

**Assessment of Environmental Impacts of
Wastewater Components of
Erzincan Cansuyu Drinking Water Supply
Project**

1 Introduction¹

The project is included in project "Technical Assistance to Prepare Drinking Water Supply for 8 Municipalities in Turkey" (Central Finance and Contracts Unit TR0504.03/SRV/002) within the "The European Union's 2005 National Pre-Accession Assistance Programme for Turkey" in order to meet short, medium and long term (until 2040) water wastewater requirements of Erzincan Province.

The overall objective of this project is to accelerate EU accession by enabling Turkey to achieve a high level of environmental protection and compliance with EU directives. The purpose of the technical assistance contract is to prepare a Master Plan, Financial and Operational Performance Improvement Review (FOPIR) for water supply and wastewater improvements, followed by Feasibility Study, Environmental Impact Assessment, IPA Application Form, Design Report, Tender Dossiers and estimated cost of the works for the improvement of the water supply systems.

The Project will define the long term investment needs of Erzincan Municipality until 2040 within water and wastewater services. In addition, the Project will prioritize the investment needs and propose priority investments by considering the results of socio-economical and affordability studies.

The priority investments will respect the principles of compliance and least-cost service improvements. The following subjects have been assessed:

- Determining the level of target service provision,
- Obligations brought by legal service provision,
- Tariff Policy
- Resulting investment priorities and investment timing and,
- Creating a framework document to be referred by the municipality and the public.

The area that will be covered by the supervision of water supply services within the Project is the area within the boundaries of Erzincan Municipality.

¹ This Appendix is the translation of conclusions attained from the Non-Technical Summary of the Project presented in Project Identification File submitted to Erzincan Governorship, Erzincan Provincial Directorate of Environment and Forestry on 17 April 2009.

1.1 General Properties of Project

Erzincan wastewater treatment plant discharge quality is controlled by Provincial Directorate of Ministry of Environment and Forestry of Erzincan and Erzurum Regional Directorate of the Refik Saydam Hygiene Centre.

1.2 Existing Wastewater Services:

There is pumping station in the Erzincan wastewater collection system which is located in Gökürk District Housing area. The rest of wastewater is transmitted to the existing WWTP by gravity.

Erzincan Municipality has a conventional activated sludge wastewater treatment plant which discharges treated wastewater to Karasu River. The plant has been operated since 1996.

1.3 Wastewater treatment plant

The current wastewater treatment plant of Erzincan was constructed in 1994 and commissioned in 1996. The plant has been designed and constructed for 124,000 PE. Total area of the treatment plant is 160,000 m². The plant was designed to comply with the Turkish effluent criteria in 1994, which are less strict than the present criteria, which complies with EU directive.

The treatment plant was designed in two stages; only first stage has been constructed in 1994-96.

The upgrade and extension of the plant will increase its capacity to 135,000 PE (2025 population) and provide a treatment which complies with the present effluent criteria in Turkey and the EU Directive 91/271/EEC.

The treated wastewater is discharged to Karasu River. The treatment plants efficiency is monitored by analyses performed by Provincial Directorate of Ministry of Environment and Forestry. The sludge generated from the treatment plant is disposed to the sludge drying beds. There is no sludge dewatering equipment in the plant.

1.4 Wastewater and Storm System Systems

Erzincan is served by a separate system for wastewater and storm water. The existing sewerage system was commenced in 1996 by a project carried out by the World Bank Fund after the 1992 earthquake.

The Erzincan Municipality and the municipalities of neighbouring sub-provinces around the city centre are grouped together to operate the wastewater collection system. This union has been named "Can Birlik". The Erzincan Sewerage System Project had been designed by this union and approved in 2007 by the Iller Bank. Currently the wastewater collection system of Erzincan serves the neighbourhood municipalities (Geçit and Demirkent), as well as the city itself. In the scope of "Canbirlik" Project, Erzincan Municipality will also serve the Kavakyolu, Çukurkuyu and Ulalar Municipalities.

Table A18/3 2007 Wastewater Service Data

Parameters	Year 2007
Total number of people in the service area	86,779
People connected to the system	85,911
Connection rate, %	%99
Total amount of wastewater discharged to the WWTP, m ³ /year	6,145,870

Wastewater of the Erzincan city is collected by gravity due to the topographical conditions with the exception of houses in basement level and Göktürk District. The wastewaters from such houses, which constitute 1% of the whole is collected by the use of cesspools.

The wastewater collected by the sewerage system of Erzincan was measured during the Master Plan studies. The measurements were carried out on the main collector with 900 mm diameter before the wastewater treatment plant. The results of the measurements are listed in the table below:

Table A18/4 The Results of Wastewater Flow Measurements

Day	Date	Hour	Height (m)	Time	Velocity (m/s)	Wastewater flowrate		
						(m ³ /sec)	(m ³ /hr)	(m ³ /day)
Day 1	29-04-2008	8:00	0,24	1'54"	0,76	0,12	434	10.420
Day 2	30-04-2008	12:00	0,34	1'26"	1,01	0,20	716	17.185
Day 3	01-05-2008	16:00	0,34	1'23"	1,04	0,22	781	18.740
Day 4	02-05-2008	8:00	0,25	1'50"	0,79	0,13	457	10.964
Day 5	03-05-2008	12:00	0,34	1'21"	1,07	0,23	826	19.829
Day 6	04-05-2008	16:00	0,34	1'20"	1,08	0,23	826	19.829
Day 7	05-05-2008	8:00	0,24	1'59"	0,73	0,11	411	9.876
Daily Average						0,18	636	15.263

1.5 Operation of Wastewater System

The current wastewater collection system operation and maintenance services are intervention at breakdowns with only little preventive maintenance. A vacuum truck is used in order to solve blockage problems in the pipelines. The cleaning of manholes and sewer system are realised by the use of the machine.

In Aydınlık Evler District, there are problems related to both the storm water and waste water collection systems due to the relatively low altitude of this area. In short term period, the sewer collectors for this problematic area will be renewed with adequate cross section and slope.

According to future land use development plan; centre of trade activities, residential and other central uses are proposed alongside Sivas-Erzurum Highway, and Ordu, Kırklar and 13 Şubat Avenues that intersect the highway. In case of this area will be developed as described in the development plan, this

area will discharge their wastewater into public sewer system by complying with this directive and additionally comply with the Integrated Pollution and Prevention Control (IPPC) Directive (96/61/EC) covering pollution from large industrial installations should be considered as well as the fundamental principle of "polluter pays".

1.6 Wastewater projects to be implemented in the short term

A list of projects required for rehabilitation and enhancement of the water and wastewater services within the 2040 horizon has been developed in close cooperation with the Erzincan Municipality. The long list of projects has been divided in urgent improvement projects to be implemented under the present EU accession compliance programme during 2010 to 2013, and less urgent projects to be implemented in the medium and long term. Urgent projects shall generally be designed for the 2040 demand, but constructed in a phased manner with immediate construction covering the 2025 requirements.

Index	Name of project	Description	Unit	Amount
WW-1	Rehabilitation of existing wastewater treatment plant	Reconstruction and renewal of (mainly) mechanical-electrical equipment and instruments, which will resolve the issue of non-compliance during operation	lump sum	1
WW-2	Increasing capacity of existing wastewater treatment plant	Upgrading of pumping capacity so as to meet the pumping needs until 2040	lump sum	1
WW-3	Replacement of sewer collectors	Replacement sewer collectors having Ø 500 - 1000 mm diameter and 4 km length.	m	4,000
WW-4	Replacement of sewer network	Replacement of 3 km sewer network having Ø 200- 400 mm diameter and installation of 34 km of new sewer network (Ø 200 -400 mm) in parallel with new water pipes to be installed in new development areas	m	3,000 34,000
WW-6	Supervision of WW construction works	Supervision of wastewater construction works for WW-1 to WW-4	lump sum	1

1.7 Wastewater projects to be implemented in the medium and longer term

Index	Name of project	Description	Unit	Amount
WW-5	Extension of sewer network	Construction of sewer network having Ø 200- 300 mm for mid-term and long term	m	34,400 18,900
WW-6	Supervision of WW construction works	Supervision of wastewater construction works for WW-5	lump sum	1

2 Environmental Effects of the Project and Use of Natural Resources

Drinking Water Supply Project and Wastewater Disposal projects shall be carried out together. Therefore their impacts are considered together.

2.1 Overall Environmental Effects and Commitments under the Project

During the construction works to be conducted within the project, padding materials will be used while laying the pipes into the trenches. These materials will be supplied from a stone pit and used after being fragmented into appropriate sizes. The padding materials to be used shall be supplied from authorized pits belonging to the municipality and the EIA queries of these pits shall be completed. In case that these pits are not sufficient, material purchase shall be done after completing the necessary procedures within the regulation on EIA for the pit from which the material will be supplied.

In areas where the pipes will be laid and in the sections which other construction works will be conducted, first the 20 cm vegetative soil shall be skimmed. After that, the trenches where the pipes and channels are laid will be excavated. The subsoil extracted from the trench and the vegetative soil shall definitely not be mixed and they shall be stored separately during the construction.

The vegetative soil in the areas, where buildings will be constructed as well as in the area, where the pumping station will be constructed, will be skimmed with 30 cm depth and stored separately. During the storage, excavation material sub-soil and vegetative soil shall definitely not be mixed.

2.1.1 Number of Personnel to be Employed

Only treatment plant operational team is composed totally of 8 staff as: One plant manager, 2 labourers and 5 technicians.

Totally the 30 people are considered to work during the construction phase. Since these personnel most likely are residing in Erzincan Province, no separate facility is considered for their accommodation.

2.1.2 Duration of Construction

The construction phase of the project will last approximately 4 years and it is expected that it will be within 2010-2013 period and that the construction

works such as excavation and filling will be completed in this period. 2014-2020 period is a period that covers medium term implementations and no implementation of heavy construction activities is expected within this period. 2020-2040 period is a period that covers long term implementations.

During the operation phase of the project, no permanent operation personnel will be required and it is planned to maintain the works with the existing personnel of the Municipality.

2.2 Use of Natural Resources (Land Use, Water Use, Type of Energy Used etc.)

2.2.1 Land Use

The area in which the project will be implemented is the area within the administrative region of Erzincan Province and it is mostly composed of the areas within the residential areas.

2.2.2 Water Use

Since the number of personnel from various levels to work in all construction works is 30, water consumption amount per person is taken as 150 lt, and;

$$\text{Water use amount of personnel} = 150 \text{ lt/day} \times 30 \text{ persons} = 450.0 \text{ litres/day}$$

Total Water Amount: Amount of water to be used by personnel + Amount of Irrigation Water

$$45 \text{ m}^3/\text{day} + 350 \text{ m}^3/\text{day} = \mathbf{395 \text{ m}^3/\text{day}}$$

Considering the calculations made for the domestic water for personnel, 395 m³/day potable domestic water will be required for the personnel to be employed. By accepting that all of the demand will return as wastewater, it is assumed that all of the water to be used by personnel will be returned as wastewater. The wastewater will be connected to the network which is within Erzincan Province and again operated by the municipality.

2.2.3 Type of Energy Used

In the existing situation, since the energy to be used is electrical energy, it will be supplied from Erzincan Province city network.

As energy type to be used in the construction phase, diesel fuel, which is a fuel type required for the operation of construction machinery. The required diesel fuel amount is 0,2 litre/km for trucks, 18 litre/hr for excavators in case they will be operated at full performance for 1 hour, and 14 litre/hr for loaders in case they will be operated at full performance for 1 hour. The fuel need required will be supplied from the nearest petrol station.

$$\text{Total Amount of Diesel Fuel Required: } \underline{530 \text{ litre/day}}$$

2.3 Amounts of Waste Generation, Characteristics of Wastes and Measures to be taken

2.3.1 Solid Waste

Amount of Solid Waste to be generated

Totally 30 persons will be employed in the preparation and construction works; and amount of domestic solid wastes (by taking daily amount of solid waste as 1.34 kg/day-capita) generated by them will be;

$$30 \text{ persons} \times 1.34 \text{ kg/day-capita} = 40.2 \text{ kg/day.}$$

Measures to Be Taken

These wastes to be generated will be gathered in the covered trash containers located in the project area; and sent to landfill area belonging to Erzincan Municipality.

The disposal of the solid wastes to be generated during the project activities shall be provided in accordance with the "Regulation of Solid Waste Control".

Any other packaging wastes (cement packages, wastes belonging to materials to be used in laying pipes etc.) possibly generated in the construction site may be present. For the other solid wastes mentioned; the provisions of the Regulation on Control of Packages and Package Wastes and Regulation of Solid Waste Control will be followed.

2.3.2 Liquid Wastes

Amount of Liquid Waste to Be Generated

45 m³/day of potable-domestic water will be needed for the personnel to be employed. By accepting that all of the demand will return as wastewater, 12 m³ of domestic wastewater will be generated.

Measures to Be Taken

The wastewater to be generated will be connected to the network which is within Erzincan Province and again operated by the municipality.

During the disposal of liquid wastes to be generated the provisions of Water Pollution Control Regulation will be followed.

2.3.3 Hazardous Wastes

The fuel need required for the construction machinery will be supplied from the nearest petrol station, however lubricant replacements and refuelling will be required for the construction machinery to be used during the construction works from time to time. These operations will be conducted without giving any damage to environment and human health.

Waste oils to be generated will be stored either in waste oil tanks or in barrels located in the construction sites in accordance with "Regulation for Control of Hazardous Wastes".

Measures To Be Taken

In addition, storage and disposal of hazardous wastes shall be done in accordance with "Regulation for Control of Hazardous Wastes", "Regulation for Control of Waste Oils" and circular on "Petrol Wastes and Waste Oils". The fuel required for the vehicles will be supplied from the nearest petrol station.

2.3.4 Waste Gas and Air Quality

There are no industrial plants, roads having heavy traffic or buildings which can affect the air quality in and around the project area. The most important source which can affect the project area in terms of air quality is the emissions due to the domestic heating. The amount of the seasonal pollutants coming from fossil fuels varies according to the quality and amount of fuel used. It is assumed that quality coal is used in the region, so that the pollution resulting from domestic heating is at a negligible level. In case the planned project is implemented, it is not expected that it will adversely affect the existing air quality in the region.

In order to reduce the emissions generated by the vehicles to be operated during the operation phase, routine controls of all of the vehicles and equipment will be made and if necessary, maintenance will be made, and other vehicles will be used until the completion of the maintenance.

2.3.5 Calculation of Dust to Be Generated Along the Route of the Network

The amount of dust generated during earthworks is taken as a cumulative effect of both the waste water disposal project and water supply project. For this reason the calculation given at Section 2.3.5. of the Waste water project EIA summary document, the overall dust production during the construction of both of the projects.

Measures to Be Taken

The operations during the constructions phase will cause dust formation. In order to reduce the amount of the dust to be generated, uncoated roads will be watered regularly especially during dry periods. Again especially in the back filling works, watering will be done in layers as the material is laid in order to prevent dust formation.

In order to minimize dust formation during land preparation and construction phase some measures will be taken. Measures to be taken:

- Wind breaker mounds will be formed in the land and they will be used in the position of wind protector,
- The loaders will be covered by nylon covers,
- Unloading and loading will be made without scattering,

- The materials will be covered by nylon covers or materials with particle size over 10 mm,
- Compression will be made by binding materials,
- Upper layers will be kept in 10% humidity.
- Uncoated roads will be humidified by spraying method.
- In addition, in order to prevent dust emission during transportation and loading, unloading and loading will be made without scattering.

2.3.6 Excavation and Construction Wastes

The excavation material generated as a result of excavations during construction phase will be used in filling of the lower sections. Therefore, no excavation waste is expected. During the project, the provisions of Regulation for Control of Excavation Soil, Construction and Debris Wastes will be followed.

In case excavation waste is generated, necessary measures will be taken in accordance with Regulation for Control of Excavation Soil, Construction and Debris Wastes. In this scope,

- 1 Waste management will be provided so as to minimize the effects of wastes to the environment and human health in accordance with the provisions of the Regulation,
- 2 Necessary permissions and approvals will be obtained in the phases of waste generation, transportation and storage,
- 3 During the activities, the wastes will be collected, recycled, gathered according to their contents and no harmful, hazardous and foreign material will exist in the wastes,
- 4 Before the activities start, the Waste Transportation and Acceptance Certificate given in Appendix 2 of the Regulation will be obtained regarding transportation and storage of wastes,
- 5 The wastes will not be disposed to places other than the recycling or storage facility authorized by the municipality or civilian authority,
- 6 The expenditures for waste management will be covered,
- 7 Damages which can occur due to possible accidents in the phases of waste generation, transportation and storage will be compensated and pollution resulted from the accident will be eliminated.

In accordance with the Regulation for Control of Excavation Soil, Construction and Debris Wastes, measures reducing the noise and visual pollution will be

taken during the removal of excavation soil and the surroundings of the activity area will be enclosed. Planning will be done so as to match the amount of soil extracted during the excavation and back filling volumes and the excavation soil will first be used in the activity area.

During extraction of excavation soil natural drainage systems will be maintained and measure will be taken against possible erosion. During extraction of excavation soil, the buildings near excavation area, natural drainage, energy and telecommunication plants/systems, pavement and road coating will be protected and measures will be taken against possible damage and erosion.

2.3.7 Noise and Vibration

In the scope of the project, noise will be generated due to equipment to be used in the station during the preparation of land during construction phase and during operation phase. The activities will be limited by the working hours and no activity creating noise will be performed at night.

High noise levels are not expected during the construction and operation of the planned works. The noise will only be caused by machinery and equipment to be used during the activities.

It was determined that the noise created during operation would not affect Erzincan Province, which is the nearest settlement, and nearby villages.

Measures To Be Taken

The controls of the equipment to be used both in construction and operation phases of the project will be conducted and the noise level of the equipment will be maintained compliant to the limit values specified by the "Regulation on Environmental Noise Emission Created by Equipment Used in Open Areas (200/14/AT)", which was prepared by Ministry of Industry and Trade. The noise levels of the vehicles will meet the limit values specified in this regulation.

In the scope of the project, warning plates will be mounted in case the 80 dBA noise level is exceeded and the measures specified in "Labourer Health and Labour Safety Bylaw" will be taken for the personnel working in these areas. Appropriate protective means and equipment such as earmuffs and earplugs will be given accordingly. In addition, maintenance of machinery and equipment will be done regularly and the level of possibly generated noise will be reduced.

In the case that the recommended noise levels are exceeded during the construction and operation phases and that the technical facilities are insufficient to reduce the noise at its source, the workers will be provided with protective means and equipment specified in Law No. 1475, Labour Law such as ear muffs, ear plug etc.

Noise will be generated temporarily due to usage of construction machinery during the construction phase of the project and during the works. The limits given in "Regulation for Control of Noise" will be followed. Periodical maintenance of construction machinery and equipment will be done regularly and no works will be conducted between hours 22.⁰⁰ and 06.⁰⁰.

It was determined that the noise created during the operation would not affect the nearest settlement.

2.4 Risk of Accident Which Can Be Caused by Technology and Materials Used

There are risks of accident and danger which may be caused due to carelessness of personnel during the construction works of the project. In order to minimize these risks, regular maintenance of machinery and equipment used will be made and the personnel will be trained in the subject of labour safety.

Measures will be taken against any fire incidents and emergency intervention plan that will be prepared by construction contractors will be enabled for other emergency conditions (fire, earthquake etc.). In case of any emergency such as industrial accident, flood, earthquake, fire etc. first person who sees the incident will warn other units in the project area. The personnel working in the project area will first inform the relevant institutions (hospital, fire department, police etc.) and after providing that the aid teams has arrived, injured people will be sent to the nearest medical unit with a vehicle ready in the project area.

In order to prevent risk, the electrical installation systems in the area will be disabled by the teams employed in the construction site. In the electric related fires, the flammable sources near the fire will be isolated immediately.

No adverse effect will be given to biological, physical, economical, and cultural environment that the living beings are in touch and interact with. No direct or indirect, short or long term, temporary or permanent adverse effect will be permitted on the environmental elements during and after operation.

2.5 Flora - Fauna Types, Classification, Living Environments, Population Densities, Determination of Endemic, Rare, Endangered Species, Free of Danger etc. Categories:

2.5.1 Flora

The site is evaluated in terms of floristic as a result of initial land studies performed in the project area and its surroundings, and literature studies supporting them.

The project area has terrestrial climate characteristics and is located in Iran-Turan geographical region. Related to these climate characteristics, nearby Karasu River the flora is: except for the poplars and willows seen along the rivers, generally weak herbaceous plants are common. Forest are rare and

cleared away. At the base of the plain, steppes and in the mountainous sections forests heavily consist of oak trees compose the dominant flora.

The project are mostly represents Iran-Turan geographical region character and there are no plant species to be protected according to the Appendix 1 list of "Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)" and to be included by "Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES Convention)".

Based on literature and land studies conducted, 95 plant species were determined in the project area and its surroundings. The flora of the area consists of steppes, mountainous moorlands, meadows and species partly adapted to watery area habitats, which are appropriate for the climate structure.

2.5.2 Determination of Endemic, Rare, Endangered Species

Only 5 of the species found were determined as endemic. However, when we examine the Red Data Book categories of these species; we have seen that they are within the LR (lc) namely LOWER RISK - Least Concerned - group of plant species requires no protection and which is not endangered.

When the risks of the specified endemic species in the project area and its surroundings (according to IUCN and BERN); it is not expected that this activity will directly affect the continuity of the generation of these species.

Amphibians

There are 5 species of the amphibian in the area and among these types, Night Frog and Wood frog belong to Appendix II, and Small salamander, Spotted salamander and plain frog belong to Appendix III according to the Bern Convention. Possible diffusing species in the area are in LC (common) category. Almost all of the amphibians living in our country are species under protection according to the Bern Convention.

Reptiles

Reptiles are represented by 20 reptile species consist of one turtle, three angelfishes, six lizards and ten snakes. Among these species, *Testudo greace* (common turtle) is included in VU category according to IUCN and it is one of the species that shall be strictly protected according to Bern Convention Appendix II. And in other reptile species *Lacerta viridis* Green Lizard was assessed according to Red Data Book and it was understood that it belongs to - common- LC category. According to the Bern Convention, ten species belong to Appendix II list, and ten of them belong to Appendix III.

According to the annexes of 2008-2009 Central Hunting Commission all possible reptile species are present in Annex 1, namely the list of "Wild Animals Protected by Ministry of Environment and Forestry".

Birds

Activity field ornithofauna (bird list) consists of the bird species that are present or possible to be present in the field. Although the existence statuses of

the determined bird species are different, they are also subjected to the Red Data Book classification. According to the resolutions of Central Hunting Commission, an evaluation has been made and in the table it is stated in which annex they are found.

Mammals

In the result of the studies carried out, it was determined that there are 22 mammal species within the project area and its close vicinity. Among these mammal species, all of the mammal species, determined to be present according to IUCN, belong to Lower Risk (LR) category. According to the Bern Convention criteria, among these 22 mammal species, 8 of them belong to Annex II namely "Strictly Protected Species" list. Among other species, 3 mammal species belong to Annex III, namely "Protected Species" list. The remaining 11 mammal species are not present in the Annex lists of Bern Convention.

Among the mammal species found in the project area and its close vicinity, there is not any endemic species.

2.5.3 Impact of Activity on Flora and Fauna

Together with the start of the works in the site, although the flora shall be affected adversely, flora species may grow up after the completion of the works in the field.

Due to the noise-levels that may be produced during the construction activities and works in the site within the project area, the terrestrial fauna elements may temporarily wander off the area. However, in the close vicinity of the project area, there are alternative habitats that may be used by the mammals and bird species that are expected to be affected by the noise levels that shall occur. In the area, no endemic species among fauna elements were observed.

During construction period, birds shall leave the construction areas. Since the creatures having the motion ability in land shall leave the area after the construction works shall begin, they shall not be affected from the construction works.

In case the species under protection shall be determined, they shall not be harmed and Hunting Period Central Hunting Commission Decisions issued for each season by the Ministry of Environment and Forestry shall be followed in order to protect the hunting animals in the area.

Regarding birds, activity area consists of the species adapted to watery area habitats, woody and bushy areas. It is not expected that the activity shall have a negative impact concerning bird species.

For the mammals, we can mention about the existence of small mammal animal species, which are adapted to wet meadow, bushy, woody, rocky, and surrounding open lands.

As a result; the activities during the land preparation and operation phase will create disturbance factor on the species, however, the species will be affected adversely from this, a risk like disappearance of the species is not possible.

2.6 Overall Environmental Effects of the Activity

If the activity is assessed in terms of its environmental effects, the works to be conducted within the activity can be defined as environmental.

Since the project aims disposal of wastewater generated in the coverage area of Erzincan Municipality and there are environmental challenges in terms of existing disposal, the project targets to mitigate the pressures on the existing environment caused by domestic wastewater. In this point of view, some temporary effects to be arisen during the construction phase will lighten the environmental burden as soon as the project is implemented and bring a cleaner environmental approach. Therefore, it is possible to qualify the project as an environmentally friendly project.