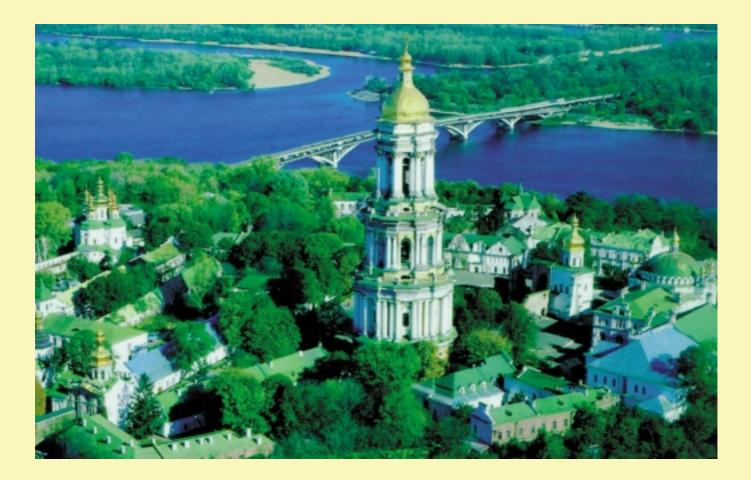
DANUBE POLLUTION REDUCTION PROGRAMME

NATIONAL REVIEWS 1998 UKRAINE

PROJECT FILES



Ministry of Environmental Protection and Nuclear Safety



in cooperation with the

Programme Coordination Unit UNDP/GEF Assistance



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Preface

The National Reviews were designed to produce basic data and information for the elaboration of the Pollution Reduction Programme (PRP), the Transboundary Analysis and the revision of the Strategic Action Plan of the International Commission for the Protection of the Danube River (ICPDR). Particular attention was also given to collect data and information for specific purposes concerning the development of the Danube Water Quality Model, the identification and evaluation of hot spots, the analysis of social and economic factors, the preparation of an investment portfolio and the development of financing mechanisms for the implementation of the ICPDR Action Plan.

For the elaboration of the National Reviews, a team of national experts was recruited in each of the participating countries for a period of one to four months covering the following positions:

- Socio-economist with knowledge in population studies,
- ➢ Financial expert (preferably from the Ministry of Finance),
- ➢ Water Quality Data expert/information specialist,
- > Water Engineering expert with knowledge in project development.

Each of the experts had to organize his or her work under the supervision of the respective Country Programme Coordinator and with the guidance of a team of International Consultants. The tasks were laid out in specific Terms of Reference.

At a Regional Workshop in Budapest from 27 to 29 January 1998, the national teams and the group of international consultants discussed in detail the methodological approach and the content of the National Reviews to assure coherence of results. Practical work at the national level started in March/April 1998 and results were submitted between May and October 1998. After revision by the international expert team, the different reports have been finalized and are now presented in the following volumes:

Volume 1:	Summary Report		
Volume 2:	Project Files		
Volume 3 and 4:	Technical reports containing:		
	- Part A : Social and Economic Analysis		
	- Part B : Financing Mechanisms		
	- Part C : Water Quality		
	- Part D : Water Environmental Engineering		

In the frame of national planning activities of the Pollution Reduction Programme, the results of the National Reviews provided adequate documentation for the conducting of National Planning Workshops and actually constitute a base of information for the national planning and decision making process.

Further, the basic data, as collected and analyzed in the frame of the National Reviews, will be compiled and integrated into the ICPDR Information System, which should be operational by the end of 1999. This will improve the ability to further update and access National Reviews data which are expected to be collected periodically by the participating countries, thereby constituting a consistently updated planning and decision making tool for the ICPDR.

UNDP/GEF provided technical and financial support to elaborate the National Reviews. Governments of participating Countries in the Danube River basin have actively participated with professional expertise, compiling and analyzing essential data and information, and by providing financial contributions to reach the achieved results.

The National Reviews Reports were prepared under the guidance of the UNDP/GEF team of experts and consultants of the Danube Programme Coordination Unit (DPCU) in Vienna, Austria. The conceptual preparation and organization of activities was carried out by **Mr. Joachim Bendow**, UNDP/GEF Project Manager, and special tasks were assigned to the following staff members:

-	Social and Economic Analysis and	
	Financing Mechanisms:	Reinhard Wanninger, Consultant
-	Water Quality Data:	Donald Graybill, Consultant,
-	Water Engineering and Project Files:	Rolf Niemeyer, Consultant
-	Coordination and follow up:	Andy Garner, UNDP/GEF Environmental
		Specialist

The Ukrainian National Reviews were prepared under the supervision of the Country Programme Coordinator, Mr. Vasyl Vasylchenko. The authors of the respective parts of the report are:

-	Part A: Social and Economic Analysis:	Ms. N. Tomashes'ska
-	Part B: Financing Mechanisms:	Ms. I. Sherban
-	Part C: Water Quality:	Ms. O. Tarasova
-	Part D: Water Environmental Engineering:	Mr. A. Obodovsky

The findings, interpretation and conclusions expressed in this publication are entirely those of the authors and should not be attributed in any manner to the UNDP/GEF and its affiliated organizations.

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Vienna – Austria, November 1998

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Project 1

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management – 1st stage (ACIM-Tysa)

Project title

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management – 1^{st} stage (ACIM-Tysa).

Promoter

Authority/Company: Transcarpathian Regional Production Department for irrigation and water management

Address: 61a Zagorska St., Uzhgorod

Tel: 03122 31361

Fax: 03122 31334

Project Target

Scientific support for flood and water resources pollution control; automation and expansion of control areas, of information acquisition and processing in intensive yield formation areas, of well-timed pollution detection, flood formation and behavior warning, and taking of proper measures in order to protect water resources against pollution and lands against flooding.

Investment Cost

2.900.000 HRV (1.450.000 \$US)

Status of Project

Ongoing project

1. Project title

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management - 1st stage (ACIM - Tysa):

- a. construction of center for information acquisition and processing with technological support in Uzhgorod;
- b. equipment for information exchange .

2. Promoter Details

2.1. Authority/Company

Name: Transcarpathian Regional Production Department for irrigation and water management"

Address: 61a Zagorska St., Uzhgorod

Tel: 03122 31361

Fax: 03122 31334

2.2. Contact Persons

Ivanytskiy Orest Mykhaylovych, Head of Regional Department for Water Management

2.3. Advisor/Consultant

Chipak Volodymyr Petrovych, Chief Engineer of Regional Department for Water Management

2.4. Legal/Financial Status

As a subdivision of State Committee of Ukraine for Water Management it comes out as a client for antiflood measures in the region financed by national budget.

Annual turnover of last three years is 2.880.000 hrv.

2.5. Authority/Company Profile

The general tasks are: efficient utilization and protection of water resources; protection of population, national economy sites and facilities against damage caused by spring and storm flood, improvement of existing water management complex.

2.6. Planning/Implementing Capacity of the Authority

Projects for antiflood protection in the region are being developed according to the order of the Regional Department for Water Management and State "Integrated Schedule for Antiflood Measures for 1994 - 2000" as Ukrainian national budget funds are available.

	Schedule for	Work fulfilled during	Average annual	
	1994 — 2000, km	1994-1997, km	productivity, km	
Reconstruction and erection of embankments	200	32,4	8,0	
Training	162	48,2	12,0	
Bank protection	51	20,2	5,0	

Implementation of the schedule is as follows (January, 1998):

2.7. Key Participants

Transcarpathian Regional Production Department for irrigation and water management and Regional Upper-Tysa Department for water management of Hungary as a contractor.

2.8. Key Operators

Transcarpathian Regional Department for irrigation and water management

3. Project Description

3.1. Project outline

1st stage of ACIM - Tysa: to erect center for information acquisition and processing with technological support in Uzhgorod, to establish direct connection in order to provide information exchange between Uzhgorod center and corresponding center of Upper-Tysa Department for water management in Niredkhaza (Hungary).

3.2. Primary Need for Project

Flood control and protection of water resources against pollution are the most typical problems in Tysa River area. Since Tysa is one of the largest tributaries of Danube these problems are concern of neighboring regions of Ukraine, Romania, Hungary, Slovakia, i.e. they are international.

Current flood-warning service is not perfect at the terms of both limitations of information areas and primitive technology of observation and meteorological information acquisition, transmission and processing.

Establishing of ACIM-Tysa is aimed to provide scientific support for flood and pollution control programme. It will give an opportunity of implementing an automation and expansion of information acquisition, transmission and processing in intensive yield formation areas (mountain and foothills areas) necessary for well-timed pollution detection, flood formation and behavior warning, and taking of proper measures in order to protect water resources against pollution and lands against flooding.

3.3. Status of Project Reports

Additional information is available if necessary.

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
Fully adequate	yes	yes	yes
Partial adequate			
not adequate			
English summary (yes/no)	no	no	no

Technical documentation for the 1st stage of ACIM-Tysa is properly ratified and now is being implemented.

3.5. Technology Proposed

ACIM-Tysa system will be implemented in terms of phases in 2 stages:

1st stage: hydrologic data and information on water facilities acquisition is carried out using traditional methods, afterwards data is being stored in computer database in order to provide information exchange with neighboring countries, forecast drawing up and advising on failure-proof flood passing.

 2^{nd} stage: erection of first 7-10 automatically controlled stations in Ukrainian area of Tysa River. Their simultaneous operation with Hungarian meteorological radar would allow to estimate a threat of flood in Tysa River area. In future the number of stations is to be increased up to 25. This will allow to perform complete flood forecast in automatic mode and to simulate possible versions of antiflood protection in upper part of Tysa area in Ukraine and Hungary

3.6. Site Context Definition

Additional description information is not available.

3.7. Specific Project Item

The complex should be passed to "Uzhgorod Production Department for water supply and canalization" for operation.

4. Area/Site Description/Instructions

4.1. Planning Permitting Status

According to international experience, creation of automatically controlled systems similar to ACIM -Tysa System in Germany (Rheine area) and Netherlands is possible only in co-operation with experts of all countries suffering from pollution and harm made by water, with financial support of inerm\national organizations and funds. Such conclusion has been made by experts of Ukraine, Hungary, Romania, Sweden and Denmark at their meeting in Niredkhaza (Hungary, April 23-24, 1996).

As far as we know, institutions of Hungary, Romania and Slovakia involve international funds to implement automatically controlled water facilities information measuring and transmission systems.

4.2. Regulatory Liaison to Date

Erection work is performed by Ukrainian organizations. Upper-Tysa Department for Water Management (Hungary) and foreign companies supplying the equipment will participate in adjustment and alignment work.

4.3. Public's Expression of Interest

Inhabitants of Ukrainian, Hungarian, Romanian and Slovakian regions situated in the upper part of Tysa River area expect that the problem of flood protection will be solved soon. There is no doubt that they are interested in the implementation of ACIM-Tysa project.

5. Environmental Assessment

Quality		Impact Scale/Target					
Quality	Soil	Soil Water Air Ecosystem Landscape Settlem					
Adequate	yes	yes	yes	yes	yes	yes	
Partial							
None							
Expert Opinion	important	important	not important	important	important	important	

5.1. Scale of Existing Impacts/Risks

Flooding of the territory causes deterioration of the environmental situation and landscape and inflicts both mental and material loss. Implementation of the project will have a positive impact on all the risks.

5.2. Risk of Deterioration

Non-implementation of the project will make impossible creation of up-to-date system of monitoring and information transmission within the area of flood formation and well-timed sufficient measures at the territory of 12.500 km² (Tysa River area within Transcarpathian Region of Ukraine) of 18.300 km² (this territory includes 5.500 km² of Hungarian part of Tysa River area, which is already automated).

5.3. Sensitivity of Locality/Receptor

Thickly populated areas of Transcarpathian lowland, of Tysa River valley and its right-hand tributaries (Uzh, Latovitsa, Borzhava, Rika, Tereblya, Teresva), where most of the plants are situated.

5.4. Primary Benefits of Project

Implementation of the project will allow to carry out prompt and long-term measures on protection of population and national economy sites against flood, and water resources - against pollution on all geographical levels: local, regional, national and international, considering the follows:

- Location of the neighboring regions of Ukraine, Romania, Hungary and Slovakia in Tysa River area.
- 40% of the Tysa's annual yield is produced within the Transcarpathian region of Ukraine (its area is less than 10% of the Tysa River area); 55 70% of this yield is produced during the flood period.
- Most of flood is produced in the mountain part of Tysa River area and has a very high speed. Thus often it is destructive and disastrous.

5.5. Construction/Operational Impacts Evaluation:

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate	yes	yes
Not adequate		
Experts Opinion		

Project 2

Construction of embankment on Tysa River in Tyachiv

Project title

Construction of embankment on Tysa River in Tyachiv

Promoter

Authority/Company: Transcarpathian Regional Production Department for irrigation and water management

Address: 61a Zagorska St., Uzhgorod Tel: 03122 31361 Fax: 03122 31334

Project Target

Protection of built-up city area and treatment facilities against Tysa flood water flooding.

Investment Cost

1.740.000 HRV (870.000 \$US)

Status of Project

Ongoing project.

1. Project title

Construction of embankment on Tysa River in Tyachiv

2. Promoter Details

2.1. Authority/Company

Name: Transcarpathian Regional Production Department for irrigation and water management"

Address: 61a Zagorska St., Uzhgorod

Tel: 03122 31361

Fax: 03122 31334

2.2. Contact Persons

Ivanytskiy Orest Mykhaylovych, Head of Regional Department for Water Management

2.3. Advisor/Consultant

Litvinov Mykola Dmytrovych, Chief Specialist of Regional Department for Water Management

2.4. Legal/Financial Status

As a subdivision of State Committee of Ukraine for Water Management it comes out as a client for antiflood measures in the region financed by national budget.

Annual turnover of last three years is 2.880.000 hrv.

2.5. Authority/Company Profile

The general tasks are: efficient utilization and protection of water resources; protection of population, national economy sites and facilities against damage caused by spring and storm flood, improvement of existing water management complex.

2.6. Planning/Implementing Capacity of the Authority

Projects for antiflood protection in the region are being developed according to the order of the Regional Department for Water Management and State "Integrated Schedule for antiflood measures for 1994 - 2000" as Ukrainian national budget funds are available.

2.7. Key Participants

Transcarpathian Regional Production Department for irrigation and water management

2.8. Key Operators

Proper water management organizations,

Erection - Mobile Mechanized Pack MMP-240

Operation - Tyachiv Department for drainage and antiflood facilities

3. Project Description

3.1. Project Outline

Area protection by means of banking and Tysa River bank stabilization

3.2. Primary Need for Project

Tysa flood water-flooding protection of built-up city area and treatment facilities.

3.3. Status of Project Reports

Erection is performed in accordance with planning and preliminary estimation documentation developed and approved.

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
Fully adequate	yes	yes	yes
Partial adequate			
not adequate			
English summary	no	no	no
(yes/no)			

3.5. Technology Proposed

Earthfill embankment 4,12 km and bank stabilization 0,69 km long

3.6. Site Context Definition

Status of proprietary rights - state property.

3.7. Specific Project Item

Additional description information is not available.

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

Erection work is carried out according to the order of the Regional Department for Water Management and State "Integrated Schedule for antiflood measures for 1994 - 2000".

4.2. Regulatory Liaison to Date

Erection work is performed by Ukrainian organizations. Upper-Tysa Department for Water Management (Hungary) and foreign companies supplying the equipment will participate in adjustment and alignment work.

4.3. Public's Expression of Interest

In 1970 Tyachiv was flooded; in 1992, 1993 and 1995 the area of its treatment facilities was underflooded. So, there is no doubt that Tyachiv population is interested in implementation of this project.

5. Environmental Assessment

Quality	Impact Scale/Target					
Quanty	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important	important	important	important	important

5.1. Scale of Existing Impacts/Risks

Insufficiently purified and unpurified wastewater discharge of Uzhgorod CTF causes deterioration of Uzh River surface water quality characteristics - a source of drinking water for Slovakian locations situated further with the stream. The probability of accidental discharge is very high.

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater – and later of unpurified wastewater - to the Uzh River. First of all, this will result in water supply deterioration for the Slovakian locations, whose first intake is situated 3 kilometers from the place of Uzhgorod CTF discharging to the Uzh River.

5.3. Sensitivity of Locality/Receptor

The project has an impact on environmental situation in Uzh River - Bodrog River's tributary (Tysa).

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international.

5.5. Construction/Operational Impacts Evaluation:

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate	yes	yes
Not adequate		
Experts Opinion	very important	

Project 3

Complex utilization of timber with introduction of environmentally friendly technologies in Teresva Woodprocessing Enterprise

Project title

Complex utilization of timber with introduction of environmentally friendly technologies in Teresva Woodprocessing Enterprise.

Promoter

Authority/Company: Closed joint-stock company Tersvyansk Woodprocesssing Enterprise

Address: 1 Zavodska St., Teresva, Tyachivsky Rayon

Tel: 21 246

Fax:03134/22414

Project Target

Technological re-equipment according to advanced European technologies in order to produce environmentally clean products, termination of untreated wastewater discharge to Tisa River, establishment of low waste production

Investment Cost

5.000.000 \$US

Status of Project

Planned project.

1. Project title

Complex utilization of timber with introduction of environmentally friendly technologies in Tersvyansk Woodprocessing Enterprise

2. Promoter Details

2.1. Authority/Company

Name: Closed joint-stock company Tersvyansk Woodprocessing Enterprise

Address: 1 Zavodska St., Teresva, Tyachivsky Rayon

Tel: 21 246

Fax: 03134/22414

2.2. Contact Persons

Bilanych Ivan Andriyovych, General Director

2.3. Advisor/Consultant

Not identified

2.4. Legal/Financial Status

Information not available

2.5. Authority/Company Profile

JSC Tersvyansk Woodprocesssing Enterprise produces sawn timber, chip wood boards, pasted boards, sliced veneer, cabinet furniture - sets

2.6. Planning/Implementing Capacity of the Authority

Local authorities will promote development and implementation of projects

2.7. Key Participants

JSC Tersvyansk Woodprocesssing Enterprise, Ivano-Frankivsk Planning and Construction Institute, "Bison Verke" company

2.8. Key Operators

JSC Tersvyansk Woodprocesssing Enterprise, Ivano-Frankivsk Planning and Construction Institute, "Bison Verke" company

3. **Project Description**

3.1. Project Outline

Complex utilization of low quality timber and waste from logging and woodworking. Utilization of existing areas and saturation of them with advanced technologies and high-producing equipment made by Bison Verke and other companies. The project shall be implemented during 2-3 years for interest-free or low interest loans, both foreign and Ukrainian, their repayment during five years after reaching the design capacity. The project shall be implemented in two phases:

Phase I - reconstruction of chip wood boards factory, water purification works and furniture production

Phase II - other production facilities

3.2. Primary Need for Project

- a. cleaning of industrial air emissions from pollutants: inorganic matters HS, CO, SO, NO and organic limit, non-limit aromatic hydrocarbons, alcohols, ethers, aldehydes, ketones, formaldehyde and others. Air cleaning degree will be 80 to 98% due to usage of the special plant, as well as:
 - reuse of boiler house off-gas in the process of chip drying
 - intake of formaldehyde from presses and other equipment with scrubber and biofilters
 - use of boiler house blast air to heat thermal oil
 - operation of the production plant on solid fuel with the integrated thermo oil boiler to heat drying and press
 - use of filter plants to clean foul air and gases (formaldehyde, carbon and nitric oxides, acenone, solvents, varnishes, wood dust and others)
 - providing admissible normative width deviations for chip wood boards and the corresponding reduction in labor input for calibration and polishing of wood dust and other activities;
- b. purification of water from organic compounds petroleum derivatives, phenols of aromatic hydrocarbons, alcohols, organic acids, mercaptans and others, as well as from inorganic ones like sulfides, sulphates, nitrates, nitrides and others due to introduction of advanced technology and expansion of water treatment facilities, introduction of circulating water supply in production and others.
- c. complex utilization of timber, in particular timber management, logging and woodworking will allow to avoid raw waste lumber in the areas, rivers, streams of the forest and low lumberyard.

3.3. Status of Project Reports

No investment for the current being

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	yes
partial adequate			
not adequate			
English summary	Ukr	Ukr	
(yes/no)			

3.4. Quality of Project Reports

3.5. Technology Proposed

High efficiency of the proposed project is achieved by the deep low waste technology of the local low quality lumber processing, introduction of new technologies, use of modern complex equipment, as well as almost complete processing of chip wood boards at the Enterprise.

The project is viable in both technical and economic terms and makes significant profit, which ensures loan repayment and operation of the main activities of the works.

3.6. Site Context Definition

Status of proprietary rights - joint stock property

3.7. Specific Project Item

No

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

Design works will be performed with involvement of design organizations of leading industrial design companies and Ivano-Frankivsk design institute.

Erection, adjustment and alignment work is planned to be performed by Ukrainian organizations and foreign companies supplying the equipment

4.3. Public's Expression of Interest

Implementation of the project will allow to maintain the current number of personnel, to create additional new jobs due to more complete use of capacities. Increased capacities of treatment facilities at Tersvyansk Woodprocessing Enterprise will allow to use them as municipal treatment facilities.

5. Environmental Assessment

Quality	Impact Scale/Target					
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important	important	important	important	important

5.1. Scale of Existing Impacts/Risks

Current production equipment, treatment facilities for hazardous emissions are obsolete, their physical depreciation reaches 40%. It results in pollution of the environment with different matters. The enterprise is not able to meet limit permissible standards for emissions and discharges. Furthermore, burning fuel oil, gas, lumber waste at the works produces gaseous substances also adversely affecting the environment (NO_x, CO₂, CO). Exhaust aspiration air systems do not envisage filter systems directly at workbenches.

Due to imperfect technology, condition of aspiration-ventilation systems, the formaldehyde inside concentration 2,5-4 times exceeds the admissible level and accounts for 0,70-1,25 mg/m³. No production meets permissible limits of air emissions, which should not exceed the following values: dust - not more than 1,0 g/sec, formaldehyde - not more than 0,12 g/sec, nitric oxide - not more than 1,23 g/sec, carboxide - not more than 6,43 g/sec. However they are significantly higher. Water is used for both production and social needs. Chip wood board production uses water to prepare resin solutions, to wash equipment, containers, pipelines and fittings, to cool machinery. According to the norms, water consumption per 1 m³ of the manufactured board is 3,32 m³ or over 300.000 m³ annually.

Industrial wastewater in chip wood boards production originates from washing the equipment while specific pollutants are urea and formaldehyde resins and adhesives polluting the wastewater with formaldehyde (1 class hazardous).

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of untreated wastewater containing organic compounds like petroleum derivatives, phenols, aromatic hydrocarbons, mercaptans, as well as inorganic compounds, increased ambient air emissions will not allow to adopt low waste production and manufacture of environmentally clean product.

5.3. Sensitivity of Locality/Receptor

The project has an impact on transboundary ambient air pollution of the neighboring Romania, on environmental situation in the settlement of Teresva and on water quality in Tisa River - Danube's tributary.

5.4. Primary Benefits of Project

Radical measures on reconstruction of chip wood boards plant, replacement of existing technology and equipment in order to ensure international environmental standards and production of environmentally clean product. Project will have benefits on different geographical levels: local, regional, national and international

5.5. Construction/Operational Impacts Evaluation:

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate	yes	yes	
Partial adequate			
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

Project 4

Complex utilization of timber with introduction of environmentally friendly technologies in Velykobychkiv Wood Chemistry Enterprise

Project title

Complex utilization of timber with introduction of environmentally friendly technologies in Velykobychkiv Wood Chemistry Enterprise

Promoter

Authority/Company: Joint-stock company Velykobychkiv Wood Chemistry Enterprise

Address: 37 Promyslova St., V. Bychkiv, Rakhivsky Rayon

Tel: 21 514

Fax: 03132/21514

Project Target

Technological re-equipping according to advanced European technologies in order to stop intensive wastewater discharge from production of urea and formaldehyde resins to Shopurka River (tributary of Tisa River) with undertreated wastewater in the amount of 830.000 m³ per year.

Investment Cost

5.000.000 \$US

Status of Project

Planned project.

1. Project title

Complex utilization of timber with introduction of environmentally friendly technologies in Velykobychkiv Wood Chemistry Enterprise

2. Promoter Details

2.1. Authority/Company

Closed joint-stock company

Name: Joint-stock company Velykobychkiv Wood Chemistry Enterprise

Address: 37 Promyslova St., V. Bychkiv, Rakhivsky Rayon

Tel: 21 514

Fax: 03132/21514

2.2. Contact Persons

Kuzmyk Vasyl Mykhailovytch, Director

2.3. Advisor/Consultant

Not identified

2.4. Legal/Financial Status

Joint stock company, financial information is not available

2.5. Authority/Company Profile

JSC Velykobychkiv Wood Chemistry Enterprise produces the range of 20 products: charcoal, acetic acid technical, refined, reactive, food, methyl alcohol, thinners, formalin, glue-melt and other products

2.6. Planning/Implementing Capacity of the Authority

Local authorities will promote development and implementation of projects

2.7. Key Participants

JSC Velykobychkiv Wood Chemistry Enterprise

2.8. Key Operators

JSC Velykobychkiv Wood Chemistry Enterprise

3. **Project Description**

3.1. Project Outline

Complex utilization of low quality timber and waste from logging and woodworking. Utilization of existing areas and saturation of them with advanced technologies and high-producing equipment made by Grill & Grossman and other companies. The project shall be implemented during 2-3 years for interest-free or low interest loans, both foreign and Ukrainian, their repayment during five years after reaching the design capacity.

3.2. Primary Need for Project

- a. cleaning of industrial air emissions from pollutants: inorganic matters HS, CO, SO, NO and organic limit, non-limit aromatic hydrocarbons, alcohols, ethers, aldehydes, ketones, formaldehyde and others;
- b. purification of water from organic compounds petroleum derivatives, phenols of aromatic hydrocarbons, alcohols, organic acids, mercaptans and others, as well as from inorganic ones like sulfides, sulphates, nitrates, nitrides and others due to introduction of advanced technology and expansion of water treatment facilities, reuse of water in production and others

3.3. Status of Project Reports

No investment at the current time

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.4. Quality of Project Reports

3.5. Technology Proposed

Reconstruction of urea and formaldehyde resins workshop and transfer of this production to low waste. Reconstruction will increase annual resins output to 40 thousand tons compared to the current volume of 15 thousand tons. The proposals and preliminary planning were performed by "Grill & Grossman" /Austria/ in 1993. Austrian and German equipment is proposed to be used for reconstruction. For the first half of 1998 it is planned to commission a new workshop of activated carbon with the annual capacity of 50 tons.

The project is viable both technically and economically, it makes significant profit, which will ensure loans repayment and the main work of the enterprise.

3.6. Site Context Definition

Status of proprietary rights - joint stock property

3.7. Specific Project Item

No

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

Design works will be performed with involvement of design organizations of leading industrial design companies. Erection, adjustment and alignment work is planned to be performed by Ukrainian organizations and foreign companies supplying the equipment.

4.3. Public's Expression of Interest

Implementation of the project will allow to maintain the current number of personnel, to create additional new jobs due to more complete use of capacities. Increased capacities of treatment facilities at Velykobychkiv Wood Chemistry Enterprise will allow to use them as municipal treatment facilities.

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important	important	important	important	important

The environment of the settlement of Velyky Bychkiv, Rakhiv Rayon, is adversely affected by production activity of the wood Chemistry Enterprise, in particular production of urea and formaldehyde resins and acetic acid.

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of untreated wastewater containing organic compounds like petroleum derivatives, phenols, aromatic hydrocarbons, mercaptans, as well as inorganic compounds, increased ambient air emissions will not allow to adopt low waste production

5.3. Sensitivity of Locality/Receptor

The project has an impact on the ambient air quality, on environmental situation in the settlement of Velyky Bychkiv and on Tisa River - Danube's tributary.

5.4. Primary Benefits of Project

Radical measures on reconstruction of chip wood boards plant, replacement of existing technology and equipment in order to ensure international environmental standards and production of environmentally clean product. Project will have benefits on different geographical levels: local, regional, national and international.

Implementation of the project will allow to use new technologies to achieve purification of water from organic compounds: petroleum derivatives, phenols, aromatic hydrocarbons, mercaptans, and inorganic compounds, to expand treatment facilities; to stop discharge of untreated wastewater to Tisa River; to create low waste production and to manufacture environmentally clean product.

QualityConstruction/ImplementationOperation/Follow up phaseAdequatePartial adequateyesNot adequateExperts OpinionImplementation of the project will allow to improve environmental, sanitary and epidemic situation in the region

5.5. Construction/Operational Impacts Evaluation

Project 5

Extension and reconstruction of Wastewater Treatment Facilities of Uzhgorod (3rd turn)

Project title

Extension and reconstruction of Wastewater Treatment Facilities of Uzhgorod (3rd turn)

Promoter

Authority/Company: "Uzhgorod Production Department for water supply and canalization", State Municipal Enterprise

Address: 1 Mytna St., Uzhgorod

Tel.: 363 10

Fax: 03 122 / 43 503.

Project Target

To provide standardized purification of wastewater to Uzhgorod treatment facilities, to terminate discharge of insufficiently purified wastewater.

Investment Cost

25.000.000 USD

Status of project

Planned project.

1. Project Title

Reconstruction and extension of Uzhgorod Wastewater Treatment Facilities (3rd turn)

2. Promoter Details

2.1. Authority/Company

Name: "Uzhgorod Production Department for water supply and canalization", State Municipal Enterprise

Address: 1 Mytna St., Uzhgorod

Tel.: 363 10

Fax: 03 122 / 43 503.

2.2. Contact Persons

Ganin Serhiy Genadiyovych

2.3. Advisor/Consultant

Not identified

2.4. Legal/Financial Status

With independent balance of economic activity

2.5. Authority/Company Profile

Among the general tasks of the Department activity are the follow ones:

- Yield, production, transportation and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning development of water supply and wastewater purification.

Number of persons employed - 460.

2.6. Planning/Implementing Capacity of the Authority

Local authorities will promote development and implementation of projects

2.7. Key Participants

Client: "Uzhgorod Production Department for water supply and canalization", State Municipal Enterprise; Uzhgorod City Council

2.8. Key Operators

Not identified because of lack of financing

3. Project Description

3.1. Project Outline

Expansion and reconstruction of Uzhgorod canalization treatment facilities in complex with erection of Canalization Pump Plant # 4bis. Increase of treatment facilities daily capacity from 50.000 m^3 up to 200.000 (I complex), termination of annual discharge of insufficiently purified wastewater to boundary Uzh River (the tributary of Bodrog River, Tysa) in amount of 13.000.000 m^3 .

At the current moment daily 100.000 m^3 of influent water comes in Uzhgorod treatment facilities whose daily capacity is 50.000 m^3 . This results in insufficiently purified wastewater discharge to the boundary Uzh River - Bodrog River's tributary (Tysa) - at the annual amount of $13.000.000 \text{ m}^3$.

3.2. Primary Need for Project

The staff of the "Lvivgiprocombud" Research Institute has designed technical and economic basis for the construction of the 3rd stage, expansion and reconstruction of Uzhgorod canalization treatment facilities (CTF) including daily capacity increase from 50.000 m³ to 200.000 m³.

The technical and economic basis has been approved by proper institutions and passed state examination. In terms of 01/03/98 with the planning and surveying work costs of 82.630 hrv., the cost of the planning and surveying works performed by the staff of the Institute is 22.360 hrv., including 17.960 hrv. – according to the documentation of the 1st starting complex. The planning has been stopped because of lack of budget funds.

3.3. Status of Project Reports

No investment for the current being

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
Fully adequate	yes	yes	yes
Partial adequate			
not adequate			
English summary	Ukr	Ukr	
(yes/no)			

There has been paid 311.000 hrv. (of 495.344 hrv.) for performing of preliminary estimation documentation, project examination, and performing of siting project.

3.5. Technology Proposed

1st starting complex consists of the following main facilities:

Intake box, grids lattices, primary sedimentation tanks, aerotanks, secondary sedimentation tanks, bioreactors, aerobic mineralizers, transformer substation, reservoirs, engineering communications, discharge station, etc.

Mechanical and total purification of wastewater using a complex of such facilities as racks, primary sedimentation tanks, aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, aftertreatment constructions, etc.

3.6. Site Context Definition

State municipal economy.

3.7. Specific Project Item

The complex should be passed to "Uzhgorod Production Department for water supply and canalization" for operation.

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works.

4.3. Public's Expression of Interest

Implementation of the project will allow to insure standardized wastewater purification, improve water quality in Uzh River, reduce the risk of water supply deterioration for those Slovakian locations, whose first intake is situated 3 kilometers from the place of Uzhgorod CTF discharging to the Uzh River.

5. Environmental Assessment

Quality		Impact Scale/Target				
	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important	important	important	important	important

5.1. Scale of Existing Impacts/Risks

Insufficiently purified and unpurified wastewater discharge of Uzhgorod CTF causes deterioration of Uzh River surface water quality characteristics. Uzh River is a source of drinking water for Slovakian locations situated further with the stream. The probability of accidental discharge is very high.

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater – and later of unpurified wastewater - to the Uzh River. First of all, this will result in water supply deterioration for the Slovakian locations, whose first intake is situated 3 kilometers from the place of Uzhgorod CTF discharging to the Uzh River.

5.3. Sensitivity of Locality/Receptor

The project has an impact on environmental situation in Uzh River – Bodrog River's tributary (Tysa).

5.4. Primary Benefits of Project

Implementation of the project will allow to increase treatment facilities daily capacity from 50.000 m^3 to 200.000 m^3 . This will result in termination of insufficiently purified wastewater discharge. Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate			
Partial adequate	yes	yes	
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation:

Project 6

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management – 2nd stage (ACIM-Tysa)

Project Title

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management – 2^{nd} stage (ACIM-Tysa).

Promoter

Authority/Company: Transcarpathian Regional Production Department for irrigation and water management

Address: 61a Zagorska St., Uzhgorod

Tel: 03122 31361

Fax: 03122 31334

Project Target

Scientific support for flood and water resources pollution control; automation and expansion of control areas, of information acquisition and processing in intensive yield formation areas, of well-timed pollution detection, flood formation and behavior warning, and taking of proper measures in order to protect water resources against pollution and lands against flooding.

Creation of peripheral network of automatically controlled stations for on-site measuring of parameters (water level, temperature of water and air, reservoir filling level, degree of hydraulic facilities damage, etc.) and transmitting data through the communication system to information acquisition center.

Investment Cost

1.800.000 HRV (900.000 \$US)

Status of Project

Planned project.

1. Project Title

Automatically controlled information measuring system for flood forecasting and Tysa River water resources management – 2^{nd} stage (ACIM-Tysa)

2. Promoter Details

2.1. Authority/Company

Name: Transcarpathian Regional Production Department for irrigation and water management

Address: 61a Zagorska St., Uzhgorod

Tel: 03122 31361

Fax: 03122 31334

2.2. Contact Persons

Ivanytskiy Orest Mykhaylovych, Head of Regional Department for Water Management

2.3. Advisor/Consultant

Chipak Volodymyr Petrovych, Chief Engineer of Regional Department for Water Management

2.4. Legal/Financial Status

As a subdivision of State Committee of Ukraine for Water management it comes out as a client for antiflood measures in the region financed by national budget.

Annual turnover of last three years is 2.880.000 hrv.

2.5. Authority/Company Profile

The general tasks are: efficient utilization and protection of water resources; protection of population, national economy sites and facilities against damage caused by spring and storm flood, improvement of existing water management complex.

2.6. Planning/Implementing Capacity of the Authority

Projects for antiflood protection in the region are being developed according to the order of the Regional Department for Water Management and State "Integrated Schedule for antiflood measures for 1994 - 2000" as Ukrainian national budget funds are available.

Implementation of the schedule is as follows (January, 1998):

	Schedule for 1994-2000, km	Work fulfilled during 1994-1997, km	Average annual productivity, km
Reconstruction and erection of embankments	200	32,4	8,0
Training	162	48,2	12,0
Bank protection	51	20,2	5,0

Because of the lack of state budget financing allocated for the project implementation regional department for water management proposes to involve investments of international funds in order to construct the 2nd stage of ACIM - Tysa.

2.7. Key Participants

Transcarpathian Regional Production Department for irrigation and water management and Regional Upper-Tysa Department for water management of Hungary as a contractor.

2.8. Key Operators

Transcarpathian Regional Department for irrigation and water management

3. Project Description

3.1. Project Outline

1st and 2nd stages of ACIM-Tysa: to erect center for information acquisition and processing with technological support in Uzhgorod, to establish direct connection in order to provide information exchange between Uzhgorod center and corresponding center of Upper-Tysa Department for water management in Niredkhaza (Hungary).

3.2. Primary Need for Project

According to the project of the 2nd stage of ACIM-Tysa system creation (the 1st stage is currently being erected), erection of first 7-10 automatically controlled stations in Ukrainian area of Tysa River is planned. In future the number of stations is to be increased up to 25. This will allow to perform complete flood forecast in automatic mode and to simulate possible versions of antiflood protection in upper part of Tysa area in Ukraine and Hungary.

Flood control and protection of water resources against pollution are the most topical problems in Tysa River area. Since Tysa is one of the largest tributaries of Danube these problems are concern of neighboring regions of Ukraine, Romania, Hungary, Slovakia, i.e. they are international.

Current flood-warning service is not perfect at the terms of both limitations of information areas and primitive technology of observation and meteorological information acquisition, transmission and processing.

Establishing of ACIM-Tysa is aimed to provide scientific support for flood and pollution control programme. It will give an opportunity of implementing an automation and expansion of information acquisition, transmission and processing in intensive yield formation areas (mountain and foothills areas) necessary for well-timed pollution detection, flood formation and behavior warning, and taking of proper measures in order to protect water resources against pollution and lands against flooding.

3.3. Status of Project Reports

Additional information is available if necessary.

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	yes
partial adequate			
not adequate			
English summary	no	no	no
(yes/no)			

Technical documentation for the 2^{nd} stage of ACIM-Tysa is planned to be drawn up in 1998 at the expense of international funds

3.5. Technology Proposed

ACIM-Tysa system will be implemented in terms of phases in 2 stages:

1st stage: hydrologic data and information on water facilities acquisition is carried out using traditional methods, afterwards data is being stored in computer database in order to provide information exchange with neighboring countries, forecast drawing up and advising on failure-proof flood passing.

 2^{nd} stage: erection of first 7-10 automatically controlled stations in Ukrainian area of Tysa River. Their simultaneous operation with Hungarian meteorological radar would allow to estimate a threat of flood in Tysa River area. In future the number of stations is to be increased up to 25. This will allow to perform complete flood forecast in automatic mode and to simulate possible versions of antiflood protection in upper part of Tysa area in Ukraine and Hungary.

3.6. Site Context Definition

Status of proprietary rights – state property.

3.7. Specific Project Item

The complex should be passed to "Uzhgorod Production Department for water supply and canalization" for operation.

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

According to international experience, creation of automatically controlled systems similar to ACIM-Tysa System in Germany (Rheine area) and Netherlands is possible only in co-operation with experts of all countries suffering from pollution ad harm made by water, with financial support of inerm\national organizations and funds. Such conclusion has been made by experts of Ukraine, Hungary, Romania, Sweden and Denmark at their meeting in Niredkhaza (Hungary, April 23-24, 1996). As far as we know, institutions of Hungary, Romania and Slovakia involve international funds to implement automatically controlled water facilities information measuring and transmission systems.

4.2. Regulatory Liaison to Date

Erection work is performed by Ukrainian organizations. Upper-Tysa Department for Water Management (Hungary) and foreign companies supplying the equipment will participate in adjustment and alignment work.

4.3. Public's Expression of Interest

Inhabitants of Ukrainian, Hungarian, Romanian and Slovakian regions situated in the upper part of Tysa River area expect that the problem of flood protection will be solved soon. There is no doubt that they are interested in the implementation of ACIM-Tysa project.

5. Environmental Assessment

Quality		Impact Scale/Target				
Quanty	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important	important	important	important	important

5.1. Scale of Existing Impacts/Risks

Flooding of the territory causes deterioration of the environmental situation and landscape, and inflicts both mental and material loss. Implementation of the project will have a positive impact on all the risks.

5.2. Risk of Deterioration

Non-implementation of the project will make impossible creation of up-to-date system of monitoring and information transmission within the area of flood formation and well-timed sufficient measures at the territory of 12.500 km² (Tysa River area within Transcarpathian Region of Ukraine) of 18.300 km² (this territory includes 5.500 km² of Hungarian part of Tysa River area which is already automated).

5.3. Sensitivity of Locality/Receptor

Thickly populated areas of Transcarpathian lowland, of Tysa River valley and its right-hand tributaries (Uzh, Latovitsa, Borzhava, Rika, Tereblya, Teresva), where most of the plants are situated.

5.4. Primary Benefits of Project

Implementation of the project will allow to carry out prompt and long-term measures on protection of population and national economy sites against flood, and water resources - against pollution on all geographical levels: Local, regional, national and international, considering the follows:

- Location of the neighboring regions of Ukraine, Romania, Hungary and Slovakia in Tysa River area.
- 40% of the Tysa's annual yield is produced within the Transcarpathian region of Ukraine (its area is less than 10% of the Tysa River area); 55 70% of this yield is produced during the flood period.
- Most of flood is produced in the mountain part of Tysa River area and has a very high speed. Thus often it is destructive and disastrous.

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate	yes	yes
Not adequate		
Experts Opinion	very important	

Project 7

Priority measures on protection against flooding and improvement of sanitary and epidemic situation in Vilkovo

Project Title

Priority measures on protection against flooding and improvement of sanitary and epidemic situation in Vilkovo.

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

Project Target

To improve environmental situation and water supply of the least satisfactory (at the aspect of the sanitary and epidemic situation) parts of Vilkovo, elimination of the threat of dwelling flooding

Investment Cost

1.700.000 HRV (8.500.000 \$US)

Status of project

Planned project.

1. Project Title

Priority measures on protection against flooding and improvement of sanitary and epidemic situation in Vilkovo.

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, Head of Department of Capital Development; tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Chegurkov Grygoriy Borysovych, Technical Director of "Ukrpivdenvodgosp" Institute 2.4

2.4. Legal/Financial Status

Public authority

2.5. Authority/Company Profile

Among the general tasks of department activity are the following ones:

- Yield, production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Lack of financial resources; local authorities will promote development and implementation of projects

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy

2.8. Key Operators

"Odesakomunproekt", Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

To erect embankment in Pridunaysky St., to bury the shallow channel fragments in B. Khmelnitsky St. in order to run water supply line, to break a solid covered road and to reconstruct shallow channels running between Ochakiv mouth and Radyanska St.

3.2. Primary Need for Project

Complex of work defined in the project will allow to provide the least satisfactory (at the aspect of the sanitary and epidemic situation) parts of Vilkovo with drinking water and to eliminate the threat of dwelling flooding

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

To erect the embankment, to bury the shallow channel fragments, to run the water supply line, to break the road

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow to insure the safety of life for city inhabitants and to improve environmental situation

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	Yes	yes		yes	yes	yes
Partial						
None						
Expert Opinion	Important	important		important	important	important

5.2. Risk of Deterioration

Further flooding of Vilkovo, deterioration of the sanitary and epidemic situation.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate		yes	
Partial adequate	yes		
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation

Project 8

Kiliya protection against flooding (emergency measures)

Project Title

Kiliya protection against flooding (emergency measures).

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax:(0482) 22 60 39

Project Target

Protection of Kiliya built-up area of personal plots against wastewater flooding, improvement of environmental, sanitary and epidemic situation

Investment Cost

3.800.000 HRV (1.900.000 \$US)

Status of Project

Planned project.

1. Project Title

Kiliya protection against flooding (emergency measures).

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, ; Head of Department of Capital Development tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Chegurkov Grygoriy Borysovych, Technical Director of "Ukrpivdenvodgosp" Institute

2.4. Legal/Financial Status

State enterprise

2.5. Authority/Company Profile

Among the general tasks of Department activity are the following ones:

- Yield, production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Local authorities will promote development and implementation of project.

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy

2.8. Key Operators

Designer Institution: "Odesakomunproekt" Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

Construction of yield collecting channel in west and north parts of Kiliya, reconstruction of reservoir in Dzerzhinskogo St., construction of subsurface drain.

3.2. Primary Need for Project

Implementation of the project will insure protection of Kiliya built-up area of personal plots against wastewater flooding, normalization of medical hygiene situation, improvement of environmental situation

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

3.6. Site Context Definition

State municipal economy.

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow to insure safe conditions for population, to improve environmental situation and to reduce emission of pollutants from diffuse producers.

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality	Impact Scale/Target					
	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important		important	important	important

5.2. Risk of Deterioration

Flood water flooding of Kiliya results in contaminated water concentration and deterioration of Danube surface water and Kiliya underwater quality characteristics. Since Kiliya is situated at a distance of 30 km from the Danube mouth and Danube area wetlands the probability of emergency yield exists.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate		yes	
Partial adequate	yes		
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation

Project 9

Creation of the Wastewater Treatment Facilities in Reni

Project Title

Creation of the Wastewater Treatment Facilities in Reni.

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax:(0482) 22 60 39

Project Target

Standardized purification of wastewater coming through to treatment facilities of Reni, termination of insufficiently purified wastewater discharge.

Investment Cost

5.600.000 HRV (2.800.000 \$US)

Status of Project

Planned project.

1. Project Title

Creation of the Wastewater Treatment Facilities in Reni.

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration, Reni Seaport

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, Head of Department of Capital Development tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Tyurev William Fedorovych, Technical Director of "Odesakomunproekt" Institute

2.4. Legal/Financial Status

Public authority, regional executive authority

2.5. Authority/Company Profile

Among the general tasks of Department activity are the following ones:

- Yield, production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Lack of financial resources; local authorities will promote development and implementation of projects.

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy

2.8. Key Operators

Odessakomunproekt", Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

Erection of new canalization treatment facilities with daily capacity of 10.000 m³.

3.2. Primary Need for Project

Treatment and aftertreatment facilities listed in the project allow to improve the quality of yield to the amount of 5.8 mg/liter, suspension substance – to 3 mg/liter according to the requirements of environmental protection legislation.

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

Mechanical and total purification of wastewater using a complex of facilities such as racks, primary sedimentation tanks, biological purification aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, aftertreatment facilities.

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date.

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow to insure standardized wastewater purification, improve water quality in Danube River, reduce the risk of environmental situation deterioration in the area of Danube River delta.

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality	Impact Scale/Target					
Quanty	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes		yes	yes	yes
Partial						
None						
Expert Opinion	important	important		important	important	important

Insufficiently purified and unpurified wastewater discharge of Reni CTF causes deterioration of the quality characteristics of Danube River surface water directly near Danube River delta.

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater and unpurified wastewater to Danube River. First of all, this will result in water quality deterioration. It will also harm such sensitive environmental system as Danube delta.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate			
Partial adequate	yes	yes	
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation

Project 10

Construction of Vilkovo Wastewater Treatment Facilities

Project Title

Construction of Vilkovo Wastewater Treatment Facilities.

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

Project Target

Protection of Vilkovo built-up area of personal plots against wastewater flooding, improvement of environmental, sanitary and epidemic situation

Investment Cost

13.000.000 HRV (6.500.000 \$US).

Status of Project

Planned project.

1. Project Title

Construction of Vilkove Wastewater Treatment Facilities.

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, Head of Department of Capital Development tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Tyurev William Fedorovych, Technical Director of "Odesakomunproekt" Institute

2.4. Legal/Financial Status

Public authority, regional executive authority

2.5. Authority/Company Profile

Among the general tasks of Department activity are the following ones:

- Yield, production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Lack of financial resources; local authorities will promote development and implementation of projects.

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy

2.8. Key Operators

"Odesakomunproekt", Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

Erection of new canalization treatment facilities with daily capacity of 4.000 m^3 and complete biological treatment and aftertreatment facilities with the daily capacity of 3.000 m^3 .

3.2. Primary Need for Project

Treatment and aftertreatment facilities listed in the project allow to improve the quality of yield to the amount of 5,8 mg/liter, suspension substance – to 3 mg/liter according to the requirements of environmental protection legislation.

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

Mechanical and total purification of wastewater using a complex of facilities such as racks, primary sedimentation tanks, biological purification aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, aftertreatment facilities

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow to insure standardized wastewater purification, improve water quality in Danube River, reduce the risk of environmental situation deterioration in the area of Danube River delta.

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality	Impact Scale/Target					
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes		yes	yes	yes
Partial						
None						
Expert Opinion	important	important		important	important	important

Insufficiently purified and unpurified wastewater discharge of Vilkove CTF causes deterioration of the quality characteristics of Danube River surface water directly near Danube River delta

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater and unpurified wastewater to Danube River. First of all, this will result in water quality deterioration. It will also harm such sensitive environmental system as Danube delta.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international.

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate			
Partial adequate	yes	yes	
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation

Project 11

Extension of the Wastewater Treatment Facilities in the Izmail Paper Factory (city WWTP)

Project Title

Extension of the Wastewater Treatment Facilities in the Izmail Paper Factory (city WWTP)

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

Project Target

Standardized purification of wastewater coming through to treatment facilities of Reni, termination of insufficiently purified wastewater discharge

Investment Cost

7.200.000 HRV (3.600.000 \$US).

Status of Project

Planned project.

1. Project Title

Extension of the Wastewater Treatment Facilities in the Izmail Paper Factory (city WWTP)

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration, Izmail Paper and Pulp Plant

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, Head of Department of Capital Development tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Tyurev William Fedorovych, Technical Director of "Odesakomunproekt" Institute

2.4. Legal/Financial Status

Public authority, regional executive authority

2.5. Authority/Company Profile

Among the general tasks of Department activity are the following ones:

- Yield production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Lack of financial resources; local authorities will promote development and implementation of projects.

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy, Izmail Paper and Pulp Plant

2.8. Key Operators

"Odesakomunproekt", Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

Increase of the plant daily capacity from 24.000 m^3 up to 50.000 m^3 with regard to the city wastewater intake and purification

3.2. Primary Need for Project

Treatment and aftertreatment facilities listed in the project allow to improve the quality of yield to the amount of 5.8 mg/liter, suspension substance – to 3 mg/liter according to the requirements of environmental protection legislation.

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

Mechanical and total purification of wastewater using a complex of facilities such as racks, primary sedimentation tanks, biological purification aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, aftertreatment facilities

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interaction

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow to insure standardized wastewater purification, improve water quality in Danube River, reduce the risk of environmental situation deterioration in the area of Danube River delta.

5. Environmental Assessment

Impact Scale/Target Quality Soil Water Air Ecosystem Landscape Settlement Adequate yes yes yes yes yes Partial None Expert Opinion important important important important important

5.1. Scale of Existing Impacts/Risks

Insufficiently purified and unpurified wastewater discharge of Vilkove CTF causes deterioration of the quality characteristics of = Danube River surface water directly near Danube River delta

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater and unpurified wastewater to Danube River. First of all, this will result in water quality deterioration. It will also harm such sensitive environmental system as Danube delta.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate			
Partial adequate	yes	yes	
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

Project 12

Vilkovo city-channels erec reconstruction

Project Title

Vilkovo city-channels erec reconstruction

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Odessa Region State Administration.

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

Project Target

To insure water exchange in shallow channels in order to improve sanitary and epidemic situation in Vilkovo and Danube delta area and to protect historical peculiarity of Vilkovo as of "Ukrainian Venice".

Investment Cost

4.800.000 HRV (2.400.000 \$US).

Status of Project

Planned project.

1. Project Title

Vilkovo city-channels erec reconstruction

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Odessa Region State Administration

Address: 37 Pushkinska St., Odessa

Tel: (0482) 22 32 18

Fax: (0482) 22 60 39

2.2. Contact Persons

Siyanko Oleksandr Mykhaylovych, Head of Department of Capital Development; tel.: (0482) 22 84 71

2.3. Advisor/Consultant

Chegurkov Grygoriy Borysovych, Technical Director of "Ukrpivdenvodgosp" Institute

2.4. Legal/Financial Status

Public authority

2.5. Authority/Company Profile

Among the general tasks of Department activity are the following ones:

- Yield production, transportation, and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.
- Development of technical policy concerning water works and wastewater purification development.

Number of persons employed is 520

2.6. Planning/Implementing Capacity of the Authority

Lack of financial resources; local authorities will promote development and implementation of projects.

2.7. Key Participants

Client: Department for housing and municipal engineering and energy economy

2.8. Key Operators

"Odesakomunproekt", Institute Contractor: "Dunayvodbud"

3. Project Description

3.1. Project Outline

To clear and to deepen the major shallow channel and some of minor ones, to run a new network of shallow channels between the city and the navigable channel in order to provide water discharge to Bilgorod channel and to the Black Sea

3.2. Primary Need for Project

To insure water exchange in shallow channels in order to improve sanitary and epidemic situation in Vilkovo and Danube delta area and to protect historical peculiarity of Vilkovo as of "Ukrainian Venice".

3.3. Status of Project Reports

The project has passed sanitary, ecological and technical examination

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary (yes/no)	no	no	

3.5. Technology Proposed

Mechanical and total purification of wastewater using a complex of facilities such as racks, primary sedimentation tanks, biological purification aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, aftertreatment facilities

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

Cholera locations arise occasionally in the region

4. Area/Site Description/Interaction

4.1. Planning Permitting Status

The project has passed sanitary, ecological and technical examination.

4.2. Regulatory Liaison to Date

At the current moment lack of funds does not allow to get proper institutions involved in erection works

4.3. Public's Expression of Interest

Implementation of the project will allow insuring safety of life and improving environmental situation

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality	Impact Scale/Target					
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate		yes		yes	yes	yes
Partial						
None						
Expert Opinion		important		important	important	important

5.2. Risk of Deterioration

The further pollution and water exchange slowing down in the shallow channels results in eutrofication of these channels and water quality deterioration, underflooding of Vilkovo and disappearing of unique landscapes of the Danube delta.

5.3. Sensitivity of Locality/Receptor

The project has an impact on ecological, sanitary and epidemic situation in unique Danube delta ecosystem.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase	
Adequate		yes	
Partial adequate	yes		
Not adequate			
Experts Opinion	Implementation of the project will allow to improve environmental, sanitary and epidemic situation in the region		

5.5. Construction/Operational Impacts Evaluation

Project 13

Extension and reconstruction of the Kolomiya Wastewater Treatment Facilities up to 45.000 m³ capacity

Project Title

Extension and reconstruction of the Kolomiya Wastewater Treatment Facilities up to 45.000 m^3 capacity

Promoter

Authority/Company: Ivano-Frankivsk Regional Administration, Regional Administration Department for Capital Development

Address: 67 Galitska St., Ivano-Frankivsk

Tel: 031 225 2215

Project Target

Improvement of Prut River water quality as a result of the capacity increase and Kolomiya waste water purification system development

Investment Cost

16.600.000 HRV (8.800.000 \$US)

Status of Project

Planned project.

1. Project Title

Extension and reconstruction of the Kolomiya Wastewater Treatment Facilities up to 45.000 m^3 capacity

2. Promoter Details

2.1. Authority/Company

Name: Ivano-Frankivsk Regional Administration, Regional Administration Department for Capital Development

Address: 67 Galitska St., Ivano-Frankivsk

Tel: 031 225 2215

Fax: 031 225 2215

2.2. Contact Persons

Odukha Mykola Serhiovych, Director of "Lvivgiprokomunbud" Institute, tel.: (032) 75 1254

2.3. Advisor/Consultant

"Lvivgiprokomunbud" Institute, address: 6 Bohomoltsa St., Lviv tel.: (032) 1254

2.4. Legal/Financial Status

Public authority, information on the annual turnover of last 3 years is not available

2.5. Authority/Company Profile

General task is to design and maintain erection and operation of the municipal sites including wastewater treatment facilities

2.6. Planning/Implementing Capacity of the Authority

Lack of resources needed to plan and implement projects

2.7. Key Participants

Ivano-Frankivsk Regional Administration, Kolomiya Municipality

2.8. Key Operators

Kolomiya Department for water supply and canalization

3. Project Description

3.1. Project Outline

Improvement of Prut River environmental situation, wastewater purification.

3.2. Primary Need for Project

3.3. Status of Project Reports

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate		yes	
partial adequate	yes		
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

Mechanical and total purification of wastewater using a complex of facilities such as racks, primary sedimentation tanks, biological purification aerotanks of a corridor type (used for biological purification), secondary sedimentation tanks, after treatment facilities

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

Technical and economic basis has been designed, it has passed the state examination.

4.2. Regulatory Liaison to Date

4.3. Public's Expression of Interest

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate		yes		yes		yes
Partial						
None						
Expert Opinion	important	important		important	important	important

5.2. Risk of Deterioration

Non-implementation of the project will lead to increased discharge of insufficiently purified wastewater and unpurified wastewater to Prut River

5.3. Sensitivity of Locality/Receptor

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate	yes	
Partial adequate		
Not adequate		
Experts Opinion		

Project 14

Additional engineering networks and facilities for the processing for the Kolomiya WWTP

Project Title

Additional engineering networks and facilities for the processing for the Kolomiya WWTP

Promoter

Authority/Company: Ivano-Frankivsk Regional Administration, Regional Administration Department for Capital Development

Address: 67 Galitska St., Ivano-Frankivsk Tel: 031 225 2215

Project Target

Improvement of the quality of Prut River water

Investment Cost

9.300.000 HRV (4.650.000 \$US)

Status of Project

Planned project.

1. Project Title

Additional engineering networks and facilities for the processing for the Kolomiya WWTP

2. Promoter Details

2.1. Authority/Company

Name: Ivano-Frankivsk Regional Administration, Regional Administration Department for Capital Development

Address: 67 Galitska St., Ivano-Frankivsk

Tel: 031 225 2215

Fax: 031 225 2215

2.2. Contact Persons

Odukha Mykola Serhiovych, Director of "Lvivgiprokomunbud" Institute, tel.: (032) 75 1254

2.3. Advisor/Consultant

"Lvivgiprokomunbud" Institute address: 6 Bohomoltsa St., Lviv, tel.: (032) 1254

2.4. Legal/Financial Status

State Scientific and Research Institute, information on the annual turnover of last 3 years is not available

2.5. Authority/Company Profile

General task is to design and maintain erection and operation of the municipal sites including wastewater treatment facilities

2.6. Planning/Implementing Capacity of the Authority

Lack of resources needed to plan and implement projects

2.7. Key Participants

Ivano-Frankivsk Regional Administration, Kolomiya Municipality

2.8. Key Operators

Kolomiya Department for water supply and canalization

3. Project Description

3.1. Project Outline

Improvement of Prut River environmental situation, wastewater purification

3.2. Primary Need for Project

3.3. Status of Project Reports

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate		yes	
partial adequate	yes		
not adequate			
English summary			
(yes/no)			

3.5. Technology Proposed

3.6. Site Context Definition

Municipal property

3.7. Specific Project Item

4. Area/Site Description/Interaction

4.1. Planning Permitting Status

Technical and economic basis has been designed, it has passed the state examination.

4.2. Regulatory Liaison to Date

4.3. Public's Expression of Interest

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes		yes		
Partial						
None						
Expert Opinion						

5.2. Risk of Deterioration

5.3. Sensitivity of Locality/Receptor

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international.

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate	yes	
Partial adequate		
Not adequate		
Experts Opinion		

Project 15

Implementation of the extended project of sewer erection designated for Luzhany industrial area wastewater discharge and implementation of wastewater purification technology at Luzhany Pilot Distillery Plant

Project Title

Implementation of the extended project of sewer erection designated for Luzhany industrial area wastewater discharge and implementation of wastewater purification technology at Luzhany Pilot Distillery Plant.

Promoter

Authority/Company: Luzhany Pilot Distillery Plant

Address: Luzhany, Chernivtsi Region

Project Target

To raise the technogenetic and environmental safety in Prut River area and to improve providing population with quality drinking water in Prut River area along with spirit production economic indexes.

Investment Cost

2.700.000 hrv. (1.350.00 \$US)

Status of Project

Ongoing project.

1. Project title

Implementation of the extended project of sewer erection designated for Luzhany industrial area wastewater discharge and implementation of wastewater purification technology at Luzhany Pilot Distillery Plant.

2. Promoter Details

2.1. Authority/Company

Name: Luzhany Pilot Distillery Plant

Address: 53, Centralna St., Luzhany

Tel: 93 293

Fax: 91 278

2.2. Contact Persons

Zavadovskiy V. A., Director of the Plant

2.3. Advisor/Consultant

"Giprocivilprombud" Institute

2.4. Legal/Financial Status

Gross Assets - 12.300.000 hrv (6.150.000 \$US), sales volume - 9.800.000 hrv. (4.900.000, profit - 2.330.000 hrv. (1.165.000 \$US)

2.5. Authority/Company Profile

2.6. Planning/Implementing Capacity of the Authority

No capacity

2.7. Key Participants

Chernivtsi Regional State Administration, Chernivtsi City Council

2.8. Key Operators

Luzhany Pilot Distillery Plant

3. **Project Description**

3.1. Project Outline

Since 1992 there has been carried out erection of the sewer to divert discharge mixture of Luzhany Pilot Distillery Plant to Chernivtsi treatment facilities in order to prevent Prut River pollution and sludge areas formation within the area of drinking water source (Luzhany and Mamayevka).

The daily capacity of the sewer will be 1000 m^3 . The total length of the sewer is 13.798 m. The total cost of the work fulfilled in 1992 - 1996 is 1.270.000 hrv. (considering the prices of that period). The rest of the work would cost 1.430.000 hrv. (prices of 1997).

It is planned to get investment (700.000 hrv.) on state guarantee of investment redeem within 5 years at the expense of Luzhany Pilot Distillery Plant production (rectified ethanol of the highest degree of rectification) sale.

3.2. Primary Need for Project

The General tasks of the project are:

- To implement the technology of wastewater biological purification for spirit production industry.
- To complete erection of the sewer that would cover all discharge of the Luzhany industrial area.

3.3. Status of Project Reports

Actual

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes		
partial adequate			
not adequate			
English summary	no		
(yes/no)			

3.5. Technology Proposed

Spirit production wastewater biological purification according to the combined aerobic-anaerobic diagram and making of useful products of waste.

Coverage of all Luzhany industrial area.

3.6. Site Context Definition

3.7. Specific Project Item

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

Authorization of the Regional State Department for environmental safety is available.

4.2. Regulatory Liaison to Date

The project has been approved by local authorities, land users and representatives of "Chernivtsivodokanal".

4.3. Public's Expression of Interest

Project has been approved by public opinion.

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes		yes	yes
Partial						
None						
Expert Opinion		yes			no	

5.2. Risk of Deterioration

Non-implementation of the project will result in further pollution of the surface water and air.

5.3. Sensitivity of Locality/Receptor

Water intake and recreation Prut River areas.

5.4. Primary Benefits of Project

- Project will have benefits on different geographical levels:
- Local: Increase of the environmental safety in Prut River area and extra profit at the expense of utilization of waste and reduction of ecological taxes.
- Regional: Improvement of the environmental situation in Prut River area and of water supply in the village of Novoselitsa.
- National: Development of standard solution for the complex ecological and resource problem of spirit production industry of Ukraine.
- International: Reduction of the risk of international conflicts and development of methods of cooperation.

Quality	Construction/Implementation	Operation/Follow up phase
Adequate	yes	yes
Partial adequate		
Not adequate		
Experts Opinion		

5.5. Construction/Operational Impacts Evaluation

Project 16

Processing and raise of environmental safety of sludge formations in "Vodokanal" enterprise (Chernivtsi)

Project Title

Processing and raise of environmental safety of sludge formations in "Vodokanal" enterprise (Chernivtsi)

Promoter

Authority/Company: "Giprocivilprombud" State Enterprise/"Zirka"

Address: 200A Chervonoarmiyska St., Chernivtsi, 274013

Tel./Fax.: (03722) 735 30

Project Target

Rise of technogenetic and ecological safety in Prut River area and treatment facilities sludge partial utilization for utility purpose.

Investment Cost

2.000.000 HRV (1.000.000 \$US)

Status of Project

Planned project.

1. Project Title

Processing and raise of environmental safety of sludge formations in "Vodokanal" enterprise (Chernivtsi)

2. Promoter Details

2.1. Authority/Company

Name: "Zirka" Enterprise/ "Giprocivilprombud" State Institute Address: 200A, Chervonoarmiyska St., Chernivtsi, 274013 Tel: (03722) 735 30 Fax: (03722) 728 02

2.2. Contact Persons

Shevchuk Petro Ivanovych, Director of the Institute

2.3. Advisor/Consultant

Chernivtsi Regional State Department for Environmental Safety

2.4. Legal/Financial Status

Annual engineering work load – 220.000 hrv. (110.000 \$US)

2.5. Authority/Company Profile

Among the general tasks of the Department activity are the follow ones:

- Yield production, transportation and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.

Development of technical policy concerning development of water supply and wastewater purification

2.6. Planning/Implementing Capacity of the Authority

No capacity

2.7. Key Participants

Chernivtsi Regional State Administration, Chernivtsi City Council/ "Chernivtsivodokanal"

2.8. Key Operators

"Zirka"/"Giprocivilprombud"

3. Project Description

3.1. Project Outline

Considering design capacity of "Vodokanal" enterprise (Chernivtsi) daily sludge entry in the treatment facilities is as large as 48.000 kg (translated into solid). Total accumulation of non-dehumidified sludge in disorganized areas exceeds 1.000.000.000 kg. As a result, the land gets disabled, filtrate gets into the river and subsoil water, the tonnage of sludge that might be washed away by underflooding is constantly increasing.

It is planned to design, erect and equip units of dehydration and sludge worming along with storing of sludge within the Chernivtsi treatment facilities area. It is planned to organize dehydrated sludge transportation to the farms or its utilization at forest strips owing to the strict control of sludge composition (heavy metals and other harmful substances).

At the same time it is planned to carry out design work, and afterwards to density and close existing unorganized sludge storage areas.

Designing of sludge dehydration unit costs 39.000 hrv., of worming unit - 3.500 hrv., of sludge storage areas - 3.500 hrv.

In total, erection work costs 1.500.000 - 1.700.000 hrv., considering utilization of existing facilities.

A number of alternative designs of dehydration unit equipping are under consideration, such as: equipping with Ukrainian or imported equipment, fixed or mobile. Approximate cost of equipment is 1,000,000 DM.

It is expected to redeem investment assets at the expense of waste concentration excess fee (in accordance with approved regulations for wastewater intake in Chernivtsi treatment facilities) accumulated on special account of the State Committee for Environmental Safety.

3.2. Primary Need for Project

General tasks of the project are:

- To design, erect and equip the units of sludge dehydration and worming in Chernivtsi and facilities for the following storing.
- To plan schedule of work and to close existing disorganized sludge storage areas

3.3. Status of Project Reports

The project of sludge drying and warming has passed ecological and sanitary examination.

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	partially
partial adequate			
not adequate			
English summary	no	no	no
(yes/no)			

3.5. Technology Proposed

Mud dehydration, drying and warming

3.6. Site Context Definition

3.7. Specific Project Item

4. Area/Site Description/Interactions

4.1. Planning Permitting Status:

Authorization of the State Committee for Architecture and Development is available

4.2. Regulatory Liaison to Date

4.3. Public's Expression of Interest

Project has been approved by public opinion

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quanty	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate	yes	yes	yes	yes	yes	yes
Partial						
None						
Expert Opinion	important	important		important	important	

5.2. Risk of Deterioration

Pollution of surface, subsurface water and air

5.3. Sensitivity of Locality/Receptor

Subsoil water and recreation area of the Prut River.

5.4. Primary Benefits of Project:

Project will have benefits on different geographical levels:

- Local: For the plant: Increase of the environmental safety in Prut River area and extra profit.
- Regional: Improvement of the environmental situation in Prut River area and of water supply in the village of Novoselitsa.
- National: Development of standard solution for the complex ecological and resource problem of canalization treatment facilities.
- International: Reduction of the risk of international conflicts and development of methods of cooperation.

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate	yes	yes
Partial adequate		
Not adequate		
Experts Opinion		

Project 17

Sanitation, design and demonstration reconstruction of water supply and canalization facilities in Chernivtsi area of old building up aimed at improvement of water supply and reduction of soil displacement risk

Project Title

Sanitation, design and demonstration reconstruction of water supply and canalization facilities in Chernivtsi area of old building up aimed at improvement of water supply and reduction of soil displacement risk.

Promoter

Authority/Company: Chernivtsi Municipal Enterprise (Seba Company, Austria)

"Cernivtsivodokanal" State Municipal Economy

Address: 5 Komunalnykiv St., Chernivtsi

Tel./Fax: (03722) 474 60, (03722) 439 15.

Project Target

Experimental implementation of simultaneous city old part water supply improvement and reduction of man-made soil displacement declivity load.

Investment Cost

700.000 HRV (350.000 \$US)

Status of Project

Planned project.

1. Project Title

Sanation, design and demonstration reconstruction of water supply and canalization facilities in Chernivtsi area of old building up in order to improve water supply and reduce risk of soil displacement

2. Promoter Details

2.1. Authority/Company

Name: Chernivtsi Municipal Enterprise (Seba Company, Austria)

"Cernivtsivodokanal" State Municipal Economy

Address: 5 Komunalnykiv St., Chernivtsi

Tel: (03722) 474 60

Fax: (03722) 439 15

2.2. Contact Persons

Botnar V. I

2.3. Advisor/Consultant

"Giprocivilprombud" State Institute

2.4. Legal/Financial Status

2.5. Authority/Company Profile

2.6. Planning/Implementing Capacity of the Authority

Partial project financing

2.7. Key Participants

Chernivtsi Regional Administration, Chernivtsi City Council

2.8. Key Operators

Chernivtsivodokanal" ("Seba", Austria), "Giprocivilprombud" Institute

3. **Project Description**

3.1. Project Outline

The disastrous condition of water supply and canalization network in the Chernivtsi area of old building up causes excessive drinking water loss, inadmissible soil pollution with canalization drain. On the other hand, it causes intensification of soil displacement and thus acceleration of water and canalization network damage. The proposal developed by Ukrainian and Austrian experts at the conference on water supply improvement in Chernivtsi is to fulfill pilot and demonstration project of the water and canalization system renovation in the Chernivtsi area of old building up and reduction of displacement risk.

It is planned to perform sanitation and planning under supervision of "Seba" (Austria) experts, who implemented similar projects in a number of old European cities. It is also planned to perform demonstration reconstruction of water and canalization network in the assigned area of old building up.

3.2. Primary Need for Project

General tasks of the project are as follows:

- To perform the work and to acquire experience of sanitation and water supply network reconstruction planning under conditions of old building up and threat of soil displacement.
- To carry out service and reconstruction in the assigned part of the city using up-to-date technologies and materials.

3.3. Status of Project Reports

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate	yes	yes	
partial adequate			
not adequate			
English summary	no	no	
(yes/no)			

3.5. Technology Proposed

3.6. Site Context Definition

3.7. Specific Project Item

4. Area/Site Description/Interactions

- 4.1. Planning Permitting Status
- 4.2. Regulatory Liaison to Date
- 4.3. Public's Expression of Interest

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality	Impact Scale/Target					
	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate						
Partial						
None						
Expert Opinion	important	important		important		important

5.2. Risk of Deterioration

5.3. Sensitivity of Locality/Receptor

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels:

- Local: Improvement of water consumption, reduction of water loss and risk of soil displacement in the old building up area of Chernivtsi.
- Regional: Improvement of environmental situation in Prut River area and city water supplying.
- National: Acquisition of advanced international experience of sanitation and reconstruction using up-to-date equipment and materials aimed to solve problems of old building up areas in Ukrainian cities.
- International: Acquisition of experience of cooperation with EC countries in order to get Ukrainian, Moldavian and Romanian specialists acquainted with it afterwards by means of international projects.

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate		
Not adequate		
Experts Opinion		

5.5. Construction/Operational Impacts Evaluation

Project 18

Construction of the polygon for storage of solid waste in Chernivtsi (2nd stage)

Project Title

Construction of the polygon for storage of solid waste in Chernivtsi (2nd stage)

Promoter

Authority/Company: Department for housing and municipal engineering and energy economy of Chernivtsi City Council

Address: 20 Lomonosova St., Chernivtsi

Tel: 2 6546

Project Target

Investment Cost

Status of Project

Planned project.

1. Project Title

Construction of the polygon for storage of solid waste in Chernivtsi (2nd stage).

2. Promoter Details

2.1. Authority/Company

Name: Department for housing and municipal engineering and energy economy of Chernivtsi City Council

Address: 20 Lomonosova St., Chernivtsi

Tel: 2 6546

Fax:

2.2. Contact Persons

Kryzhanivskiy Vasyl Mykolayovych, Head of Industrial - Engineering Department

2.3. Advisor/Consultant

Chuprina V. P., "Dniprokomundorproekt" Institute

2.4. Legal/Financial Status

Annual turnover of last 3 years is 30.000 hrv.

2.5. Authority/Company Profile

Department for housing and municipal engineering Number of persons employed is 39.

2.6. Planning/Implementing Capacity of the Authority

Department is planning and implementing the project.

2.7. Key Participants

Chernivtsi City Council

2.8. Key Operators

2428; Tel.: 3 8363

3. **Project Description**

3.1. Project Outline

Complete technology of solid waste products storing in artificial trenches with maximum possible excavation level (considering geological and hydro-geological conditions).

3.2. Primary Need for Project

General task of the project is to insure protection of air, neighboring lands, surface and subsurface water against pollution, to keep pollutants out of the Prut River.

3.3. Status of Project Reports

The results of technical and ecological examination of the project are positive

3.4. Quality of Project Reports Feasibility Study Detailed Design

	Feasibility Study	Detailed Design	Implementation Report
fully adequate	yes	yes	yes
partial adequate			
not adequate			
English summary	no	no	no
(yes/no)			

3.5. Technology Proposed

Parameters of sanitary and protection area of the range correspond to the proper standards. All the work concerning the range for solid waste products, strengthening of isolation and further cultivation is mechanized.

3.6. Site Context Definition

Municipal economy

3.7. Specific Project Item

The project has been developed in the accordance with the Instructions on project contents and drawing up

Construction/

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

The project has passed state ecological examination (# 18-4/7-164 of 24/12/1993), examination of the State Committee of Ukraine for Construction (# 67 of 25/05/1990), the detailed project has been approved by the City Executive Committee

4.2. Regulatory Liaison to Date

City Executive Committee, Department for housing and municipal engineering of Chernivtsi City Council

4.3. Public's Expression of Interest

Public opinion is positive

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target				
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate						
Partial						
None						
Expert Opinion	important	important		important	important	

5.2. Risk of Deterioration

Termination of the range erection will result in deterioration of the city and the Prut River (Danube's tributary) environmental situation because it will cause elementary landfilling.

5.3. Sensitivity of Locality/Receptor

Lack of organized landfill has a negative impact on Prut River water quality

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels: local, regional, national and international

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate		
Not adequate		
Experts Opinion		

5.5. Construction/Operational Impacts Evaluation:

Project 19

Expansion and reconstruction of Chernivtsi canalization system including increase of its daily capacity up to 200.000 m³

Project Title

Expansion and reconstruction of Chernivtsi canalization system including increase of its daily capacity up to 200.000 \mbox{m}^3

Promoter

Authority/Company: Chernivtsi City Council Address: 1 Central Sq., Chernivtsi Tel: 2 5924 Authority/Company: "Chernitvsivodokanal" Enterprise Address: 5 Komunalnykiv St., Chernivtsi Tel.: 4 7460 Fax: 4 3915.

Project Target

Investment Cost

3.200.000 HRV (1.600.000\$US)

Status of Project

Ongoing project.

1. Project Title

Expansion and reconstruction of Chernivtsi canalization system including increase of its daily capacity up to 200.000 m^3

2. Promoter Details

2.1. Authority/Company

Authority/Company: Chernivtsi City Council Address: 1 Central Sq., Chernivtsi Tel: 2 5924 Authority/Company: "Chernitvsivodokanal" Enterprise Address: 5 Komunalnykiv St., Chernivtsi Tel: 4 7460

Fax: 4 3915.

2.2. Contact Persons

Chief Engineer of "Chernitvsivodokanal" tel.: 4 7460, 4 7461

2.3. Advisor/Consultant

Chief Engineer of "Chernitvsivodokanal" tel.: 4 7460, 4 7461.

2.4. Legal/Financial Status

Local Municipal Authority

2.5. Authority/Company Profile

Among the general tasks of the Department activity are the follow ones:

- Yield production, transportation and distribution of drinking water to consumers.
- Intake, disposal and purification of wastewater.
- Technical operation of city water supply and canalization system, support of its repair and operation.

Development of technical policy concerning development of water supply and wastewater purification

2.6. Planning/Implementing Capacity of the Authority

Lack of finance

2.7. Key Participants

"Chernitvsivodokanal" State Municipal Economy

2.8. Key Operators

3. Project Description

3.1. Project Outline

3.2. Primary Need for Project

To avoid Prut River area pollution and to improve its environmental situation. To provide capacity for extra wastewater intake and purification to standard rate.

3.3. Status of Project Reports

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate			
partial adequate			
not adequate			
English summary			
(yes/no)			

3.5. Technology Proposed

- **3.6.** Site Context Definition
- 3.7. Specific Project Item
- 4. Area/Site Description/Interactions
- 4.1. Planning Permitting Status
- 4.2. Regulatory Liaison to Date
- 4.3. Public's Expression of Interest

5. Environmental Assessment

Quality		Impact Scale/Target				
	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate						
Partial						
None						
Expert Opinion						

5.1. Scale of Existing Impacts/Risks

5.2. Risk of Deterioration

Non-implementation of the project will result in significant deterioration of Prut River area environmental situation that is of the situation in Ukrainian part of Danube area

5.3. Sensitivity of Locality/Receptor

The project has an impact on environmental situation in Danube River area and its delta.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels:

- Local: Improvement of environmental situation in the city and its suburbs.
- Regional: Improvement of environmental situation in Prut area (downstream of Chernivtsi).
- National and International: Improvement of environmental situation in one of the Ukrainian parts of Danube area

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate		
Not adequate		
Experts Opinion		

Hot Spot Name, River & Location (distance from mouth)	Parameters & Values which Define the Problem	Ranking of the Problem	Name & Type of Project (Structural or Non - structural)	Project Strategy & Targets	Parameters & Values which Define Project Benefits	Project Beneficiaries
Animal farming in Kylia Region	Includes two low priority hot sports and issues of introduction ecologically sustainable agricultural practices in animal farming pollution inventory, feasibility study	low priority	non-structural project No21	To support agricultural reforms and to prevent the future ecological problem from unsustainable animal farming	upgrading existing animal farms, farmers training, establishing the training center for farmers in the region	District authorities and farmers of the Kiliya region
	Kylia Collective Farm "Put Lenina": Total BOD:no data Phenols: no data Total discharge: 25.71 th.cub.m per year Lack of sewage treatment; possible pollution of ground water with direct impact on human health	low priority	non-structural project No 21	strategy for environmentally sustainable land use; introduction of ecologically sound agricultural practices; enforcement of environmental legislation	State of ground water quality and surface water; flood prevention	Ministry for Environmental Protection and Nuclear Safety
	Lisky Collective Farm "Pogranichnik", Kylia District: Total BOD: no data Phenols: no data Total discharge: 20.th.cub.m per year Lack of sewage treatment; possible pollution of ground water with direct impact on human health	low priority	Non-structural Project No 21	strategy for environmentally sustainable land use; introduction of ecologically sound agricultural practices; enforcement of environmental legislation		

Project 20

To support agricultural reforms and to prevent the future ecological problem from unsustainable animal farming

Project Title

To support agricultural reforms and to prevent the future ecological problem from unsustainable animal farming

Promoter

Kylyia district authorities in Odessa Region

Project Target

Upgrading existing animal farms, farmers training, establishing the training center for farmers in the Kilia district of Odessa region (lower Danube)

Investment Cost

250.000 \$US

Status of Project

Planned project

1. Project Title

Expansion and reconstruction of Chernivtsi canalization system including increase of its daily capacity up to 200.000 m^3

2. Promoter Details

2.1. Authority/Company

Will be specifies

2.2. Contact Persons

Will be specified

2.3. Advisor/Consultant

Will be specified

2.4. Legal/Financial Status

Local agricultural authorities and farmer associations

2.5. Authority/Company Profile

Will be specified

2.6. Planning/Implementing Capacity of the Authority

Lack of finance educational resources, small scale machinery

2.7. Key Participants

Kiliya agricultural authorities; farmers of the Kylia district

2.8. Key Operators

3. **Project Description**

3.1. Project Outline

3.2. Primary Need for Project

To prevent future lower Danube area pollution and to improve its environmental situation. To promote agricultural reform and ecologically sustainable development of agriculture

3.3. Status of Project Reports

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate			
partial adequate			
not adequate	not adequate	not adequate	not adequate
English summary	no	no	no
(yes/no)			

3.5. Technology Proposed

Conducting inventories of diffuse pollution sources; farmer training; piloting ecologically sound farming

3.6. Site Context Definition

Will be specified

3.7. Specific Project Item

Will be specified

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

None

4.2. Regulatory Liaison to Date

None

4.3. Public's Expression of Interest

Very high

5. Environmental Assessment

Quality			Impact Scale/Target			
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement
Adequate			adequate			
Partial						
None						
Expert Opinion	needs study	needs study		needs study	needs study	

5.1. Scale of Existing Impacts/Risks

5.2. Risk of Deterioration

Non-implementation of the project will result in strategic mismanagement in agriculture and future heavy pollution with nutrient and pathogenic microorganisms of Lower Danube area; may impact very important wetlands

5.3. Sensitivity of Locality/Receptor

The project has an impact on environmental situation in Danube River area and its delta.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels:

- Local: Improvement of environmental situation in the area and wetlands.
- Regional: Improvement of environmental situation in Lower Danube river
- National and International: Improvement of environmental situation in one of the Ukrainian parts of Danube area and wetland of international importance

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase		
Adequate				
Partial adequate				
Not adequate				
Experts Opinion	the introduction of sustainable agricultural practices I the region wi have extremely high impact			

Project 21

Reconstruction of existing and construction of new WWT facilities and accumulation pounds, improvement of the technology processes

Project Title

Reconstruction of existing and construction of new WWT facilities and accumulation pounds, improvement of the technology processes

Promoter

Rakhiv Cardboard Factory

Rakhiv City Administration

Project Target

Feasibility study for investment to upgrade technology at the Rakhiv Cardboard Factory and improve waster water treatment facilities

Investment Cost

250.000 \$US

Status of Project

Planned project

1. Project Title

Reconstruction of existing and construction of new WWT facilities and accumulation pounds, improvement of the technology processes

2. Promoter Details

2.1. Authority/Company

Rakhiv Regional Authority, Rakhiv Cardboard Factory Management; Carpathian Fund for Regional Development

2.2. Contact Persons

Director of Rakhiv Cardboard Factory; Mayor of Rakhiv; Head of NGO

2.3. Advisor/Consultant

Will be identified.

2.4. Legal/Financial Status

Local Municipal Authority, Local Rakhiv Cardboard Management, NGO

2.5. Authority/Company Profile

Among the general tasks of the Department activity are the follow ones:

- Cardboard production and affiliated goods.
- Intake, disposal and purification of waste water.
- Technical operation of cardboard water supply and canalization system, support of its repair and operation.

2.6. Planning/Implementing Capacity of the Authority

Lack of finance

2.7. Key Participants

Rakhiv municipalities, NGO "Carpathian Fund for Regional Development"

2.8. Key Operators

Will be identified

3. Project Description

3.1. Project Outline

3.2. Primary Need for Project

Reduction of the Tisza River pollution with phenols, oil products and especially BOD organic from Rakhiv Cardboard Factory

3.3. Status of Project Reports

Not available

3.4. Quality of Project Reports

	Feasibility Study	Detailed Design	Construction/ Implementation Report
fully adequate			
partial adequate			
not adequate			
English summary (yes/no)	no; feasibility study needed	no	no

3.5. Technology Proposed

Reconstruction of existing and Construction of new WWT facilities and accumulation pounds, improvement of the technology processes

3.6. Site Context Definition

Will be identified

3.7. Specific Project Item

4. Area/Site Description/Interactions

4.1. Planning Permitting Status

Will be identified

4.2. Regulatory Liaison to Date

Will be identified

4.3. Public's Expression of Interest

Strong

5. Environmental Assessment

5.1. Scale of Existing Impacts/Risks

Quality		Impact Scale/Target					
Quality	Soil	Water	Air	Ecosystem	Landscape	Settlement	
Adequate							
Partial			partial		partial		
None							
Expert Opinion	high	high		high		high	

5.2. Risk of Deterioration

Non-implementation of the project will result in significant deterioration of Tisza area environmental situation, human and ecosystem health, that is of the situation in Ukrainian part of Danube area

5.3. Sensitivity of Locality/Receptor

The project has an impact on environmental situation in Danube River area and its delta.

5.4. Primary Benefits of Project

Project will have benefits on different geographical levels:

- Local: Improvement of environmental situation in the city and its suburbs.
- Regional: Improvement of environmental situation in Tisza area (downstream of Rakhiv).
- National and International: Improvement of environmental situation in one of the Ukrainian parts of Danube area

5.5. Construction/Operational Impacts Evaluation

Quality	Construction/Implementation	Operation/Follow up phase
Adequate		
Partial adequate		
Not adequate		
Experts Opinion		