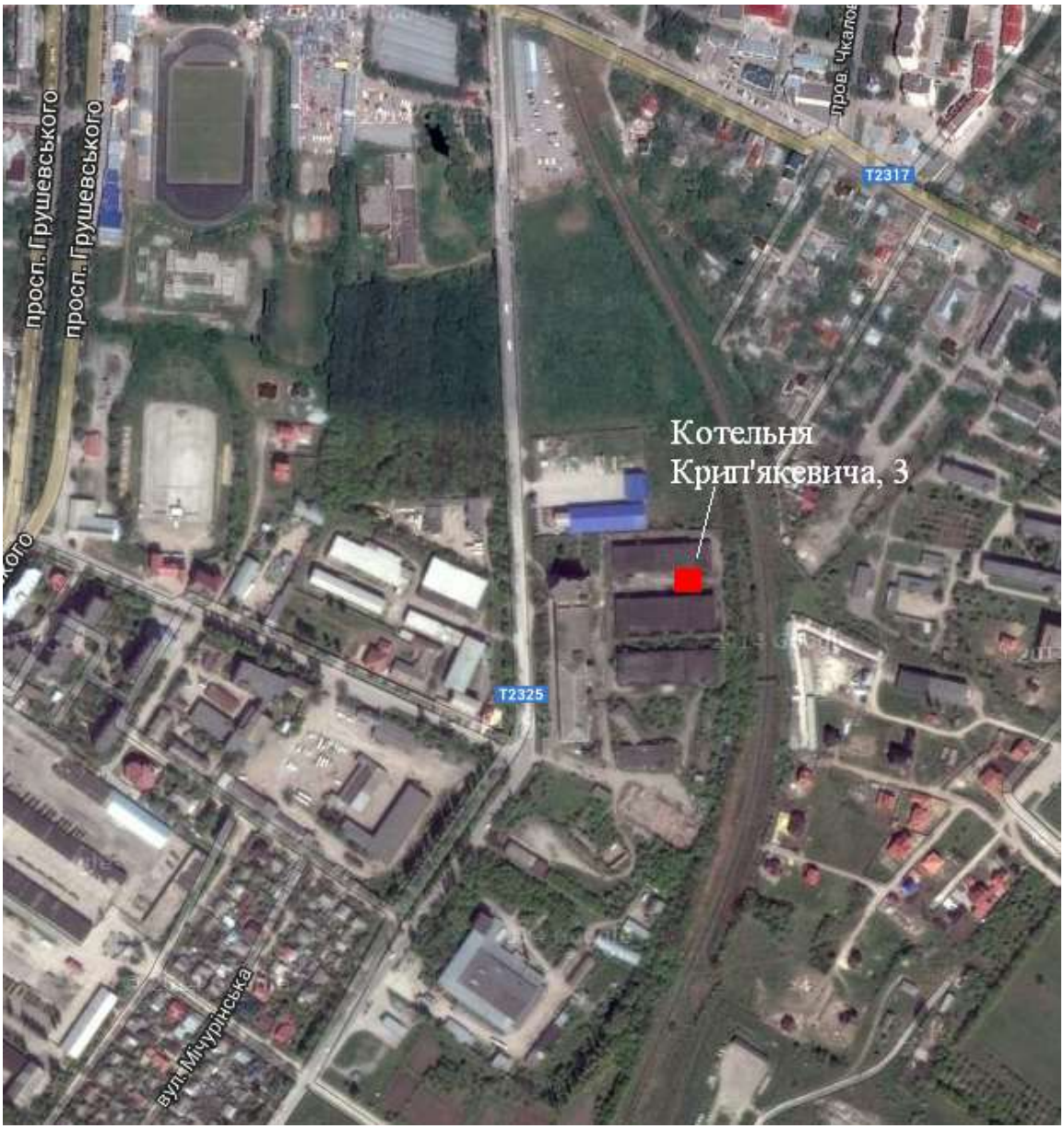


Fig. 2. Location of constriction of the new HPS

Closure of the HPS and replacement of capacities provide considerable savings of operating costs. Besides, there will be a significant reduction of losses on personnel, consumed gas, materials, and services, current and emergency repairs. The personnel released after HPS being closed down will be offered new jobs at vacant positions. In case of the employees refusing to occupy the new positions, they are, under the current legislation subject to discarding with being paid appropriate indemnities.

3.1.2. Component 2: Rehabilitation of heat network

Component description:

HPS to be closed down was built in the 1960's, and the main heat supply network's pipeline diameter was DN600.

However, due to many industrial enterprises having been shut down, the demand has been considerably reduced, and today's load requires decrease in diameter of the heat network pipelines. Thus, the pipelines, which are in an emergency state and too big, will be replaced. The old pipelines will be removed, and the new pre-insulated ones will be installed. The main advantages of such investments are decrease in heat losses and prevention of breaks in the district heating network, as well as decrease in reliability of heat delivery. Besides, network maintenance costs will be considerably cut down. It is planned to replace pipes of the heat network sections from the Timiriazieva 123 boiler house, along Timiriazieva St. and Hrushevskoho Ave., 880m long; along Hrushevskoho Ave. 1.6km long; along Drai Khmary St. 667m long.

The pipeline to be replaced is shown in Fig.3.

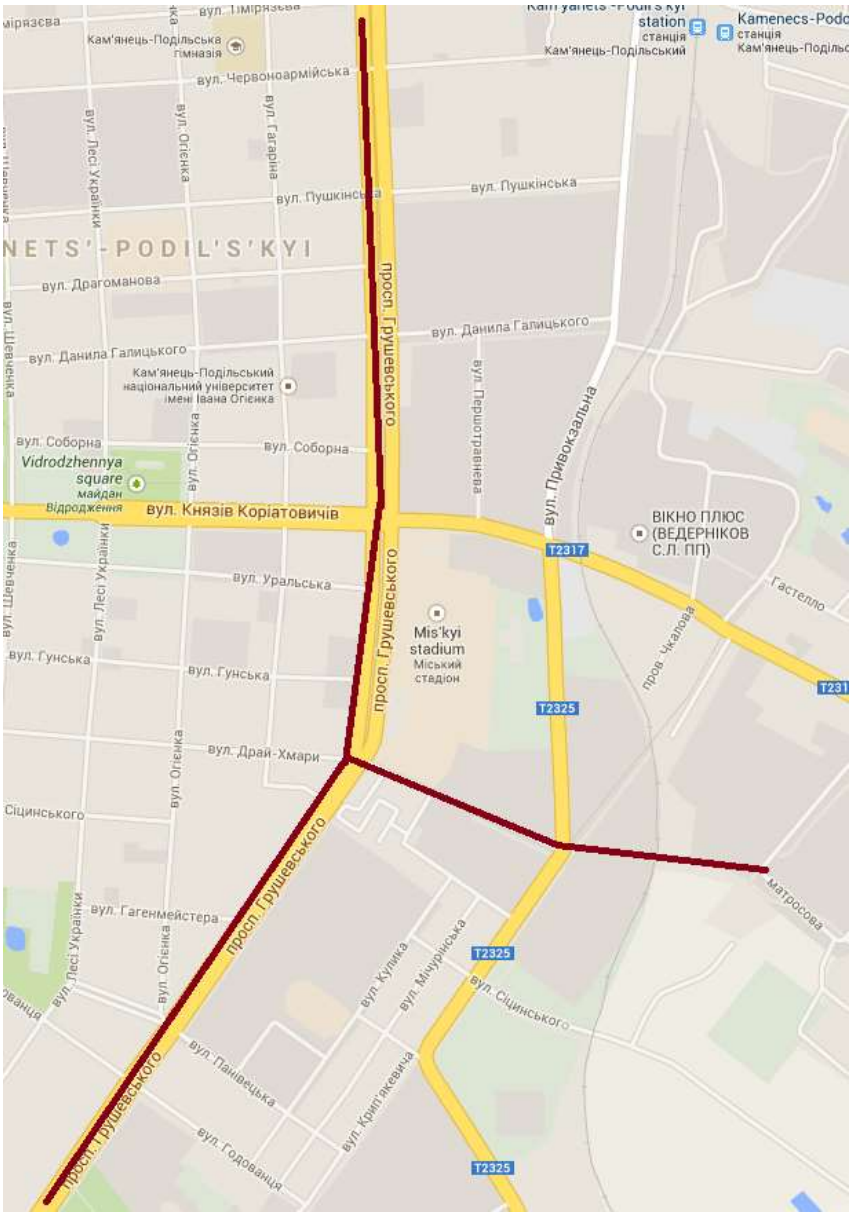


Fig.3. Pipeline to be replaced

<u>Advantages of the component:</u>

The basic advantages of the component are reduction of operating costs.

Advantages of this investment component are listed below:

1. Heat losses for the utility will get cut down by 5% from 29 692 Gcal/year to 25 413 Gcal/year due to improvement of energy efficiency;

2. Increase in operating life of the main and distribution pipelines which are replaced for 30 and more years;

3. Operating costs will reduce by 1% from UAH 73,837 mil to 72,777 mil due to:

- 1 % reduction of costs for gas through cut of heat consumption;

- 6 % reduction of energy consumption through cut of costs for transferring;
- 15 % reduction of administrative costs through decrease in necessity of liquidating breaks and handling complaints from population;
- 9 % reduction of costs for water through cutback of breaks.

3.1.3. Component 3: IHS and heat meters

Component description:

Provision is made for installation of new IHSs in residential buildings; installation of correcting pumps and heat meters, which will allow to avoid irrational use of thermal energy, improve quality of heat supply services, cut down length of the pipeline transportation system and, consequently, reduce heat losses and operational costs.

The main attention, from the consumers' point of view, falls upon investments which create stimuli for control and saving of energy at the expense of increase in measures to improve energy efficiency, and due to changes to consumers' behavior making it possible for them to significantly cut down the need for heating for buildings. Investments in new packaged substations are part of the strategy for modernization of the whole district heating system. This strategy will affect the course of the tariff reforms through creating stimuli for clients, so that to save energy and their consumption of heat.

Depending on a building heat system configuration, lead-in locations for the heat supply system, cold and hot water in each building, one or a couple of IHSs will be installed.

A new IHS will replace the existing heat supply on the basis of CHS. Thus, CHS may be dismantled. It has been calculated that the IHS will reduce the level of heat overexertion in the heating systems, and the metering devices will lead to the possibility of an efficient control of the service rendering process and reduction of monetary costs for heat and hot water supply.

The main advantages of this component are ensured by the following:

1. Heat delivered to the heat network will go down by 4% (from 93 282 Gcal/year to 89 426 Gcal/year) due to finer heating adjustment. Accordingly, population reducing heating consumption will be observed.

2. Realization of heating will also reduce by 2%, from UAH 33,543 mil to UAH 32,752 mil, due to reduction of heating consumption.

3. Operating costs will reduce by 2%, from UAH 36.916 mil to UAH 36.312 mil, through:

- 2% is the saving of gas consumption due to decrease in heating consumption;
- 3% is the saving of electric energy due to decrease in costs for transfer;
- UAH 604.179 mil of saved investment in the DH network due to extended period of operation of the modernized network (from 30 to 40 years).

Investment objects:

The proposed IHSs and meters will be installed on the network which includes boiler houses at Timiriazieva 123, Mykoly Hordiichuka 2, Kniaziv Koriatovychiv 56 and Hrushevskoho 31. List of IHSs proposed for installation is given in the Table 3.

Table 3

Building sign	Address of the building	Scope of supply (only heating or heating + HWS or HWS)	Transit or dead-end connection of the building to heating network	Floor area, m2	Number of storeys,pcs	Number of entrance, pcs	Number of flats, pcs	Number of inhabitants, pcs
A1.	6, 30 Rokiv Peremohy St.	Heating + HWS	Dead-end	4415	9	1	115	290
A2.	8, 30t Rokiv Peremohy St.	Heating	Dead-end	3 344	9	2	70	167
A3.	10, 30 Rokiv Peremohy St.	Heating	Dead-end	3 088	9	2	68	138
A4.	12, 30 Rokiv Peremohy St. (2md lead-in)	HWS	Dead-end	5 297	5	4	98	250
A5.	14, 30 Rokiv Peremohy St.	HWS	Dead-end	3 812	5	4	70	188
A6.	14a, 30 Rokiv Peremohy St.	Heating	Dead-end	2 186	5	3	50	113
A7.	14b, 30 Rokiv Peremohy St.	Heating	Dead-end	2 068	5	3	48	126
A8.	13, Haharin St.	Heating + HWS	Dead-end	6 306	9	4	128	263
A9.	89, Haharin St.	Heating + HWS	Dead-end	5 350	9	3	107	277
A10.	4, Heroiv Nebesnoi Sotni St.	Heating + HWS	Dead-end	4 401	9	3	88	210
A11.	6, Heroiv Nebesnoi Sotni St.	Heating + HWS	Dead-end	3 447	9	2	68	141
A12.	8, Heroiv Nebesnoi Sotni St.	Heating + HWS	Dead-end	3 434	9	2	69	165
A13.	39, Heroiv Nebesnoi Sotni St.	Heating	Dead-end	4 051	5	4	91	195

A14.	41, Heroiv Nebesnoi Sotni St.	Heating	Dead-end	3 968	5	4	90	177
A15.	22, Hodovanets St.	Heating + HWS	Dead-end	1 642	5	3	44	90
A16.	24, Hodovanets St.	Heating + HWS	Dead-end	1 981	5	1	62	135
A17.	26, Hodovanets St.	Heating	Dead-end	2 521	5	1	136	215
A18.	26a, Hodovanets St.	Heating + HWS	Dead-end	5 102	9	1	176	381
A19.	44, Drai Khmara St.	Heating + HWS	Dead-end	3 170	9	2	69	145
A20.	4, Druzhby Narodiv St.	Heating + HWS	Dead-end	3 244	9	2	72	157
A21.	1, Kamianchanyna St.	Heating + HWS	Dead-end	1 047	9	4	133	317
A22.	9, Kniaziv Koriatovychiv (pumping station)	Heating	Dead-end	-	-	-	-	-
A23.	2, Kosmonavtiv St.	Heating + HWS	Dead-end	6 826	9	4	144	353
A24.	6, Kosmonavtiv St.	Heating	Dead-end	5 206	9	3	108	222
A25.	7,9, Kosmonavtiv St.	Heating + HWS	Dead-end	9 666	9	6	194	476
A26.	8, Kosmonavtiv St.	Heating	Dead-end	1 783	9	1	53	125
A27.	10, Kosmonavtiv St.	Heating	Dead-end	1 864	9	2	53	124
A28.	12, Kosmonavtiv St.	Heating + HWS	Dead-end	3 569	9	2	103	236
A29.	17, Kosmonavtiv St.	Heating	Dead-end	3 151	9	2	66	161
A30.	4, Kulyka St.	Heating + HWS	Dead-end	4 393	5	8	90	230
A31.	5, Lermontov St.	Heating + HWS	Dead-end	2 829	9	2	72	155
A32.	85, Lesia Ukrainka St.	Heating + HWS	Dead-end	4 493	5	5	85	214
A33.	9, Mykoly Hordiichuka St.	Heating	Dead-end	4 512	9	4	85	225
A34.	11, Mykoly Hordiichuka St.	Heating	Dead-end	3 778	9	2	105	254
A35.	3, Molodizhna St.	Heating + HWS	Dead-end	6 694,2	9	1	161	304
A36.	3A, Molodizhna St.	Heating	Dead-end	4 258	12	1	60	81
A37.	5, Molodizhna St.	Heating	Dead-end	4 041	12	1	59	114
A38.	31, Molodizhna St.	Heating	Dead-end	4 179	12	1	57	100
A39.	25, Nihynske Shose St.	Heating + HWS	Dead-end	3454	9	2	64	166
A40.	30, Nihynske Shose St.	Heating	Dead-end	3 332	9	2	67	163
A41.	32, Nihynske Shose St.	Heating	Dead-end	3 246	9	2	69	162
A42.	34, Nihynske Shose St. (1st lead-in)	Heating	Dead-end	7 268	9	3	140	360
A43.	34, Nihynske Shose St. (2nd lead-in)	Heating	Dead-end	4 846	9	2	93	240
A44.	34, Nihynske Shose St. (3rd lead-in)	Heating	Dead-end	3 348	9	2	68	173
A45.	8, Ohienko St.	Heating	Dead-end	2 502	5	4	53	108
A46.	82, Ohienko St.	Heating	Dead-end	3 061	5	4	70	134
A47.	4, Panivetska St.	Heating	Dead-end	2 842	5	4	70	131
A48.	5, Panivetska St.	Heating	Dead-end	1 668	5	2	40	82
A49.	13, Panivetska St. (Central Heat Supply Station)	HWS	Dead-end	-	-	-	-	-
A50.	8, Proektna St.	Heating + HWS	Dead-end	4 623,5	9	3	108	224
A51.	47, Pushkinska St. (pumping plant)	Heating	Dead-end	-	1	-	-	-
A52.	1,3,5, Rozvadovskyi St. (KTEB 11)	Heating	Dead-end	9 682	-	-	168	494
A53.	24, Saksahanskoho St.	Heating + HWS	Dead-end	1 471	5	2	39	76
A54.	4, Suvorov St	Heating + HWS	Dead-end	2297,12	5	4	44	140
A55.	84, Timiriaziev St.	Heating	Dead-end	2 947	5	4	69	147
A56.	86, Timiriaziev St.	Heating	Dead-end	2 937	5	4	67	127
A57.	88, Timiriaziev St.	Heating	Dead-end	3 048	5	4	73	139
A58.	122, Timiriaziev St.	Heating	Dead-end	4 818	5	6	110	223
A59.	134, Timiriaziev St.	Heating + HWS	Dead-end	5 271	9	3	104	229
A60.	158, Timiriaziev St.	Heating	Dead-end	2 961	5	4	67	129
A61.	9, Patriarkha MstyslavaSt.	Heating	Dead-end	4 323	5	8	72	214

A62.	17, Khmelnytske Shose St.	Heating + HWS	Dead-end	6 780	9	5	133	317
A63.	19,19a, Khmelnytske Shose St.	Heating + HWS	Dead-end	4 488	5	9	101	177
A64.	43, Chekhova St.; 30, Khmelnytske Rd.	Heating + HWS	Dead-end	10 007	5	13	231	481
A65.	4, Shevchenko St.	Heating + HWS	Dead-end	6 885	9	4	137	327
A66.	29, Shevchenko St. (pumping plant)	Heating	Dead-end	-	-	1	-	-
A67.	41, Shevchenko St. (pumping plant)	Heating	Dead-end	-	-	1	-	-
A68.	42, Hrushevskyi Ave.	Heating + HWS	Dead-end	4 021	9	3	99	181
A69.	74, Hrushevskyi Ave.	Heating + HWS	Dead-end	4 422	9	1	116	283
A70.	76, Hrushevskyi Ave.	Heating + HWS	Dead-end	4 445	9	1	119	286

3.2. General information on the region

Kamyanets-Podilskyi is an administrative center of the Kamyanets-Podilskyi District of the Khmelnytskyi Region. Kamyanets-Podilskyi is located in the southern part of the Khmelnytskyi Region, which is in the south-western part of Ukraine. The Smotrych River, a tributary of the Dniester, flows through the city. The total area of the city is 27.84 km^2. Population of Kamyanets-Podilskyi, as on June 1, 2012, was 102 564 persons.

Distance from the district administrative center to Khmelnytskyi is 102 km. From the north to the south of the district runs the Zhytomyr-Terebleche highway (M-20) through Khmelnytskyi to Bucharest, as well as the Khmelnytskyi-Chernivtsi railroad.

Fig.4. Geographical position of Kamyanets-Podilskyi

The city is split into the following neighborhoods: Stare Misto (Old City), Ruski Filvarky (Russian Estates), Polski Filvarky (Polish Estates), Bilanivka, Novyi Plan (New Plan), Karvasary, Vydrivka, Pidzamche, the village of Smirnova, the village of Cheremushky, the village of Tsukrovoho Zavodu (Sugar Plant), the village of Pershotravneve, the village of Zhovtneve, the residential district of Zhovtneve. The Old City territory is part of the State Historical National Park. Fig.5 shows the map of the city.

Fig.5. Map of Kamyanets-Podilskyi

3.2.1. Climatic conditions

The climate in Kamyanets-Podilskyi is temperate continental, with moderately cold variable winters, comparatively dry springs, humid summers and comparatively dry autumns. The average annual temperature is 7…8 °C. The temperature for designing heating systems: -20 ºC; the average temperature of the heating season is 0.3 ºC. The average duration of the heating season is 180 days.

Basic climatic data regarding the city are given in table 3 (based on the Khmelnytskyi Regional Center for Hydrometeorology).

Table 4

Basic Climatic Data

No.	Basic climatic data		
	Parameter	**UOM**	**Value**
1	Minimum average air temperature in January (the coldest month)	°C	-8.1
2	Maximum average air temperature in July (the hottest month)	°C	24.5
3	Average temperature for the six the warmest moths in a year (April – September)	°C	15.2
4	Average temperature for the six the coldest moths in a year (October - March)	°C	0.4
5	Relative humidity	%	79
6	Average wind velocity in a year	m/s	2.9
7	Quantity of days in the heating season	Q-ty	183
8	Start of the heating season	Month	October
9	End of the heating season	Month	April
10	Climatic zone		1

3.2.2. Ecologic situation in the city

The overall picture in the city regarding air quality can be assessed as a very good one. Based on the data of the Khmelnytskyi Regional Meteorological Office, occurrences of high and extremely high atmospheric pollution in Kamyanets-Podilskyi have not been registered over recent years; the average concentration of pollutants, as a rule, does not exceed the maximum permissible levels.

Water sources of the city are represented by the Dniester River (minimum distance from Kamyanets-Podilskyi to River Dniester is around 15 km), the Smotrych River, the Muksha River, underground sources and the system of small lakes and ponds.

Since there is no big industrial plant and factory, River Dniester is one of the cleanest and least polluted big rivers of Ukraine. River Smotrych also has good ecological characteristics. The ecological state of the river is satisfactory.

Kamyanets-Podilskyi, not being an industrial city, is characterized by a low level of noise load. The noise level, in the city center near the main transport hubs, approaches the maximum permissible levels.

All solid domestic waste, as accumulated within the city, is taken to the dump located near the city (Nihynske Shose 2A). 8 276 thousand tons of waste are gathered at this dump. The dump does not accept hazardous waste (hazard class I-III).

The main source of toxic industrial waste is industrial enterprises, power, gas and water supply companies. The industrial sector mainly creates metallic and sedimentary waste (used lead batteries, oil product waste, used luminescent lamps etc.). In total, in 2012, the enterprises and organizations generated 12.5 tons of waste of high and middle hazard class (classes I-III) and 264 thou m^3 of domestic waste.

In whole, the situation in the sphere of waste handling is much better in Kamyanets-Podilskyi, than in other regions of Ukraine. The city administration regularly demolishes unauthorized dumps. Solid waste and fallen leaves are also regularly removed from the territory of private sector. State and municipal authorities control companies in what regards collection, removal and disposal of industrial and solid domestic waste.

3.2.3. Description of the project impact territory

Component 1: Construction of a new heat and power station

Construction of a new heat and power station at Krypiakevycha St., 3, will be carried out in the industrial area of Kamyanets-Podilksyi. The nearest residential building is at the distance of 149 m in the north-east direction off the site. The area allocated for construction has approach roads; there is a highway at a distance of 120m from the area, which simplifies delivery of fuel by heavy-load vehicles; at a distance of 30m, there is a railway track, which can be used in future for delivery of bio-fuel.

Component 2: Renewal of the heat network

The route of the new network mainly runs in the green zone of the city. Ditches crossing roads are expected in the way of the heating main route, viz: at the

crossroad of Hrushevskyi Avenue with the following streets: Timiriazieva, Chervonoarmiiska, Pushkinska, Danyla Halytskoho, Kniaziv Koriatovychiv, Frai Khmary, Panivetska, and Hodovantsia.

Component 3: IHS and heat meters

The proposed IHSs with heat energy meters will be installed in the heating substations located in the basements of the residential buildings in the heating territory of the boiler houses at Timiriazieva 123, Mykoly Hordiichuka 2 and Kniaziv Koriatovychiv 56, and the newly built heat and power station at Krypiakevycha 3.

3.3. Data on Demarcation of Sanitary Protection Zones

According to the State Sanitary Rules (SSR) No.173 as of 19.06.1996, an enterprise running technological processes, during which there occur air pollutant emissions, should be isolated with a Sanitary Protection Zone (SPZ). Under this classification (Clause 5.4/SSR No.173), the Sanitary Protection Zone should be arranged to spread from hazardous sources to housing development boundaries, areas of public institutions, buildings and facilities, including children's, educational, medical and preventive institutions, welfare offices, sports facilities and the like, as well as territories of parks, gardens, squares and other amenity planting objects of public service, grounds of recreation and physical institutions, places of resort, horticultural societies and other objects put to them, including for the enterprises with the technological processes being sources for polluting air with harmful bad-smelling chemicals and biological factors, directly from the air contamination source with emissions from defined places (through chimneys, shafts) or emissions from non-defined places (through facility lamps, smoking and steaming surfaces of technological installations and other facilities etc.), as well as from places of unloading of raw materials, middling products or outdoor storages.

The outer boundary of the sanitary Protection Zone, directed toward the housing development, concentrations and levels of harmful factors must not exceed their sanitary-hygienic standards (MAC (Maximum Allowable Concentration), MAL (Maximum Allowable Level)); at the boundary of a resort-recreation zone – 0.8 of the standard value.

An estimated SPZ will be determined after designing of the “Environmental Impact Assessment" (EIA” section which is part of the design documents.

IV. XHARACTERISTIC OF IMPACT OF THE PROJECTED ACTIVITY UPON ENVIRONMENT AND SOCIAL SPHERE

During the project implementation period and operation of the boiler house and heat network, there may arise impacts as described in Table 4.1:

Table 5

Impact ed environment	Impact description
Period: Construction and installation works	
Impact assessment: Negative	
Atmospheric air	Pollutant emissions from internal-combustion engines running
	Dust emissions due to excavation works (during the dry period)
	Pollutant emissions from electric welding
Noise impact	Noise from motor transport and machinery
Water environment	No impact expected
Soils	Piling up of soil after excavations at work location
Waste management	Accumulation of solid waste after excavations
Flora and Fauna	Possible destruction of vegetation at work location in the form of lawns and some solitary trees
Human health	No impact expected In cases of non-observance of the established regulations and safety rules, there may occur emergency situations related to fires and explosions. This can result in injury to workers and persons visiting a production site or passing by, as well as damage to property.
Cultural heritage and public objects	No impact expected
Social impact	Temporary impact in the form of traffic restriction during replacement of networks.
Population shift	No impact expected
Period: Operation	
Impact assessment: Negative	
Atmospheric air	Pollutant emissions from boiler units running (quantitative indices shown in Annex 4)
Noise impact	No impact expected Noise from motor vehicles (delivery of pellets and chips, removal of ashes)
Water environment	No impact expected
Soils	No impact expected
Waste management	Accumulation of domestic waste in the course of operational procedures Creation and accumulation of ashes
Flora and Fauna	No impact expected
Human health	No impact expected

	In cases of non-observance of the established regulations and safety rules, there may occur emergency situations related to fires and explosions. This can result in injury to workers and persons visiting a production site or passing by, as well as damage to property.
Cultural heritage and public objects	No impact expected
Impact assessment: Positive	
Social and economic development	Improvement of quality and ensuring of reliability of heat supply services

V. SAFETY MEASURES AND LABOR PROTECTION

Working conditions at the workplace, safety of technological processes, machines, mechanisms, equipment and other production means, condition of collective and personal protective equipment used by workers, as well as sanitary and living conditions, must meet the legislation requirements and be secured at all stages of the PROJECT implementation.

The basic normative acts regulating safe working conditions are:

- Law of Ukraine “Upon labor protection”;
- DBN A.3.2.-2-2009 “Labor protection and industrial safety in construction”
- DNAOP 0.00-1.21-98 “Rules on safe operation of consumers’ electric installations”;
- DNAOP 0.00-1.20-98 “Safety measures for the gas supply systems of Ukraine”;
- NAPB B.06.044-2005 “Fire safety rules in Ukraine”;
- HKD 34.20.507-2003 “Rules on technical operation of electric stations and networks”;
- DNAOP 0.00-1.11-98 “Regulations on the structure and safe operation of steam and hot water supply pipelines”;
- DNAOP 0.00-1.26-96 “ Regulations on the structure and safe operation of steam boilers with the steam pressure not exceeding 0.07MPa (0.7kgf/cm2), hot-water boilers and water heaters with the water preheat temperature not exceeding 115^0C”;
- DNAOP 1.1.10-1.04-01 “Rules on safe use of instruments and devices”;
- DNAOP 1.1.10-1.02-01 “Rules on safe operation of thermal and mechanical equipment of power plants and heat networks”;
- Rules for technical operation of thermal installations and networks, as approved by the order of the Ministry of Fuel and Energy of Ukraine on 14.02.2007.

The contractor must, with the participation of the employer and subcontracting organizations, work out and approve measures on safety and industrial sanitary, obligatory for all organizations participating in construction.

Construction machines must meet the requirements of normative documents and be accompanied by operational documents; cranes and other machines acquired abroad must have a certificate of conformity to the occupational safety requirements (NPAOP 0.00-1.01). It is forbidden to operate means of mechanization, as provided for by their structure and design, without fencing, blocks, warning systems and other means of collective protection of workers.

During execution of transport and loading and unloading works, it is necessary to stick to the requirements of DBN A.3.1-5, NPAOP 0.00-1.01, NAPB A.01.001, DBN V.1.1-7, DBN V.1.2-7, and NPAOP 60.2-1.28.

5.1. Safety Requirements in Organization of Construction and Execution of Works

Prior to construction and installation works, each object must be supplied with the project documentation on construction arrangements and execution of works.

It is impermissible to conduct construction and installation works without such documentation.

Project solutions on labor protection during construction must be specific and meet the real working conditions. A special section of the Work Performance Plan (WPP) must show particularly important requirements to labor protection rules and measures to ensure their being fulfilled.

These measures must contain technical solutions and basic organizational measures regarding ensuring safety execution of works and sanitary and hygienic service of workers.

WPP must define:

1. Locations of temporary fencing, placement of cranes, location of electric power lines, roads, passages, sanitary and amenities.

2. Structures and materials storage sites.

3. Danger lines.

4. Catwalk bridges and bridges for motor transport to cross trenches.

5. Diagrams for power supply and illumination of construction site and workplaces, indicating types of lamps and places of their mounting.

6. Technological order of work performance with indication of the number of workers, their occupation, and required means of protection.

7. Scaffolding and other means of raising a scaffold, load-lifting platforms indicating allowed weight and ways of fastening of load.

8. Safe passages to workplaces and ways of lifting to the floors of erected buildings.

9. Safe sequence of load-lifting operations.

10. Dimensions of a dangerous zone for construction vehicles and motor transport to move within the light of collapse of slopes and excavations.

11. Steep of slopes excavations with the depth of over 5 m.

12. Design of mounting of vertical walls of trenches and pits which are more than 3 m deep.

13. Ways of soil compaction near construction structures.

14. List of specific dangerous works, for execution of which workers should be given a written work-permit.

15. Sequence of disassembly of sliding formwork.

16. Organization of workplaces for mounters of construction structures.

17. Location and site of operation of installation machinery.

18. Methods and devices for mounters' safe work:

- Sequence of technological operations during installation of construction structures;
- Places and ways for temporary fastening of elements to be installed;
- Sequence of installation, fastening and strapping of built-up constructions;
- Technology for dismantling of structures;
- Vehicles and mechanisms for moving construction materials, structures and cargo-handling gears for them;

- Schemes for strapping cargoes moved by a crane;
- Fire-fighting measures and fire-extinguishing means;
- Types of amenities with indication of their content, quantity and places of installation;
- Safety measures when handling toxic substances;
- Measures to reduce industrial noise, vibration etc.

To prevent the risk of workers falling down from height, WPP must provide for decrease in scope of work done by steeplejacks.

To prevent the risk of materials and products falling down from height during hosting operations with cranes, provision should be made for:

1) package for moving piece and loose materials;

2) load-grappling devices;

3) strapping means;

4) appliances for stable storage of structure elements (pyramids, cassettes);

5) means of removing by-products and construction waste;

6) necessity for use of protective floors or canopies during works carried out by the same vertical.

5.2. Safety of Site Organization

The fencing of the site should ensure safety of people moving along the streets, passages and public passes near the construction site.

If the fencing is installed closer than 10 m from the facility under construction, it is mandatory to install a protective canopy over a pedestrian walkway not less than 1.25 m wide, from boards of at least 40 mm thick.

During the preparation work, the construction site is cleared of all buildings, structures and trees that interfere with construction work. Priority work on planning the territory is also needed, to ensure the timely flow of storm water. To accommodate and serve construction teams, a number of facilities is needed, first of all, using the existing buildings, and then arranging mobile homes.

If work related to excavation of soils is planned, coordination with the Inspection for improvement and sanitary condition of the city is mandatory.

Only after completion of the preparatory work, construction of the main objects can be possible.

Construction work is carried in daylight hours. If it is necessary to conduct works at night time, it is required to agree this with the public in advance. In order to secure works at night, in case of an urgent need, the work area must be necessarily fenced, with lighting along the perimeter of the fencing; warning and information illuminated signs being displayed; artificial lighting of the work place being arranged under DVN V.2.5-28: 2016 "Natural and artificial lighting". Night works should be executed under the direct supervision of an engineering technician, with issuing a work permit and providing an additional personal briefing.

Requirements to workplace lighting:

1. The hanging height of the lamps above the level of the work site is not lower than 2.5 m. If it is impossible to meet this requirement, the voltage in the lighting network should be no more than 72 V.

2. The artificial illumination capacity should be as follows:

- Work site: at least 25 lx;
- Storage area: 10 lx;
- Approach roads: 1 lx;
- General illumination: 2 lx.

At the construction site the dangerous zones are:

- Places with bare current-conducting parts;
- Fenceless height differences over 1.3 m and higher;
- Places of movement of vehicles and equipment, their components and working elements;
- Places where harmful substances are stored, which may lead to creation of their concentration in the air exceeding MAC (Maximum Allowable Concentration);

- Places of objects possibly falling down from height.

To prevent an unauthorized access, dangerous zones should be protected with the fencing.

Safety requirements to organization of work in winter

To ensure safe working conditions in winter, it is required to:

1. Timely clear of snow and sand the approach roads and walkways.

2. Completely clear the construction material storage area of snow and ice.

3. Periodically remove icicles formed above the building entrances, pavements, passes and passages.

4. So that to prevent the roofing from collapsing due to snow load, clear the roofs of snow and ice, having protected the dangerous zone wherein the snow is thrown down.

5. For the purpose of protecting workers against unfavorable meteorological conditions, provide for a room for the workers to warm in, with the dimensions calculated in view of 0.1 m^2 per one person during the most numerous shifts, but not less than 8 m^2. The air temperature in such rooms should be at least +22°C.

In the *summer*, atmospheric electricity discharges are of great danger. Therefore, in order to protect the workers, it is necessary to carry out a complex of measures against the lightning and its secondary occurrences.

At construction sites most often they arrange lightning rods. They are installed at the corners of the object, which is erected, at a distance of not more than 20 m from each other. Each lightning rod must have an independent electrical lead, connected to the ground with a resistance of no more than 20 ohms.

A thunderstorm approaching, all works at all construction sites, cranes, excavators and other construction machines must be stopped, and the workers, having disconnected current receivers, are obliged to cover themselves in premises equipped with means of lightning protection.

5.3. Organization of the First Aid to Injured Persons at the Construction Site

Timely provision of first medical aid during an accident is of great importance in preserving the life and health of a person. It should be provided quickly and qualitatively. Therefore, the first aid rules must necessarily be included in the training of workers and at IHSs.

The first aid to an injured person during an accident should be given in the following order:

1. Release an injured person from further being exposed to a harmful factor (from being exposed to a load pressing down the person, electric current, chemical reagents, water etc.), take the person in the open air, unbuckle the belt, undo buttons.

2. Perform artificial respiration, stop the bleeding, apply a dressing, apply a splint etc.

3. Call an ambulance and take the injured person to the nearest medical institution using any means of transport, abiding, at that, by all safety laws.

One of the most frequent and serious complications in bone fractures, burns, and severe injuries is a shock. It is caused by a severe disorder of CNS which regulates blood circulation, metabolism and respiration. The shock is characterized initially by general excitement, and then by oppression of the activity of the whole body, pallor of the skin, body temperature fall, frequent and weak pulse, and low blood pressure. The shock, of course, does not lead the patient to unconsciousness. Annoyance and anxiety that appear first are usually replaced by indifferent attitude to everything around them. When rendering first aid to the injured person, it is necessary to put the patient in a convenient position, in which there are fewer sensations of pain, warm the patient with hot-water bottles, give them stimulating drinks: hot tea, coffee, alcohol, wine, or painkillers.

Hits and strains are characterized by appearance of swelling, hemorrhage and pain, as well as limitation of limb activity.

When rendering first aid, it is necessary to provide quiet and calm to the injured person and put the cold on the injured spot (pieces of ice, snow, a towel moistened with cold water).

With dislocations, the shape of a joint and the length of a limb are changed. First aid for dislocation is to create a complete calmness of the damaged joint.

Various injuries are dangerous due to the possibility of loss of a large amount of blood, contamination and infection. Sometimes the vital organs can be injured: muscles, vessels, nerves, bones, etc. Very dangerous are wounds that penetrate the cavity of the skull, chest, peritoneum, and joints.

Providing first aid, you must first clean your hands with soap and rub your fingers with iodine infusion. Then open an individual package, put the sterilized material on the wound and apply a bandage. In the absence of an individual package, you can dress the wound with bandage, gauze or a clean cloth. At that, the place of application to the wound should be wetted with iodine tincture, so that the area of wetting is larger than the wound. It is not allowed to clean the wound from dirt, dust, earth, blood, etc., lubricate with medicines, and rinse with water, since only a doctor can do this.

There are two types of fractures: open and closed. The primary purpose of first aid during fractures is to prevent damage to soft tissues by bone fragments (damage to the vessels, nerves, muscles, skin) and severe complications (shock, bleeding, and infection).

The patient with a bone fracture needs immediate help, which must be provided calmly, quickly and systematically. The patient should be put in a comfortable and calm position, which eliminates mobility of the injured part of the body. This can be achieved by fixing the fragments by means of splinting. In the absence of special splints for fixing the fragments, you can use any improvised materials (boards, sticks, pieces of plywood, cardboard, etc.). Fasten the splints with bandages, belts, ropes, etc. The correct position of the splints ensures a stationary state of the injured body part during transportation and reduces pain.

To prevent contamination of the wound with an open fracture, it is necessary to lubricate the skin surface around the wound with an iodine solution and apply a sterile bandage.

In severe burns with fire, hot water, steam, molten bitumen, you must carefully remove clothes (shoes), dress up the burned place with sterile material, fix with a bandage and send the injured person to the hospital. In any case it is not allowed to clean the burned place from parts of the garment and lubricate it with ointments and solutions.

First aid for burns caused by acids and burnt lime is to immediately rinse the affected area with a strong spurt of water; in case there is no water supply system, bathe in a tank with clean water for at least 10 – 15 minutes. Then, the burned place should be covered with a lotion of soda solution at burns of acid, and boric acid at burns of burnt lime.

5.4. Fare Safety at the Construction Site

At construction sites, fires occur as a result of disregard of precautionary measures.

1. Electric and gas welding.
2. Improper operation of electrical networks.
3. Careless handling of fire.
4. Malfunction of heating devices.
5. Self-ignition of materials.

Locations of welding and other works related to fire (connected with the heating of parts up to those temperatures that can cause ignition of materials and structures) may be temporary and permanent, when works related to fire are carried out directly in buildings, residential buildings and other structures that are being built or operated and in the territories of enterprises for equipment repair or installation of building structures.

Welding and others works related to fire are to be executed by persons who have passed the established procedure on verification of their knowledge of the requirements for fire safety, as evidenced by a special ticket.

Locations of temporary welding and others works related to fire can be determined only by written permission from a person responsible for fire safety of the object: enterprise head, shop manager, laboratory chief, workshop supervisor, warehouse coordinator, etc.

Works related to fire without written permission may be carried out, at construction sites and in places which are fire-safe, only by specialists of high qualification, who are familiar with the Basics of Fire Safety program. The list of specialists eligible for independently carrying out works related to fire without obtaining written permission, is announced the head of the facility.

Proceeding to works related to fire is allowed only in the presence of means for fire extinguishing, means for cleaning the workplace from burning materials, and means for protecting the structures that burn.

The head of an object or an officer responsible for fire safety of a premise (territory, institution, etc.) should ensure inspection of location for conduct of temporary works related to fire within 3-5 hours after completion of works related to fire.

Temporary locations for conducting works related to fire and places where welding machines, cylinders with gases and containers with flammable liquids are installed must be cleaned from combustible materials within a radius of at least 5 m.

Portable acetylene generators for work should be installed in open areas. It is allowed to temporarily operate them in well-ventilated premises. Acetylene generators must be fenced and placed at a distance of at least 10 m from the welding locations, from open fire and highly heated objects, from the places where air is taken in by compressors and fans. When installing an acetylene generator, make sure that the inscriptions "Authorized Personnel Only: Flammable", "Do Not Smoke", "Do Not Pass with Fire" are present.

VI. MITIGATION ACTION PLAN

Below is a general characteristic of possible actions that may be taken for mitigation of negative impact upon the environment, as classified in Section IV:

Table 6

Impact environment	Action
Period: Construction and installation work	
Atmospheric air	Wetting of places where dust forms, with water from stationary or mobile water supply sources
	Provision of workers with respirators (if required)
	Check of working order of engines
Noise impact	Restricted activity (execution of works between 9.00 and 23.00 or by agreement with the public)
	Provision of workers with hearing protection devices (if required)
Water environment	Not required, for negative impact is not expected
Soils	Piling of soil onto an earth ground covered with a polyethylene film, near the work location; in case it is impossible, removal of soil to approved places
Waste management	All waste will be collected and stored separately, according to a hazardous class, and transferred to specialized organizations
Objects of vegetable and animal world	All destroyed flora and cut down trees will be appropriately restored / replanted
Human health	Not required, for negative impact is not expected
Cultural heritage and public objects	Not required, for negative impact is not expected
Population shift	Not required, for negative impact is not expected
Period: Operation	
Atmospheric air	Not required, for the air pollutant emissions will not exceed the maximum allowable emissions (MAE)
Noise impact	Not required, for negative impact is not expected
Water environment	Not required, for negative impact is not expected
Soils	Not required, for negative impact is not expected
Waste management	Transfer of waste to specialized organizations according to concluded agreements
Objects of vegetable and animal world	Not required, for negative impact is not expected
Human health	Not required, for negative impact is not expected
Cultural heritage and public objects	Not required, for negative impact is not expected

Detailed Action Plan to reduce influence on the environment is given in Annex 1 in the tabular format.

VII. MONITORING PLAN

7.1. Rehabilitation period:

- Control of noise and vibration: according to the current legislation of Ukraine and in case of citizens filing complaints;
- Control of dust content: visually during execution of works;
- Control of soil accumulation after excavations: visually during execution of works;
- Control of accumulation of solid waste (asphalt coating, concrete, cobblestones, polyethylene film): visually during execution of works;
- Control of ultraviolet radiation and harmful fumes during gas/electric welding: daily in accordance with the current legislation of Ukraine;
- Control of exhaust gases from engines: daily in accordance with the current legislation of Ukraine;
- Control of traffic jams: visually during execution of works;
- Control of safety of workers, pedestrians, citizens: during execution of works.

7.2. Operation period:

- Control of water leakage (heat networks): visually during operation;
- Control of air pollutant emissions: by means of established methods and laboratory control every year.
- Control of emergency and fire safety: continually during operation.

Detailed description of parameters for control, measuring devices, responsible persons are provided in Annex 2.

VIII. DEVELOPMENT OF INSTITUTIONAL ABILITIES AND TRAINING

For the purpose of implementation of the PROJECT, they established at the Public Utility “Public Utility “Miskteplovodenerhiya” ”, a Service on Managing the Energy Efficiency Project, which fulfills functions of RPMU, as per the Operational Manual, and is responsible for daily management and implementation of the project at the local level, as well as coordinates its activity with CPMU.

RPMU is comprised of such specialists:

- RPMU leader;
- Financial management specialist;
- Accounting expert;
- Procurement specialist;
- Technical specialist (engineer);
- Environmental protection specialist (ecologist).

For observance of ecological and sanitary-hygienic norms and restrictions during carrying out of planned works and operation of reconstructed objects, in the future it is enough to conduct monitoring observations. In addition, the environmental situation will be necessarily controlled by the state control bodies in the field of ecology and sanitary and hygienic safety, both at the stage of design estimates, and at the stage of putting into operation of the reconstructed objects and their operation.

Control over compliance with the requirements of the recommendations of this ESMP on the part of the Public Utility at the construction stage will be assigned to the compliance officer. In addition, the laboratory (under the contract) will control the emission of pollutants into the air for compliance with state standards both at the stage of reconstruction, and at the stage of operation.

Additional units for monitoring compliance with the requirements of ESMP will not be created.

Table 7

Persons in charge of sticking to ecological and sanitary-hygienic norms and restrictions at the operational stage

No.	Index	Persons in charge
1	Noise, vibration	Sanitary and epidemiological station, contractor
2	Dust	Contractor
3	Soil accumulated after excavations	Engineer, contractor
4	Solid waste	Engineer, contractor
5	Ultraviolet radiation and harmful fumes during gas/electric welding	Contractor
6	Exhaust gases	Contractor
7	Traffic jams	Engineer, contractor
8	Control of compliance with sanitary-hygienic norms	Contractor
9	Safety of workers, pedestrians, citizens	Engineer, contractor

Table 8

Persons in charge of sticking to ecological and sanitary-hygienic norms and restrictions at the operational stage

No.	Index	Persons in charge
1	Water leakage	Chief controller
2	Air pollutant emissions	Environmental engineer, laboratory (by agreement)
3	Management of waste, including ashes	Environmental engineer, laboratory (by agreement)
4	Control over emergency and fire safety	Safety officer

IX. PUBLIC PARTICIPATION, PROVISION OF INFORMATION AND CONSULTING

In accordance with the requirements of the World Bank, as well as on demand of the Ukrainian legislation, when conducting an environmental assessment of investment projects related to development of urban infrastructure, the support of these projects by the public is needed. This requirement shows that the formation of positive social relations at all stages of implementation of projects is a prerequisite for their implementation.

Public hearings were organized to familiarize the public with the rehabilitation project and the environmental impact. The purpose of public hearings is to inform the urban population of the planned work within the investment project, as well as to take into account all comments and suggestions of citizens on reducing a negative impact on the environment during rehabilitation of the city's district heating system, and using the materials of public hearings for drawing up the Environmental Action Plan, the materials of which will be used in bidding documents and in the contract for execution of installation work.

On November 26, 2013, public hearings of the Public Utility’s Environmental Action Plan of the Project "District Heating Energy Efficiency of Ukraine" (the notice, Annex No. 7) took place. Before the start of public hearings, participants were registered. According to the results of public hearings, minutes were drawn up (Appendix No. 8), which contain records on the information that was communicated to the public, citizens' questions and answers, the list of those present and the decision that was taken at the hearings.

The ESMP (with annexes) is available for viewing on the public utility’s website at: http://mtve.kp.km.ua /

X. GRIEVANCE REDRESS MECHANISM

During implementation of the Project, there may be a situation when individuals or legal entities can be negatively affected by implementation of the project. In order to quickly resolve such a situation, persons who have been negatively affected by the project may file a complaint with the public utility through one of the existing filing channels:

Reception room telephone: (03849) 3-52-80;

Dispatch service: (03849) 3-49-20, 3-49-40;

Submission of a written complaint by mail or personally to the utility: 32300, Khmelnytskyi Region, Kamyanets-Podilskyi, Timiriazieva St., 123

And/or the municipality (written complaint filed by mail or personally to the city administration): 32300, Khmelnytskyi Region, Kamyanets-Podilskyi, Maidan Vidrodzhennia, 1.

All incoming requests are subject to registration. Complaints can be filed anonymously or with contact information in order to receive a follow-up message. The following data are recorded: date of receipt of the request; surname, name, patronymic; category (social status) of the applicant; where the application received from; date, index, control; raised questions; summary; indexes; contents and date of resolution; registry keeper’s surname; executor; term of execution; date of submission; index and contents of the document; decisions taken; date of ending of control; number of the case by the nomenclature.

Each application is considered on a mandatory basis and an answer is sent back, if contact information is present.

If the submitted application is not related to the PROJECT's ongoing work, it is redirected to the department that solves the problem, and this is reported to the person who made a request.

The general deadline for responding to complaints does not exceed 1 month from the date of receipt of the complaint.

The construction contractor must also implement the "Rapid Response" procedure in order to maximally efficiently and promptly respond to urgent complaints of interested parties at the site.

In case of dissatisfaction with the answer or failure to reach an agreement, the applicant may apply to a responsible specialist of the Central Project Management Group.

If a person who is negatively affected by the project will be dissatisfied with the decision received, such a person will be able, as a last resort, to apply to the court of due jurisdiction.

XI. ANNEXES

Annex No.1

Mitigation action plan

No.	Phase	Impact	Mitigation actions	Value:		Institutional responsibility		Comments
				Installation	Operation	Installation	Operation	
1	**Preliminary construction work phase**	-	Obtaining an authorization from Derzhbudkotrol for execution of works. Obtaining an authorization from the City Council's Planning and Improvement Department for construction works	-	-	-	-	-
2	**Construction:**							
2.1	**Heating networks**							
2.1.1		Noise, vibration	Limited activity (work executed between 9.00 and 23.00, or as agreed upon with the public). Provision of workers with noise-protective means	Minor	Minor	Contractor, engineer	Contractor, engineer	-
2.1.2		Dust	Wetting of places, where dust accumulates, with water from stationary or mobile sources of water supply; provision of workers with respiratory masks	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.1.3		Soil	Storing of soil onto an earth surface covered in a polyethylene film near the	Minor	Minor	Contractor	Contractor	The proposed measure will be

No.	Phase	Impact	Mitigation actions	Value:		Institutional responsibility		Comments
				Installation	Operation	Installation	Operation	
			work location; in case storing is impossible, removal of soil to locations agreed upon with PU					specified in the Contract
2.1.4		Water	Exhaustion of water out of trenches into the sewerage network or into road tanks with further being discharged into the sewerage network	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.1.5		Solid waste (asphalt coating, concrete, cobblestones, polyethylene film)	Transfer of waste to specialized companies	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.1.6		Ultraviolet radiation and hazardous fumes during gas- and electric-welding	Installation of screens and boards at the welding work location. Provision of workers with welding masks	Minor	Minor	Contractor	Contractor	-
2.1.7		Exhaust gases from engines	Application of fuel of high quality. Arrangement of proper ventilation. Do not operate the equipment in enclosed space. Do not release exhaust gases towards working personnel, citizens, animals and buildings	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.1.8		Traffic jam	Installation of warning signs, use of detours as coordinated with the State Automobile Inspection and the traffic coordination	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract

No.	Phase	Impact	Mitigation actions	Value:		Institutional responsibility		Comments
				Installation	Operation	Installation	Operation	
			department under the city council					
2.1.9		Safety of workers, pedestrians, citizens	Installation of warning signs and plates; arrangement of appropriate fencing and catwalk bridges; appropriate illumination at night	Minor	Minor	Contractor, engineer	Contractor, engineer	The proposed measure will be specified in the Contract
2.2	**Boiler houses, IHSs**							
2.2.1		Noise, vibration	Restricted activity (execution of work between 9.00 and 23.00, or as agreed upon with the public). Provision of workers with hearing protection devices	Minor	Minor	Contractor, engineer	Contractor, engineer	-
2.2.2		Dust	Wetting of places where dust forms with water from stationary or mobile water supply sources; provision of workers with respirators	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.2.3		Soil	Piling of soil onto an earth surface covered with a polyethylene film, near the work location; in case of impossibility of soil piling, removal of soil to locations agreed upon with PU	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.2.4		Water	Pumping water from trenches into the sewage system or into automotive tanks with further	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract

No.	Phase	Impact	Mitigation actions	Value:		Institutional responsibility		Comments
				Installation	Operation	Installation	Operation	
			discharge into the sewage system					
2.2.5		Solid waste (asphalt coating, concrete, cobblestones, polyethylene film)	Transfer of waste to specialized companies	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.2.6		Ultraviolet radiation and hazardous fumes during gas- and electric-welding	Installation of screens and boards at the welding work location. Provision of workers with welding masks	Minor	Minor	Contractor	Contractor	-
2.2.7		Exhaust gases from engines	Application of fuel of high quality. Arrangement of proper ventilation. Do not operate the equipment in enclosed space. Do not release exhaust gases towards working personnel, citizens, animals and buildings	Minor	Minor	Contractor	Contractor	The proposed measure will be specified in the Contract
2.2.8		Traffic jam	Installation of warning signs; use of detours agreed upon with the State Automobile Inspection and Department for Transport Flow Coordination under the City Council	Minor	Minor	Contractor, engineer	Contractor, engineer	The proposed measure will be specified in the Contract
2.2.9		Safety of workers, pedestrians, citizens	Installation of warning signs and plates; arrangement of appropriate fencing and catwalk bridges; appropriate lighting at night	Minor	Minor	Contractor, engineer	Contractor, engineer	The proposed measure will be specified in the Contract

No.	Phase	Impact	Mitigation actions	Value:		Institutional responsibility		Comments
				Installation	Operation	Installation	Operation	
3	**Operation of:**							
3.1	**Heating network**							
3.1.1		Water leakage	Reasonable control over the network state, appropriate measures to cut down leakage	Minor	Minor	Engineer	Operating organization	-
3.2	**IHS**							
3.2.1		Breakdowns/other malfunctions	Reasonable control over functioning state	Minor	Minor	Engineer	Operating organization	-
3.3	**Boiler house**							
3.3.1		Pollutant emissions	Control over compliance with permissible emissions	Minor	Minor	Engineer	Operating organization	-
3.3.2		Emergency and fire safety	Control over compliance with norms and rules on emergency and fire safety	Minor	Minor	Engineer	Operating organization	-
3.3.3		Safety of workers	Holding briefings on labor protection	Minor	Minor	Engineer	Operating organization	-
4	**Taking out of service**							
4.1		-	Drawing up a decommissioning act	-	-	-	-	-

Annex No.2

Monitoring plan

No.	Phase	Parameter to be monitored	Place of monitoring	How monitoring will be conducted / type of equipment to be used for monitoring	When monitoring is conducted: permanently or periodically	Why that particular parameter is monitored	Value of monitoring	Person in charge for monitoring
1	**Current phase**							
1.1		Access to site	At the site	Inspection, or appropriate procedures provided for by the project	Prior to construction	Safety for general population	Minor	Contractor, engineer
1.2		Control of traffic flow						
1.3		Availability of a ground for temporary storage of waste	Near the site	Visually	Prior to construction	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
1.4		Control of quality of construction materials (for instance, paints/solvents)	Contractor's warehouse	Visually/Examination of the warehouse for presence of toxic materials	Before approval of the proposed materials	Public safety and professional safety and labor hygiene	Minor	Contractor, engineer
1.5		Exhaust gases from motor vehicles	At the site	Gas analyzer verified and certified in the prescribed procedure	Prior to construction	To prevent air pollutant emissions with exceeded standards	Minor	Categorized laboratory as per contract
2	**Construction (of a heating network, a boiler house and IHSs)**							

No.	Phase	Parameter to be monitored	Place of monitoring	How monitoring will be conducted / type of equipment to be used for monitoring	When monitoring is conducted: permanently or periodically	Why that particular parameter is monitored	Value of monitoring	Person in charge for monitoring
2.1		Noise, vibration	At the site and near place of residence of people who can be influenced by the project	Public consultations	On a daily basis	For people to avoid discomfort	Minor	Contractor, engineer
2.2		Dust	At the site and near place of residence of people who can be influenced by the project	Visually	On a daily basis	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
2.3		Soil accumulated after excavations	At work location	Visually	On a daily basis / as and when necessary	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
2.4		Residual water	At work locations, in pits and trenches	Visually	On a daily basis / as and when necessary	To ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
2.5		Solid waste	At work location	Visually	On a daily basis	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
2.6		Removed hot-water systems	At work location	Visually	On a daily basis / as and when necessary	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer

No.	Phase	Parameter to be monitored	Place of monitoring	How monitoring will be conducted / type of equipment to be used for monitoring	When monitoring is conducted: permanently or periodically	Why that particular parameter is monitored	Value of monitoring	Person in charge for monitoring
2.7		Ultraviolet radiation and harmful flumes during gas/electric welding	At work location	Ultraviolet radiation meter verified and certified in the established order	During activity / as and when necessary	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Sanitary and epidemiological station
2.8		Traffic jams	At / near work location	Visually	During activity / as and when necessary	To ensure traffic safety, prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
2.10		Safety of workers, pedestrians, citizens	At excavation places, at welding work location	Assisted by a safety officer	Permanently	To avoid emergency situations	Minor	Contractor, engineer
2.11		Asphalt (fumes)	At work location	Visually	During activity	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer

No.	Phase	Parameter to be monitored	Place of monitoring	How monitoring will be conducted / type of equipment to be used for monitoring	When monitoring is conducted: permanently or periodically	Why that particular parameter is monitored	Value of monitoring	Person in charge for monitoring
2.13		Sand, gravel, broken stone, cement (dust)	At work location	Visually	During activity	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Contractor, engineer
3	**Operation**						Minor	
3.1		Water leakage	At the distributing network	Visually	During operation in case of people making complaints and notices	To prevent environmental pollution and ensure appropriate conditions of work for personnel	Minor	Engineer
3.2		Safety of workers	Installation of warning signs, appropriate personnel briefing	Assisted by an occupational safety specialist	During activity	To avoid emergency situations	Minor	Occupational safety engineer
3.3		Pollutant emission	Gas flue	Established methods	Periodicity will be set by the air emission permit, but at least annually	Compliance with requirements of the environmental legislation	Minor	Categorized laboratory as per contract
3.4		Check of efficiency of gas-treating plants (GTP)*	Before and after GTP	Established methods	Periodicity will be set by the air emission	Compliance with requirements of the	Minor	Categorized laboratory as per contract

No.	Phase	Parameter to be monitored	Place of monitoring	How monitoring will be conducted / type of equipment to be used for monitoring	When monitoring is conducted: permanently or periodically	Why that particular parameter is monitored	Value of monitoring	Person in charge for monitoring
					permit, but at least annually	environmental legislation		
4	**Taking out of service**	-	-	-	-	-	-	-

* - necessity and appropriateness of installation are determined by calculation of the EIA section.

Annex No.3

Organizations involved in execution of works

No.	Organization title	City, address	Functions during preparation and realization of a sub-project	Works to be executed	Persons in charge / contact details
1	ENERTEX SARL	De la Mer 10, Marseilles, 13016, France	General Contractor	Rehabilitation of heat networks	Representative Office's DirectorJulian Aladenise Tel: +38 06 61 47 41 82 e-mail: office.ua@enertex.fr
2	Ukraine-France Consortium	81, Pokrovska St., Zhytomyr, 10003	General Contractor	Construction of heat and power station	Director Okishev R.O. Tel: +38 0412 481 530 e-mail: rao@kriger.com.ua
3	SYSTHERM s.r.o	K. Papirne 172/26, Plzen, 31200, Czech Republic	General Contractor	IHS installation	Director General Jan Kazda Tel: +420 604 212 542 e-mail: info@systherm.com

Other organizations to be involved in executing works will be determined based on the bidding results.

RPMU structure and persons in charge

No.	Full name	Position	City, organization and address	Functional duties	Contact details (telephones and e-mails)
1	Hordiichuk Valrii Hryhorovych	Director General	Kamyanets-Podilskyi, PU "Miskteplovodenerhiya", Timiriazieva St., 123	Project Manager	(03849) 3-5280 e-mail: kp-mtve@ukr.net
2	Melnychuk Oksana Vasylivna	Financial Manager	Kamyanets-Podilskyi, PU "Miskteplovodenerhiya", Timiriazieva St., 123	Financial Management Expert	(03849) 5-0623 e-mail: mtve.tender@ukr.net

3	Vdovychynskyi Mykhailo Vikentiiovych	RPMU Leader, Procurement Specialist	Kamyanets-Podilskyi, PU “Miskteplovodenerhiya”, Timiriazieva St., 123	Procurement Specialist	(03849) 5-0623 e-mail: mtve.tender@ukr.net
4	Duryhin Mykhailo Oleksandrovych	Engineer	Kamyanets-Podilskyi, PU “Miskteplovodenerhiya”, Timiriazieva St., 123	Engineer	(03849) 3-5280 e-mail: kp-mtve @ukr.net

Annex No.4

Emissions of pollutants and greenhouse gases from burning down of natural gas

No.	Type of used fuel	Current volume of fuel per year, thou t	Pollutants and greenhouse gases	Volume of emissions per year, thou t	% of the total emission volume	Is it planned to reduce the amount of fuel as a result of the projected activity? If yes, specify by how much
1	Natural gas	1.306	Nitric oxide (NO_x)	0.0030	0.09	No
			Carbon oxide (CO)	0.0005	0.01	No
			Carbon dioxide (CO_2)	3.3376	99.89	No
			Methane (CH_4)	0.0001	0.003	No
			Nitrogen oxide (N_2O)	0.00001	0.0003	No
Altogether:				**3.34121**	**100**	**-**

Annex No.5

Emissions of pollutants and greenhouse gases from burning down of pellets

No.	Type of used fuel	Current volume of fuel per year, thou t	Pollutants and greenhouse gases	Volume of emissions per year, thou t	% of the total emission volume	Is it planned to reduce the amount of fuel as a result of the projected activity? If yes, specify by how much
2	pellets	18.391	Sulfur dioxide (SO_2)	0.037*	0.128	No
			Nitric oxide (NO_x)	0.009*	0.031	No
			Carbon oxide (CO)	0.034*	0.119	No
			Carbon dioxide (CO_2)	28.532*	99.604	No
			Methane (CH_4)	0.003*	0.009	No
			Nitrogen oxides (N_2O)	0.001*	0.005	No
			Non-methane light organic carbons	0.014*	0.050	No
			Substances in the form of suspended solid particles	0.015**	0.053	No
Altogether:				**28.645**	**100**	**-**

* - emission volume net of installation of gas-treating plants. The Necessity of installation will be determined by calculation of the EIA section;
** - calculated subject to installation of a cyclone (treating efficiency: 97%).

Annex No.6

Section 1. General information on the project and the site

INFORMATION AND ADMINISTRATIVE DATA				
Country	Ukraine			
Project title	Ukraine District Heating Energy Efficiency Project			
Scope of project and works				
Institutional structure (names and contacts)	*WB (Project Team leader) Appointed by WB*	*Project Management - PU RPMU (see above)*	*Local colleagues and/or recipients – PU services and subdivisions*	
Implementation structure (names and contacts)	*Supervision over implementation of safety ensuring measuring*	*Supervision by local experts – to be defined after signing of contract*	*Local inspector's supervision – according to the national legislation*	*Contractor – to be determined based on the bidding results*
SITE DESCRIPTION				
Site title				
Description of site location	Industrial zone, Kamyanets-Podilskyi		Annex 1: site map ☐ Yes ■ No	
Land owner?	Public Utility "Miskteplovodenerhiya"			
Description of geographical, physical, biological, geological, hydrographic and social-economic aspects	Climate in Kamyanets-Podilskyi is temperately continental with moderately cold uncertain winters, comparatively dry springs, muggy summers and comparatively dry autumns. Average annual temperature is 7…8 °C. Temperature for designing heating systems -20 ºC; average temperature for a heating season: 0.3 ºC. Average duration of a heating season: 180 days.			
Disposition and distance to the sources of materials, especially filling materials, water and stone	The objects are located in the urban area with a developed system of engineering services			
LEGISLATION				
Specify national and local legislation and authorizations required for activity within the project	Start of construction works requires: 1. Declarations on start of construction works; 2. Authorization from the city authority for start of works; 3. Authorization for trenching, from the City Council's Planning and Improvement Department; 4. Contractor's license for construction works; 5. Contractor's licenses for execution of increased-risk works.			
PUBLIC CONSULTATIONS				
Specify when/where public consultations were held	Public Hearings on the Project were held on November 26, 2013, in the Assembly Hall of the State Agrarian and Engineering University of Podillya			
FORMATION OF INSTITUTIONAL POTENTIAL				

Will there be formation of institutional potential?	☐ Yes ■ No. If "Yes", Annex 2 contains a program on forming an institutional potential

Section 2. Information on measures and conditions to ensure safety

ENVIRONMENTAL / SOCIAL ASSESSMENT OF UTILIZING MEASURES TO ENSURE SAFETY			
	Activity / Question	*Status*	*Initiated action*
Will execution of work at the site lead to any of the listed alternatives?	A. Rehabilitation of roads or buildings	■ Yes ☐ No	If "Yes", see Annex A below
	B. New construction of small facilities or infrastructure	■ Yes ☐ No	If "Yes", see Annex A below
	C. Impact on the system of surface drainage	☐ Yes ■ No	If "Yes", see Annex B below
	D. Historical buildings and districts	☐ Yes ■ No	If "Yes", see Annex C below
	E. Acquired land	■ Yes ☐ No	If "Yes", see Annex D below
	F. Hazardous or toxic materials	☐ Yes ■ No	If "Yes", see Annex E below
	G. Implications for forests and/or nature conservancy zones	☐ Yes ■ No	If "Yes", see Annex F below
	H. Risk of ammunition that failed to detonate	☐ Yes ■ No	If "Yes", see Annex G below
	I. Safety of motor and pedestrian traffic	■ Yes ☐ No	If "Yes", see Annex H below

Section 3. Mitigation Measures

TYPE OF WORK	PARAMETER	LIST/INSPECTION OF MITIGATION ACTIONS
0. General conditions	Notices and safety of workers	(a) Local authorities for control of construction works and for environmental protection are sent notices on planned execution of works. (b) The public is notified of execution of works through mass-media publications and/or notifications placed at public places (including construction sites). (c) Obtaining of all, according to the effective legislation, licenses for rehabilitation and/or construction. (d) a Contractor has officially agreed to carry out all works with sticking to safety measures and in due order, for the purpose of minimizing negative impact on population of adjacent territories and the environment. (e) The individual protective equipment of workers meets the best international standards (helmets, masks and goggles if required, safe footwear). (f) Appropriate marking of the site will provide workers with information on the basic rules and norms to follow.
A. General works on rehabilitation and/or new construction	Quality of atmospheric air	(a) During excavation works, it is required to use means to control dust, for instance, by sprinkling water and wetting the soil. (b) Construction waste, excavated soil and fill materials must be kept in the controlled territory that is regularly sprinkled with water to diminish creation of dust. (c) During compressed air drilling or removal of road surface and foundations, it is required to ensure control over creation of dust by constant sprinkling of water and/or installing dust barriers at the site. (d) Adjacent territories (pedestrian zones, roads) must be clean from soil and construction waste for the purpose of minimizing creation of dust. (e) It is forbidden to burn down waste/construction waste at the site. (f) All the machinery must meet the normative documents of Ukraine in terms of regulation of air pollutant emissions and must be maintained properly to prevent excess use of construction vehicles at the site.
	Noise	(a) Noise load from construction works will be limited to certain hours as per appropriate authorization.

		(b) When operated, covers of engines, generators, compressors and other electromechanical equipment should be closed, and the equipment itself should be placed as far as possible from populated territories.
	Quality of water	(a) At the site, they will use proper means to control erosion and sediments, such as placement of hay bales and/or sediment traps to prevent extension of sediments beyond the site boundaries and for them to cause turbidity of water in the nearby canals, rivers and springs.
	Waste product handling	(a) Routes and waste collection and burial places will be defined for all main types of waste, which is expected to accumulate in the course of excavation works, construction and demolition of the existing facilities. (b) Mineral waste accumulated through construction works and demolition should be separated from the common, organic, liquid and chemical waste directly at the construction site and kept in specific containers. (c) Construction waste will be collected and utilized by a licensed operator. (d) Records on utilization of waste must be kept as evidence of appropriate waste handling. (e) If possible, a Contractor will re-use the processed materials and materials that are well worn (except for materials containing asbestos).
D. Acquired land	Plan/Framework document on acquisition of land	(a) If acquisition of land had not been expected, but it appeared to be necessary, or if loss of access to the income sources of legal or illegal consumers was not expected, but may happen,. It is required to immediately inform the Project Manager of the World Bank. (b) There will be introduced and approved a Plan/Framework Document on acquisition of land (if required for the project).

Annex No.7

Copy of Notice on Public Hearings

Sheet 1

12 | №46, 15 листопада 2013 року

Телепрограма

ВІСНИК

НЕДІЛЯ, 24 ЛИСТОПАДА

ПЕРШИЙ

09.00 Шеф-кухар країни
09.50 Оселище
10.25 Подорожуй світом з Ю. Акуніною
10.50 Як Ваше здоров'я?
11.40 Крок до зірок
12.25 Маю честь запросити
13.10 Караоке для дорослих
13.55 Баскетбол. Чемпіонат України, Суперліга. БК "Дніпро" – БК "Фарро-ЗНТУ"
15.55 Золотий гусак
16.20 Біатлон. Кубок світу. Змішана естафета
18.00 Діловий світ. Тиждень
18.35 Концертна програма "Шевченківський вечір"
20.30 Ми хочемо, щоб ви знали
20.40 Головний аргумент
20.50 Оперативна хроніка
21.00 Підсумки дня
21.55 Політвітер
22.20 Фестиваль пісні в Кобленці
22.55 Трійка. Кино. Максима
23.00 Ера бізнесу. Підсумки
23.35 Олімпійський вечірок
23.55 Євроінтеграція
00.05 "Дружини"

Новий канал

05.15 Україна чудес
06.40 Рейсор
07.45 Церква Христова
08.00 Х/ф "Сім масок"
09.50 Пойо, якщо знаєш
11.30 Бомбезний автостоп
12.20 Х/ф "Гаррі Поттер і Кубок вогню"
15.20 М/ф "Три богатирі і Шамаханська цариця"
17.05 Т/с "Кухня"
18.30 Війна світів. Рейсор проти Шифа
21.20 Х/ф "Казки не на ніч"
23.20 Х/ф "Проект Х: Дорвейси" (3)
01.30 Х/ф "Неохопний світ" (2)

1+1

06.05, 03.30 Комедія "Головний у домі"
07.50 М/ф
08.25 "ТСН"
09.00 "Лото-Забава"
10.00, 05.25 "Смакуємо"
10.35, 22.15 "Світське життя"
11.35 "Мінімо жінку 8"
13.00 Комедія "Службовий роман"
16.35 "Вечірній Київ"
18.30 "Розсмішки комікса 4"
19.30 "ТСН-Тиждень"
20.15 "Битва кора"
23.20 "Що? Де? Коли? 2"
00.25 "Альманах українських короткометражних фільмів"
02.05 Мелодрама "Король-лев - пташка співочи"
05.00 "Твоєї 2"

Інтер

05.35 Т/с "Не жалкую, не жу, не плачу"
09.30 "Школа доктора Комаровського"
10.05 "Орел і Решка. Назад в СРСР"
11.05 "Осіння кухня"
12.05, 03.05 Т/с "Собачя робота"
16.00 Х/ф "Стрим кімнаті"
18.00 Шоу "Одна сім'я"
20.00, 02.20 "Подробиці тижня"
21.00 Т/с "Тест на любов"
00.45 Х/ф "Казки порносексен 3. Губернатор"

ICTV

05.35 Факти
06.40 Світанок
07.05 Квартирне питання
08.00 Анекдоти по-українськи
08.20 Дачі
09.00 Х/ф "Спокуса" ятка"
11.00 Кошмари життя
11.30 Максимум в Україні
12.10 Такі
12.35 Машина часу
14.35 Т/с "Полювання на підлюч"
16.45 Факти тижня
19.55 Наша Russia
20.25 Путчі кремля
20.45 Х/ф "Білий тигр"
23.00 Х/ф "Останній гераклі" (2)
01.00 Х/ф "Комунікація" (2)
02.40 Х/ф "Печальний бульвар 2. Чорна сонця" (2)
04.15 Т/с "Найнебезпечніш історії"

ТЕТ

06.00 М/ф "Льодо Лабораторії"
07.30 Мадагаскар-пайнати
07.55 Тимчуки
08.30 М/с "Смішарики. Пінгвіни"
09.00 Мультик з Лунтиком
09.40 М/с "Дашо-досліджуєш"
10.05 М/с "Фінеас. Дитя вперед"
10.40 "Біла і Стрілка"
11.35 М/ф "Кукарача"
13.35 Х/ф "Містер Дуліт"
15.40 Х/ф "Могутній Джо Янг"
18.00 Зупинись, я закохаюсь!
20.00 Т/с "Відьмаки" (2)
21.40 Крайня У
22.35 Х/ф "Три метри над рівнем неба: Я тебе хочу" (2)
01.20 Х/ф "Три метри над рівнем неба" (2)
03.25 До світанку

ТОНІС

06.00 Х/ф "Людина з бульвару Капуцинів"
07.35, 20.10 "Кумери"
07.50, 20.00, 03.50 "Цілющі продукти"
08.00 "Соціальний пульс фундуки"
09.00 Великі династії. Дерибасови
10.00 "Будь у курсі"
10.40 "Щоденник для батьків"
11.20 Х/ф "Свій серед чужих, чужий серед своїх"
13.45 За сім морів
15.00, 00.05 Д/с "Сумори планети"
15.50 "Молодь двох сфер"
17.00 "Україна-Європа: маєтник Фуко"
17.30 "Модні історії з Олексієм Новицьким"
18.30, 05.00 "Світ за тиждень"
19.00 Великі династії: Шереметьєви
20.40, 05.25 "Світські хроніки"
21.05 Жаб'ї трюки для дорослих
22.10 Х/ф "Лінч" (2)
00.35 Х/ф "Лінч" (3)
02.15 Т/с "Відомчиця мрії" (3)
03.45 Пекло Вірської нечисті
04.15 Ах, не говоріть мені про любов

СТБ

04.20, 02.50 Х/ф "Принцеса Каролина Доммерік - сторона королівської гвардії"
04.25 Ранкий ефір
05.55 "Інші країни"
08.45, 11.20 "Майстер-Шеф 5"
08.00 "Все буде смачно!"
10.00 "Кращі на Майдані"
14.15 "Х-фактор 4"
19.00 "Битва екстрасенсів. Чоловіки проти жінок"
21.15 "Один за всіх"
22.30 Х/ф "Дальнобойщики"
01.00 Х/ф "Чоловік для життя, або Не шлюб на прикладі"

ТРК Україна

06.35 Люди
07.00 Х/ф "Рідні і близькі"
09.00 Світ на сонці
10.00, 11.00 Тижневик ірки
12.00 Х/ф "Біля сонця"
14.00 Х/ф "Шалені вінчестер"
16.00 Т/с "Зозуля"
19.00, 03.05 Люди, тижня
20.00 Як дві краплі
23.30 Вечірній фарбіз
01.20 Х/ф "Вторинний ринок" (2)
03.50 Х/ф "Красні історії" (2)
05.15 Х/ф "Сказка" (2)

2+2

06.00 М/ф
08.00 "Маски-шоу"
10.00 Т/с "Мисливці на сторожових"
13.10 Т/с "Пригоди Мерлінка"
16.25 Журнал Ліги Чемпіонів УЄФА 2013-2014
16.50 ЧУ 17 Тур. "Динамо" - "Говерла"
19.00 Х/ф "13 районів. Ультиматум" (2)
21.30 "Прокурорські"
23.15 Х/ф "Лорд" (3)
01.35 Х/ф "Таємниця Чингісхана"
03.00 Х/ф "Далекий постріл"

РТН-Плюс

06.00 Х/ф "Осінні турботи"
07.20 "Сам собі режисер"
08.00 "Сміхопанорама"
08.25 "Ранкова пошта"
09.00, 12.00 Вісті
09.10 Міський час. Вісті - Москва. Тиждень у місті
09.45 "У світі тварин"
10.10 Росія - любов моя! "Обрати бесарабію"
10.40 Комедія "Майже смішна історія"
12.20 Міський час. Вісті - Москва
12.25 "Уся Росія"
12.40, 05.00 "Більше, ніж кохання"
13.20 "Вилда фактуа"
14.05 "Квитки у Большой"
14.50 Х/ф "Сонячне затемнення"
18.25, 01.55 "Смілатися розвалиться"
18.00 Вісті. Тиждень
19.30, 03.25 Х/ф "Вальс бостон"
21.05 "Недільний вечір з Володимиром Соловйовим"
22.40 Х/ф "Любимо, тому що любимо"
00.20 Х/ф "Жіночі сльози"

ТРТ-Україна

05.00, 09.00, 11.00 Новини
05.10 "Тоні і Інвіді"
05.35 Х/ф "Тиждень змінника"
06.55 "Сорому Бальзаковці"
07.30 "Сміхопанорама. Пінгвіни"
07.55 "Здоров'я"
09.10 "Непутящі замітки"
09.35 "Поки всі вдома"
10.25 "Фазенда"
11.10 До 400-річчя царської династії. "Романови"
12.40 Т/с "Вікторія"
18.45 "Авторитетний перевіз"
20.00 Недільний "Час"
21.00 "Пантери"
23.30 Комедія "Суки-суки"
01.10 Детектив "Убивство в Сандвіч-Менор"
02.35 Т/с "Замороженна планета"

ІНТ

04.15 Т/с "Повернення 5"
04.35 "Правда життя"
05.25 М/ф "Незвичайний квест"
07.30 Т/с "Таємниці слідчих 5"
11.30 "Легенди карного розшуку". Крах операції "Оя"
12.00 "Агенти впливу"
13.00 Х/ф "Рікорт"
15.00 Т/с "Дальнобійники 2"
19.00 Т/с "Пандора"
23.20 Д/с "Технічні радянського дефіциту. Шарикопоп"
00.30 Т/с "МСБ. полювання на вбивцю 8" (2)
02.25 Х/ф "Кавказ" (3)
03.50 "Реальна дрова"

5 канал

04.30 (дані цілодобово) Час. Вежливо
06.55, 01.20, 08.25, 22.25, 23.20, 00.10, 03.35, 05.55, 06.15 Відомчас
06.45, 00.00, 03.20 Міський час
06.55, 10.50, 11.50, 13.50, 14.50, 18.10, 19.20, 20.20, 01.40, 03.15 Тема/Хроніка тижня
07.00 (дані цілодобово) Час новин
07.10, 08.15, 18.45, 23.50, 00.30, 06.20 Час спорту
07.15, 12.10, 14.10, 19.25, 23.55 Лотерея в Україні
07.35, 180 гривень
08.33 Фокус-покус

09.10, 19.35 Велика політика
09.35 Вікно до Америки
10.15 Здорова історія
11.15 Трансформація
11.35 Технології
12.30, 03.40, 04.40 Життя цікаве
13.35 Мотор
14.35 Гра дня
16.35, 02.15, 05.35 Машина часу
16.35 Фактор Безпеки
17.15 Палата
17.35 Новини Кіровщини
20.35 Дорогі депутати
21.00, 01.00, 09.00 Час. Підсумки тижня з Леонідом Губенко
21.40, 03.00 Час-Тайм
22.05 Територія кризу
22.35, 02.40 Кіно з Леонідом Соколовим
23.35 Міграційний вектор
00.35 Управлінський інститут
01.55, 06.25 Огонь проти
04.15 Майстер-клас із Наталією Фіцич

Enter-фільм

05.45 М/ф
10.00 Х/ф "Не відомися характерним"
11.25 Х/ф "Дорога Олена Сергіївна"
13.15 Х/ф "Ти у мене одна"
15.10 Х/ф "Небесний вік"
16.45 Х/ф "Місяць подорожі"
18.30 Х/ф "Небесна обіцянка"
22.20 Х/ф "Ми, що підходили ближче"
01.00 Х/ф "Закон"
03.15 Х/ф "Шлях і ярмо"
05.30 Кліпмейкер

УВАГА!

Громадські слухання щодо нового інвестиційного проекту

26 листопада 2013 року відбудуться ГРОМАДСЬКІ СЛУХАННЯ плану природоохоронних дій інвестиційного проекту "Енергоефективність у секторі централізованого теплопостачання України", який буде впроваджуватись у м. Кам'янці-Подільському.

Місце проведення: м. Кам'янець-Подільський, вул. Шевченка, 12, актова зала ПДАТУ.

Початок о 16.00. Запрошуються всі охочі.

Необхідну інформацію щодо плану природоохоронних дій проекту можна отримати за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх, кабінет №20, КП "Міськтеплоенергія", тел. 3-52-80, з 9.00 до 16.00.

Пропозиції (зауваження) просимо подавати до 24 листопада 2013 року за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх кабінет №20, КП "Міськтеплоенергія", тел. 3-52-80, або на електронну адресу: kp-mte@ukr.net.

Програма передач каналу "ПлюсПлюс – К-П ТРК"

Понеділок, 18 листопада
06.00 М/с "Пиримки"
07.00 М/с "Оливія"
07.30, 11.15, 17.10 М/с "Фінеаси"

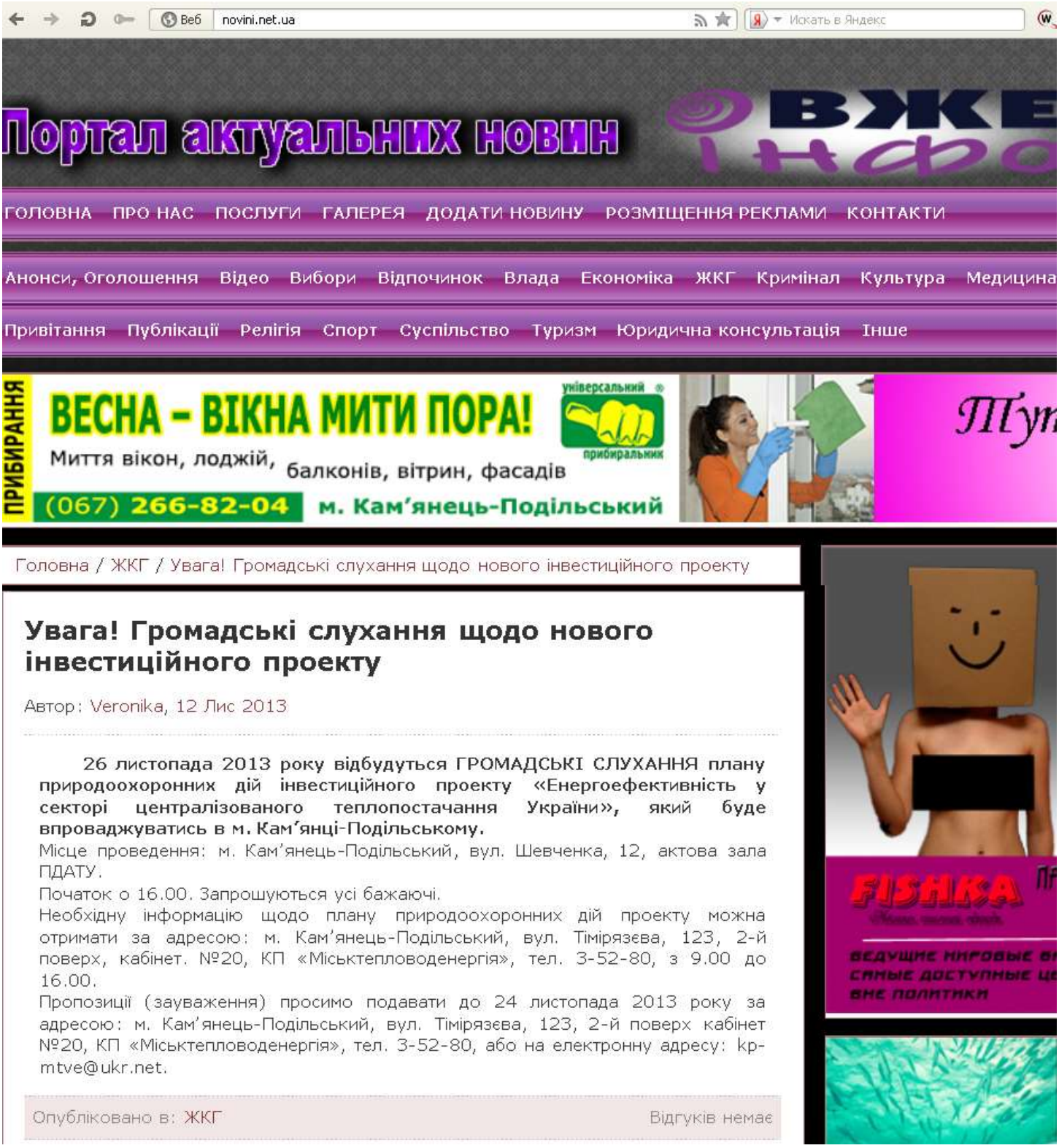
Вівторок, 19 листопада
06.00 М/с "Пиримки"
07.00 М/с "Оливія"
07.30, 11.15, 17.10 М/с "Фінеаси"

Середа, 20 листопада
06.00 М/с "Пиримки"
07.00 М/с "Оливія"
07.30, 11.15, 17.10 М/с "Фінеаси"
К-П ТРК
07.41 Перемагаючий голос вірменії

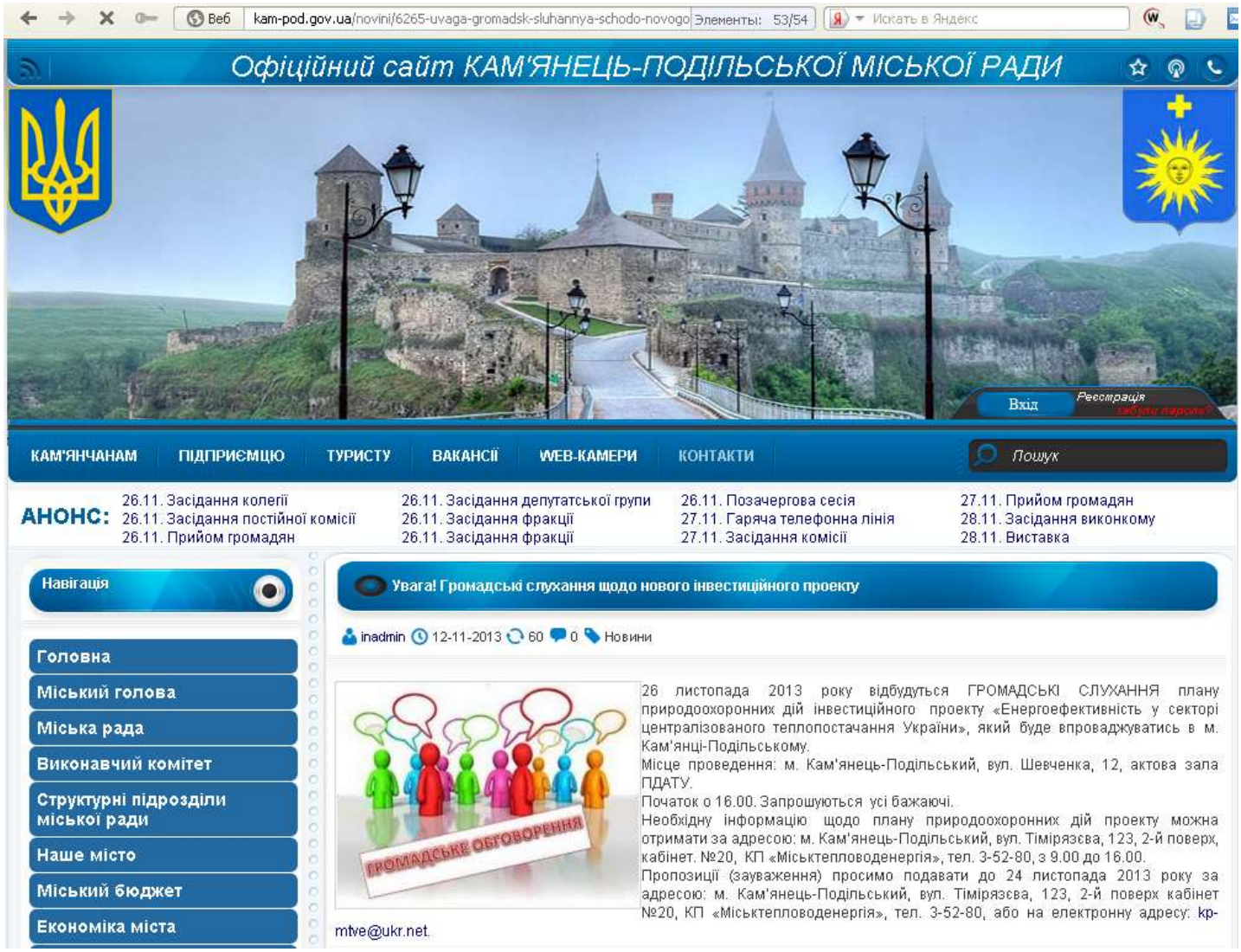
Четвер, 21 листопада
06.00 М/с "Пиримки"
07.00 М/с "Оливія"
07.30, 11.15, 17.10 М/с "Фінеаси"
К-П ТРК
07.41 Перемагаючий голос вірменії

П'ятниця, 22 листопада
06.00 М/с "Пиримки"
07.00 М/с "Оливія"
07.30, 11.15, 17.10 М/с "Фінеаси"
К-П ТРК
07.41 Перемагаючий голос вірменії

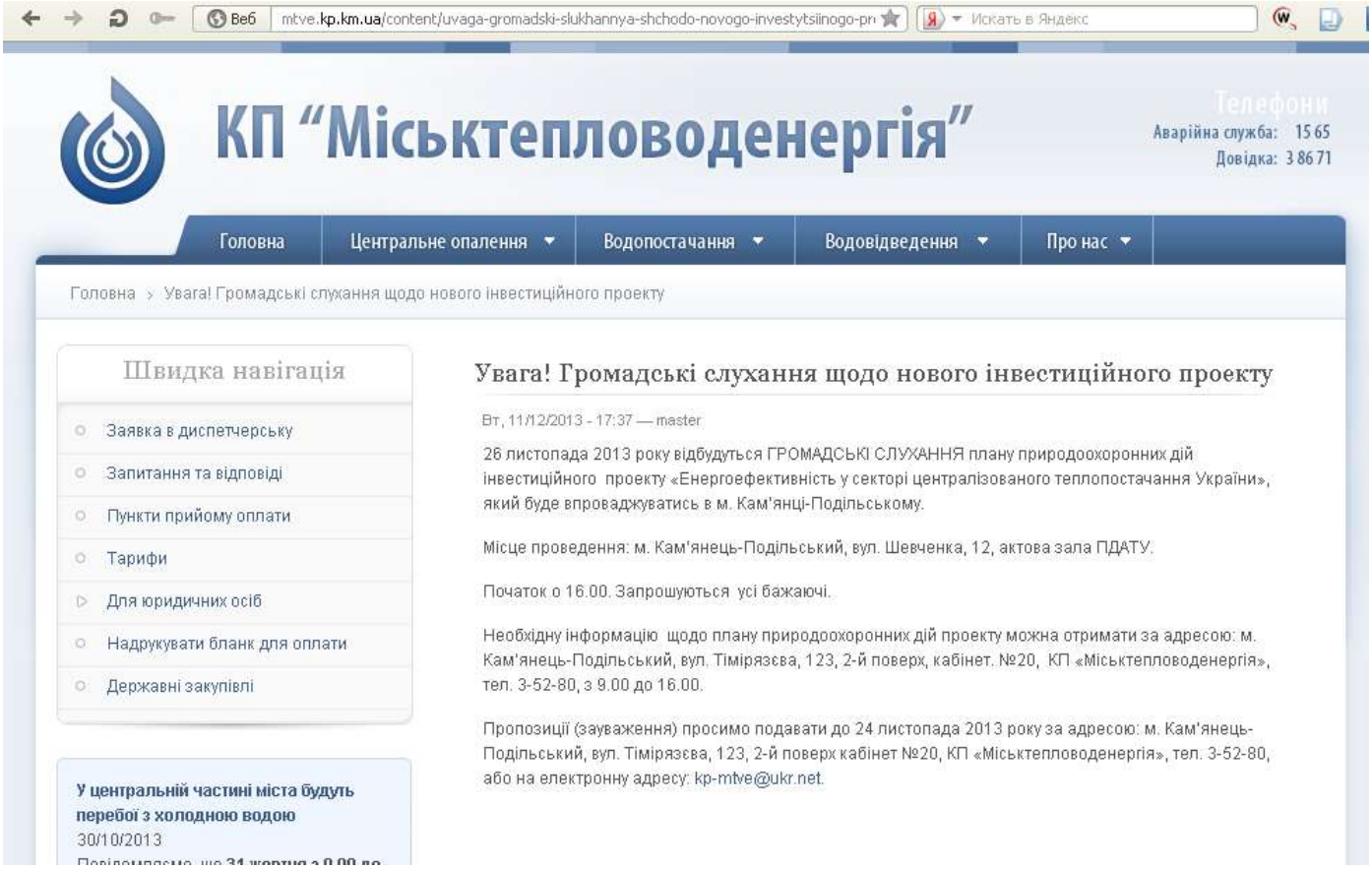
Sheet 2


novini.net.ua
Портал актуальних новин
ГОЛОВНА ПРО НАС ПОСЛУГИ ГАЛЕРЕЯ ДОДАТИ НОВИНУ РОЗМІЩЕННЯ РЕКЛАМИ КОНТАКТИ
Анонси, Оголошення Відео Вибори Відпочинок Влада Економіка ЖКГ Кримінал Культура Медицина
Привітання Публікації Релігія Спорт Суспільство Туризм Юридична консультація Інше
ПРИБИРАННЯ
ВЕСНА – ВІКНА МИТИ ПОРА!
Миття вікон, лоджій, балконів, вітрин, фасадів
(067) 266-82-04
м. Кам'янець-Подільський
Головна / ЖКГ / Увага! Громадські слухання щодо нового інвестиційного проекту
Увага! Громадські слухання щодо нового інвестиційного проекту
Автор: Veronika, 12 Лис 2013
26 листопада 2013 року відбудуться ГРОМАДСЬКІ СЛУХАННЯ плану природоохоронних дій інвестиційного проекту «Енергоефективність у секторі централізованого теплопостачання України», який буде впроваджуватись в м. Кам'янці-Подільському.
Місце проведення: м. Кам'янець-Подільський, вул. Шевченка, 12, актова зала ПДАТУ.
Початок о 16.00. Запрошуються усі бажаючі.
Необхідну інформацію щодо плану природоохоронних дій проекту можна отримати за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх, кабінет. №20, КП «Міськтепловоденергія», тел. 3-52-80, з 9.00 до 16.00.
Пропозиції (зауваження) просимо подавати до 24 листопада 2013 року за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх кабінет №20, КП «Міськтепловоденергія», тел. 3-52-80, або на електронну адресу: kp-mtve@ukr.net.
Опубліковано в: ЖКГ
Відгуків немає
FISHKA

Sheet 3


kam-pod.gov.ua/novini/6265-uvaga-gromadsk-sluhannya-schodo-novogo
Офіційний сайт КАМ'ЯНЕЦЬ-ПОДІЛЬСЬКОЇ МІСЬКОЇ РАДИ
Вхід
Реєстрація
КАМ'ЯНЧАНАМ
ПІДПРИЄМЦЮ
ТУРИСТУ
ВАКАНСІЇ
WEB-КАМЕРИ
КОНТАКТИ
Пошук
АНОНС:
26.11. Засідання колегії
26.11. Засідання постійної комісії
26.11. Прийом громадян
26.11. Засідання депутатської групи
26.11. Засідання фракції
26.11. Засідання фракції
26.11. Позачергова сесія
27.11. Гаряча телефонна лінія
27.11. Засідання комісії
27.11. Прийом громадян
28.11. Засідання виконкому
28.11. Виставка
Навігація
Головна
Міський голова
Міська рада
Виконавчий комітет
Структурні підрозділи міської ради
Наше місто
Міський бюджет
Економіка міста
Увага! Громадські слухання щодо нового інвестиційного проекту
inadmin 12-11-2013 60 0 Новини
ГРОМАДСЬКЕ ОБГОВОРЕННЯ
26 листопада 2013 року відбудуться ГРОМАДСЬКІ СЛУХАННЯ плану природоохоронних дій інвестиційного проекту «Енергоефективність у секторі централізованого теплопостачання України», який буде впроваджуватись в м. Кам'янці-Подільському.
Місце проведення: м. Кам'янець-Подільський, вул. Шевченка, 12, актова зала ПДАТУ.
Початок о 16.00. Запрошуються усі бажаючі.
Необхідну інформацію щодо плану природоохоронних дій проекту можна отримати за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх, кабінет. №20, КП «Міськтепловоденергія», тел. 3-52-80, з 9.00 до 16.00.
Пропозиції (зауваження) просимо подавати до 24 листопада 2013 року за адресою: м. Кам'янець-Подільський, вул. Тімірязєва, 123, 2-й поверх кабінет №20, КП «Міськтепловоденергія», тел. 3-52-80, або на електронну адресу: kp-mtve@ukr.net.

Sheet 4



Веб mtve.kp.km.ua/content/uvaga-gromadski-slukhannya-shchodo-novogo-investytsiinogo-pr

Искать в Яндекс

КП "Міськтепловоденергія"

Телефони
Аварійна служба: 15 65
Довідка: 3 86 71

Головна | Центральне опалення | Водопостачання | Водовідведення | Про нас

Головна > Увага! Громадські слухання щодо нового інвестиційного проекту

Швидка навігація

- Заявка в диспетчерську
- Запитання та відповіді
- Пункти прийому оплати
- Тарифи
- Для юридичних осіб
- Надрукувати бланк для оплати
- Державні закупівлі

У центральній частині міста будуть перебої з холодною водою
30/10/2013

Увага! Громадські слухання щодо нового інвестиційного проекту

Вт, 11/12/2013 - 17:37 — master

26 листопада 2013 року відбудуться ГРОМАДСЬКІ СЛУХАННЯ плану природоохоронних дій інвестиційного проекту «Енергоефективність у секторі централізованого теплопостачання України», який буде впроваджуватись в м. Кам'янці-Подільському.

Місце проведення: м. Кам'янець-Подільський, вул. Шевченка, 12, актова зала ПДАТУ.

Початок о 16.00. Запрошуються усі бажаючі.

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Annex No.8

Minutes of Public Hearings

M I N U T E S

of Public Hearings on the Nature Protection Plan within
the Ukraine District Heating Energy Efficiency Investment Project
by Public Utility "Miskteplovodenerhiya"

November 26, 2013 **Kamyanets-Podilskyi**

Venue: Khmelnytskyi Region, Kamyanets-Podilskyi, Shevchenka St., 12, Assembly Hall of the State Agrarian and Engineering University in Podilya

Attendees:

1) Of Public Utility:

Hordiichuk Valerii Hryhorovych, Director

Tarasiuk Vasyl Kuzmych, Chief Engineer

Vdovychynskyi Mykhailo Vikentiiovych, Production Planning Department Engineer

Hul Pavlo Anatoliiovych, Head of Production Planning Department (PPD)

Sikora Oleksii Oleksandrovych, Environmental Engineer

Duryhin Mykhailo Oleksandrovych, Deputy Director for Heat Supply

2) Of the City Council Executive Committee:

Hurska Maia Dmytrivna, Director of Department for Economics and Development of the City Infrastructure

3) Participants of public hearings regarding introduction of the project 175 persons in number (participants are listed in Annex 1 to these Minutes)

Agenda:

1. Approval of the hearing agenda and time-limit.

2. Implementation by PU “Miskteplovodenerhiya” of the Ukraine District Heating Energy Efficiency Project and ecological situation.

3. Examination and discussion of the draft Nature Protection Plan.

1. APPROVAL OF THE HEARING AGENDA AND TIME-LIMIT

REGARDING:

Approval of the hearing agenda and time-limit.

SPEAKERS:

Tarasiuk V.K.: I propose to approve the following agenda of the public hearing:

1. Implementation by PU “Miskteplovodenerhiya” of the Ukraine District Heating Energy Efficiency Project and ecological situation.

2. Examination and discussion of the draft Nature Protection Plan.

And I also propose the following public hearing time-limit:

- Report: up to 30 minutes;
- Answers to questions after the report: up to 30 minutes;
- Speeches during discussions: up to 5 minutes.

Voted unanimously

RESOLVED:

The following agenda of the public hearings:

1. Implementation by PU “Miskteplovodenerhiya” of the Ukraine District Heating Energy Efficiency Project and ecological situation.

3. Examination and discussion of the draft Nature Protection Plan.

And I also propose the following public hearing time-limit:

- Report: up to 30 minutes;
- Answers to questions after the report: up to 30 minutes;

- Speeches during discussions: up to 5 minutes.

2. IMPLEMENTATION BY PU "MISKTEPLOVODENERHIYA" OF THE UKRAINE DISTRICT HEATING ENERGY EFFICIENCY INVESTMENT PROJECT AND ECOLOGICAL SITUATION

REGARDING:

Implementation by Public Utility "Miskteplovodenerhiya" of the Ukraine District Heating Energy Efficiency Project in Kamyanets-Podilskyi, and ecological situation (reported by Hordiichuk V.H.).

SPEAKERS:

1. Stanislavskyi M.M.: Will the Cabinet of Ministers suspending European Integration not influence the relationships of the Utility with the World Bank?

Answered by Hordiichuk V.H.: No, it will not. Obligations are arranged between the Utility and the Bank, and no changes to the internal or external policy of the state shall not have impact upon the lending terms.

2. Bodnar S.A.: Will repair or installation works cause blocking of the urban roads?Will the roads be blocked?

Answered by Hordiichuk V.H.: The project will be developed in such a way for all works to be carried out within the 'green zone'. At the same time, blocking of the urban transport roads is not expected. Where the route crosses with the asphalt coating, new technologies will be used, which enable performance of works without destruction of the asphalt coating. Such an approach will positively influence the ecological and social situation in the city.

3. Pidskotskyi O.I.: What are the consequences for the environment due to implementation of the project?

Answered by Duryhin M.O.: We expect a positive influence. Upon completion of works provided for by the project, it is expected that there be a significant reduction of use of natural gas, which, in turn, will lead to decrease in emission of air pollutants. Detailed information on the Environmental Action Plan will be presented by Environmental Engineer Sikora O.O..

Complemented by Hordiichuk V.H.: When constructing the boiler house, we plan to erect a chimney, that is an emission source, of a sufficient height, which will produce a positive impact for scattering of pollutants, and subject to sticking to admissible limits within the sanitary-protection zone, as well as beyond the latter.

4. Starovierova N.M.: When is the project realization expected?

Answered by Hordiichuk V.H.: The project will start off in 2014. In 2015, the Utility plans to commission the main facility – the boiler house in Hrushevskoho Avenue.

5. Trishniovskyi O.S.: What is the City Council's attitude towards the Utility obtaining credit?

Answered by Hurska M.D.: Unfortunately, currently the city budget has no costs for modernization of the urban heat supply systems. Understanding that modernization is economically advantageous and extremely necessary for improving the living conditions of citizens, this credit is acceptable and approved by the City Council.

3. SITUATION ON THE DRAFT NATURE PROTECTION MEASURES

REGARDING:

1. Situation on the draft Nature Protection Plan (reported by Sikora O.O.)

SPEAKERS:

1. Hul P.A.: I propose to approve the draft Nature Protection Plan.

Voted unanimously.

RESOLVED:

That the draft ESMP be approved.

Hearing Chairman _____ Tarasiuk V.K.
signature *Surname and initials*

Hearing Secretary _____ Sikora O.O.
signature *Surname and initials*