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ENVIRONMENTAL IMPACT ASSESSMENT



Ordered by: MINISTRY OF EDUCATION & SCIENCE Education Excellence and Equity Programm (EEP-P)

<u>Project:</u> Construction of new 9 Year Primary School in Mar' Lula district, Shkodra

Location: "Mark Lula" district, "Besnik Ceka" Street, Shkoder

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INTRODUCTION

The National Strategy for Development and Integration 2007-2013 defines the social policies in its priorities and provides for and is committed to *an education and training system that responds to challenges and ensures inclusion of all children*.

Albania has the lowest indicators of school attendance compared with regional countries. Total public expenditures for education fell during the transition period (3.1% of GDP in 2004), while the EU member states average is 4.9%. To reflect the priority attached by the Government to education, overall public spending on education increased to 3.55% of GDP in 2009. In general, schools have inherited shortages in teaching materials, laboratories and maintenance. The government managed to establish computer science laboratories in all schools significantly increasing the number of computers available to students. Schools in cities and urban peripheral areas work beyond their capacity, whereas in some rural areas, student-teacher ratio is very low, and poor transportation infrastructure makes concentration of schools difficult. Increase of enrollment percentage in lower secondary education, especially in rural areas and particularly by girls, is a priority in the European Partnership framework. Vocational education expansion and qualitative increase does not respond to market demands, it has still weak links with social partners.

Democratic development and demographic movements, uncontrolled urban development, uncontrolled population movement that accompanied developments in the two recent decades had a sensitive impact on socio-economic life of the population. Many unknown areas before are populated nowadays because of migration of residents from remote areas of the country to areas of a better development prospect. Naturally, an important part of these populated areas development should be offering adequate schooling infrastructure.

The Education Excellence and Equity Project (EEE-P) supports implementation of National Education Strategy (NES) first phase. The EEE-P objective is to improve the quality of learning conditions for all pupils, and to increase attendance of general secondary schools, especially by the poor.

The project has four priorities:

- 1) strengthening of leadership, management and governance of educational system;
- 2) improvement of teaching process conditions;
- 3) improvement and rationalization of educational infrastructure; and
- 4) setting the stage for the higher education reform.

The third priority is improvement and rationalization of educational infrastructure, which, besides rehabilitation of existing schools, entails enlargement or construction of more than ten schools.

PROJECT DESCRIPTION

PROJECT OBJECTIVES

The proposed EEE-P is supporting the Government in implementing the first phase of National Education Strategy (NES) in Albania. The EEE-P objective is to improve the quality of learning conditions for all pupils and to increase enrollment in general secondary education, especially by the poor. The intermediate goals are improvement of leadership, management and governance of educational system, use of new teaching methods by teachers and wider variety of teaching aids in schools, improvement of school infrastructure quality and its use efficiency and undertaking of initial steps of higher education reform.

PROJECT PRIORITIES

The project is implemented through four priority areas.

Priority 1: Strengthening of educational system leadership, management and governance (US\$ 10 million).

This priority area aims at strengthening leadership and management capacities, and improving educational system governance and accountability. This includes activities associated with decentralization, leadership strengthening, professional development of school principals, decision making and resource management in the school level, increasing the communities' participation, introduction of performance-based management system, and full utilization of Education Management Information System (EMIS) for decision making. Decentralized service provision will be piloted in 2-3 regions before deciding on a roll out plan. This is expected to form an institutional foundation to address other priority areas.

Priority 2: Improvement of teaching and learning conditions (US\$ 26 million).

This priority area focuses on a comprehensive improvement of teaching and learning conditions quality. Special attention would be paid to support of teachers' professional development so as to qualify them to use more effective teaching methods in their classes. It would also address the issues of curricula reform, including the development of a national framework for curricula, rationalization of subjects, integration and development of textbooks. In order to implement curricula reform, policies and practices for teachers' are being reviewed. Development of assessment and education assessment will continue by strengthening the capacities of National Assessment and Exams Center, development of a national plan for assessment in education, and improvement of transparency and integrity of State matura system. This priority area enables the teachers and pupils to use a wider range of appropriate educational tools and methods in the teaching and learning process.

Priority 3: Improvement and rationalization of educational infrastructure, (US\$ 32 million).

This priority area addresses most efficient investments and (re)allocation in physical infrastructure and human resources especially in the secondary education level. It supports MoES in making decisions on investments based on school maps, which takes into consideration the demographic development in Albania. Science laboratories and ICT facilities are being provided to general secondary schools in line with the new curriculum and teachers training under priority area 2.

Priority 4: Setting the stage for higher education reform (US\$ 7 million).

This priority area focuses on support of the initial stages of higher education reform. It supports MoES and universities to carry out a system analysis in order to identify and establish the order of reform activities, which include the strengthening of university governance, financial autonomy increase and accountability of universities, strengthening of quality assurance mechanism, and promotion of university partnership agreements. It intends to increase opportunities for pupils by mobilizing private financing, provision and more efficient use of public resources.

MAJOR PHYSICAL INVESTMENTS

The main physical investment component of the proposed project falls under *Priority 3 area – improvement and rationalization of education infrastructure, especially in secondary education*. Location of these investments are being decided on the basis of school mapping database, taking into consideration the demographic development in Albania and availability of state-owned land. Since

EEE-P uses a sector-wide approach, the actual expansion of physical investments and their location is clarified by Annual Reform Program.

Table 1 contains the list of subprojects. Activities consist of minor civil works for rehabilitation and renovation of existing school facilities, construction of building enlargements within the existing schoolyards and construction of new schools on newly allocated sites. Science laboratories and ICT facilities are being provided to general secondary schools in line with the new curriculum and teachers training.

	LIST OF SCHOOLS FOR ENLARGEMENT AND CONSTRUCTION As of October 20, 2010						
	School name	Location	Status of environmental due diligence	Status	Comment		
	1. ZallMner Primary School, Kamza, Tirana	Kamez-Zall Mner	EMP checklist prepared and disclosed	Construction works finalized	Municipality need to follow up with construction firm to address minor construction problems.		
	2. Ibrahim Rugova Primary School, Kamza, Tirana	Kamez Center	EMP checklist prepared and disclosed	Construction works finalized	Municipality need to follow up with construction firm to address minor construction problems.		
	3. Ballsh, Mallakaster Secondary School, Ballsh, Mallakaster	Ballsh, Mallakaster	EMP checklist prepared and disclosed	Construction ongoing	MoEs needs to inform Bank of status of site (i.e. whether resettlement will be needed)		
rd	4. Beslidhja Primary School, Lezhe	Lezhe	EMP checklist prepared and disclosed	Construction works stopped	Construction works stopped due to the raised question on land ownership		
g schoolyaı	5. Lezhe Secondary School , Lezhe	Lezhe	EMP checklist prepared and disclosed	Construction ongoing	Construction ahead of schedule		
on existing	6. Krume 9-year Primary School, Krume	Krume, Has	EMP checklist prepared and disclosed	Construction ongoing			
School enlargement on existing schoolyard	7. Durres B.Curri Primary School, Durres City	Durres city	EMP checklist prepared and disclosed	Construction works have not started	The design and bill of quantities requires review as demolition of old school building was not taken into account		
Sci	8. Kilica Secondary School, Fier City	Fier city	EMP checklist prepared and disclosed	Construction ongoing			
	9. Durres Keneta	Durres	EMP checklist not prepared	Construction works have not started	This is the new item on the list. As the municipality did not find appropriate land for new school, they decided to extend the existing school.		
	10. Bathore 9-year school, Kamza- Bathore, Tirana	Kamza-Bathore (6)	EMP checklist not prepared	Construction works have not started	This is the new item on the list. As the municipality did not find appropriate land for new school, they decided to extend the existing school.		

Table 1 Preliminary list of schools for enlargement and construction

11. School No. 01 – Primary	Kruje	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
12. Meleq Gosnishti - Primary	Përmet	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
13. Ura Vajgurore - Primary	Berat	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
14. Lukove – Primary	Saranda	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
15. Frakull e Vogel – Primary	Fier	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
16. Kol Koci – Primary	Pogradec/Korca	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
17. Lazarat – Secondary	Gjirokastör	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
18. Sotir Gurra – Primary	Korce	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
19. B. Curri – Primary	Kukes	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation
20. Rreth (2 nd) Basic Ed.	Rreth – Xhafzoty	EMP checklist not prepared	Construction works have not started	This is the new item on the original list. Proposed extension / rehabilitation

		1	1		
	21. Paskuqan 9- year Primary School, Paskuqan, Tirana	Paskuqan	EIA prepared and disclosed	Design under preparation	
	22. Saranda 9-year Primary School, Saranda	Saranda	EIA not prepared	Confirmation of expropriation not yet received	EIA will be tendered at the same time as design. Tendering process will start after ownership papers are received. Problems with land title.
suo	23. Shkoder Secondary School , Shkoder	Shkoder	EIA not prepared	Ownership solved, works have not started	EIAs for remaining schools will be procured in one package, therefore awaiting for ownership of other schools to be solved
New constructions	24. Vlore Secondary School, Vlore City	Vlore city	EIA not prepared	Confirmation of expropriation not yet received	EIA would be tendered at the same time as design. Tendering process will start after ownership papers are received.
N	25. Fushe Kruje Secondary School, Fushe Kruje, Kruje	Fushe-Kruje, Kruje	EIA not prepared	Ownership issues solved, works have not started	EIAs for remaining schools will be procured in one package, therefore awaiting for ownership of other schools to be solved
	26. Peshkopi, Diber Secondary School, Peshkopi, Diber	Peshkopi, Diber	EIA under preparation	Ownership issues solved, works have not started	EIA expected to be finalized by the end of November
	27. Tropoje 9-year B.Curri Primary School, Bajram Curri, Tropoje	Bajram Curri, Tropoje	EIA under preparation	Ownership issues solved, works have not started	EIA expected to be finalized by the end of November

28. Bulcesh 9-year Primary School (Bathore 5), Kamza-Bathore (5), Tirana	Kamza- Bathore	EIA under preparation	Ownership issues solved, works have not started	EIA expected to be finalized by the end of November
29. Shkoder 9-year Primary School	Mar-Lulaj	EIA prepared (currently under review)	Ownership issues solved, works have not started	Pending resubmission of EIA to Bank

DESCRIPTION OF PRIMARY 9 YEAR SCHOOL "mARK LULA" BUILDING SITE AND SCHOOL

The 9 year school Mark Lula will be built at the end of "Besnik Ceka" road, Shkodra City exit in the direction of Vau i Dejes, at a crossing with the street "Shtatë Shalianet". This area of Shkodra is growing and new development can actually be tracked on day by day basis. The available parcel for construction of school is provided by Shkodra Municipality and the site surface is 6970 m²



Functional part of school building

The main entrance is foreseen on the main road side Besnik Ceka. It passes through the schoolyard and lineup square coming to the main school building entrance.

The building respects urban conditions provided for in city planning regulation for school buildings.

In terms of functional organization, the school building will be made from two distinctive parts: the three floor /levels teaching building and the two floor/levels building for different activity facilities. The teaching part of the building contains classrooms, laboratories, libraries and other necessary auxiliary facilities for school functioning (offices, toilets, etc.). The entire teaching part of the



building is envisaged as a unique space where functional environments are placed around a central, open illuminated atrium. Classrooms placed southwards and eastwards are located on the ground floor, while laboratories are located northwards because of sunning.

Activities hall, gym and cafeteria are foreseen in the other part of the building (two floors).

According to the program adopted by the Ministry of Education, the schools have to have minimum 24 classrooms and 6 laboratories, gym, activities hall and all

other necessary facilities for a normal functioning of pupils' school life, administration, medical and psychological care, library, sanitary facilities, etc. The new 9-year school design, in Mar Lula neighborhood, envisages 27 classrooms, 7 laboratories, a library, the teachers' room, multifunctional hall, gym, showers and sanitary facilities, offices for the principal and administration and all necessary auxiliary facilities.

The outdoor part of the school will consist of open fields for various sports activities, recreation squares and green areas which will serve as recreational facilities for this school pupils and teaching staff. Additionally, this area will contribute to better air quality in this area. The whole outer space is organized in three main functional groups: the entrance square and lineup square, side spaces for recreation during breaks, and sport areas. The courtyard has a perimetric service road, mainly for firefighters and supply of service and technical facilities

On the ground floor nine classrooms will be built, as well as a biology lab, a chemistry lab, a multifunctional hall, the refreshment area / cafeteria, boiler room, guard room, gym and dressing room, etc.

The first floor will have 8 classrooms, the administrative office, the archive, principal's office, deputy principal's office, teacher's room, sanitary facilities, mathematics lab, physics lab, psychologist's



office, physician's room, dentist's room, etc.

The second floor will have 10 classrooms, the computer science lab, foreign languages lab, toilets and stores.

In total, the building has 5984 m^2 in the three floors.

- Ground floor 2347 m²
- First Floor 2347 m²
- Second Floor 1290 m²

The entire useable facilities are 4590 m^2 . The new school

construction surface on the ground floor, without sidewalks, is 2347 m²

Other technical city planning data:

- Total site surface is 6970 m²
- Construction surface is 2347 m²
- Green surface is 1074 m²
- Surface of sports grounds 2030 m2
- Surface of paved squares is 717 m².

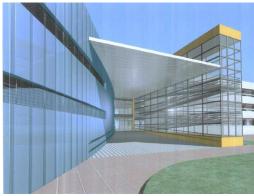


Figure 4 Visual model of the school 3

The school will be accessible from three sides, linked by streets. This makes it very accessible by increasing the potential use of school facilities by pupils and

community. The main entrance is northwards.

The building's rise is 85 cm from the ground level which provides optimal conditions for

Figure 5 Visual model of the school 4

structure protection from humidity. However, the entire building has protective measures against humidity.

Laboratories are designed according to its function and have adjacent secured room for storing chemicals. Laboratories are mainly located in the north in order to maintain uniform lighting and to protect them from direct sun light, especially in chemistry, physics, biology and computer science labs.

The project provides a good protection against fire in terms of specifications of used materials and in terms of evacuation and measures used to extinguish fire.

Proposed Site



Education Facilities in Shkodra almost cover the existing needs based on $6m^2$ per student. Only the southeastern and northwestern areas (inhabited by mainly illegal settlers from northern part of Albania in the 1990s) are not sufficiently covered. The current total need for 9 year schools expressed in surface is 24512 m² and the estimates show that this number will be doubled in 10 years. Three other 9-year schools are planned to be built until 2020 serving for

uncovered areas.

Shkodra municipality provided the available plot for the school construction with an area of 6970 m². After topographic and geological survey, all situations were considered and a plan for placing the object and organizing the courtyard was made. Physically, the construction site is flat and it has irregular geometric shape like letter L.



Figure 7 School site (view 2)



With regard to accessibility, the parcel has a very good access, due to three sides limited by streets and only on one side by private property.

The 9 year school will be built in Mar Lula neighborhood at the end of the road "Besnik Ceka", on its right side, in the direction of Kiti, Shkodra. Recently, this area is expanding day by day with constructions. The many school is located in the suburbs Municipality. Shkodra of Figure 4 shows the geographic position of Shkodra City, while figure 5 shows a satellite image of the area.

Figure 8 Position of construction site referring to Shkodra City Center (Yellow Point)



Figure 9 Satellite image of area and construction site

CONSTRUCTION SITE SELECTION ALTERNATIVES

Administratively, the country is divided into 12 prefectures, 36 districts and 374 local government units, Municipalities/Communes. The Law on Organization and Functioning of Local Government,



adopted by Parliament in 2000, corroborates government decentralization. Municipal Councils are responsible for administration of municipality properties, for collection and use of taxes, for drafting local development program, for housing, for adjustment plans implementation, for the creation and administration of school facilities. For the purpose of selecting the site, the availability of municipal owned land was taken into consideration in zones where a school is needed. In this case no other zones were examined and analyzed for the execution of this project as the site

seemed appropriate.

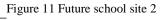
Figure 10 Future school site 1

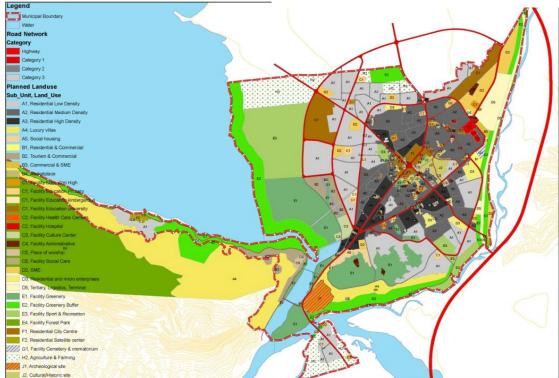
Likewise, the selection of this site, the "sole alternative", came as a result of the very development of this area in the current situation.

Current urban development of this area justifies also the selection made and the need for this school construction. The object construction and activities proposed by the MoES and city of Shkodra have taken into account all city planning criteria.

proposal ance with

Position of construction site and proposal made by the investor is in accordance with





center city planning. The construction site corresponds with D3 division made by Structural Plan Report for Shkodra city, named "Residential Area and small trading activities."

Figure 12 Urban plan of Shkodra

Limits Plan for Shkodra City

ENVIRONMENTAL BASIC CONDITIONS PHYSICAL ENVIRONMENT

Climate

Based on Albanian territory climatic regionalization, Shkodra city is part of field Mediterranean Climate zone. This climate zone is characterized by mild and wet winter and hot and dry summer.

Solar Radiation

Analysis shows that annual amount of total solar radiation received by this area is very high. The amount of heat that this zone horizontal surface receives presents a variation during the year, expressing clearly with a maximum in summer months and a minimum in winter months. The annual distribution of solar radiation shows the highest value is in July (6735 vh/m² per day), while it decreases in December to 1565 vh/m² per day.

Air Temperature

Indicators and specifications of Shkodra city thermal regime were obtained after a review of some key climate indicators of air temperature, as average temperature, maximal temperature, and minimal temperature, number of days with temperatures above or below the given threshold, which have an evident contribution on development and intensification of biophysical phenomena and processes in environments as described above.

Specifically, average maximal temperatures varies from 9.6 °C in January to 30.4 °C in July. While average minimal temperatures vary respectively from 2.6 °C to 18.1 °C in July. In general, a lower temperature amplitude value is noticed in winter months compared to summer months.

Atmospheric rainfall

In this area, atmospheric rainfall has a pure Mediterranean regime, characterized by a maximum in winter and a minimum in summer. The Shkodra area is characterized by a considerable amount of rainfall. Average annual rainfall in this area is 1528 mm. They are mostly concentrated in winter, with 66% of annual rainfall. November has most of the rainfall with an average of 206 mm, while the driest month, with least rainfall is July, with an average of 35 mm.

Wind

The area where Shkodra city is built is located on Mbishkodra Lowland placed between the mountainous area in East and Adriatic coast in the West. So, this situation shows that terrains of different characteristics are met within a small space. These different characteristics have an accentuated influence on winds regime.

In the Shkodra region, during January, winds from northern direction have an occurrence of 23%, winds blowing from North-East have an occurrence of 13%. Coming from the interior mountainous territory, these winds bring cold air masses, creating conditions for low temperatures, reaching zero degrees Celsius in many cases. We emphasize that during January wind occurrence blowing from the West quadrant have a very small occurrence which does not reach 1% of all cases.

Wind direction blowing from the West has the most frequent occurrence during July, which is accepted as a representative month for all summer season months, with 13% of cases and southwestern direction with 7%. However, occurrence of wind blowing from North and Northeast in this month is still distinct. Specifically, winds from northwestern direction have an occurrence of 9%, whereas winds from northeastern direction have an occurrence of 5%.

For the Shkodra area such a wind regime during this month is a direct result of sea breeze impact which blows from the sea to the land during the day and from land to the sea during the night.

Wind speed varies from 25-45 m/s and predominantly blows from Northeast, Southern direction.

Infrastructure

Water Supply

Prior to 1990, Shkodra water supply system was built for a population of about 80,000 inhabitants. Connections with water supply services at that time were 100% and duration was 12 hours. Since 1993 about 8 million euro were invested in water supply infrastructure, financed by the Austrian Government. These investments brought the following effects:

- Production capacity increase from 600 l/s to 1100 l/s,
- Emergency repair and network enlargement.

These projects have also foreseen the population growth. Production is sufficient to cover needs until 2020. Current water supply duration is 21 h/d, and it is estimated to increase to 24 hours with additional measures such as water meters installation and repairs of main distribution pipelines, financed by SECO and KFW. The planned school will be connected to the water supply system of Shkodra. The quality of water is described in 4.1.10.

Wastewater Removal

Prior to 1990, the Shkodra wastewater system (specific system) was built for a population of 80,000 inhabitants. At that time, connection with wastewater disposal services was 100%. From 1993 to 2007 very few investments were made in wastewater system and actually only 80% of the population is connected to a sewerage system. Wastewater removal, especially in new growing areas is based on septic tanks connected to channels of insufficient drainage capacity. Nowadays, the entire wastewater ends in Shkodra Lake.

The school will be connected to the sewage network as there are currently ongoing works under rehabilitation project of the road Shtate Shaljet. During the rehabilitation of the road the new sewage collector will be built.

Some projects are ongoing to solve this problem.

- A general drainage master plan was prepared in 2006.
- Reconstruction and expansion of underground sewerage network. The first phase is in the process.

Power Supply

The power supply system was renovated in the city central part years ago. The medium voltage network was improved to 20 KV. Cables are mainly underground and they have sufficient transformation capacity. Clients' number 33,085, including surrounding communes indicates that there is a 100% connection. Improvement of the current improvised system is necessary in newly unplanned developed areas. The substation capacity (reconstructed and improved recently) is 178 MW, sufficient even for future city expansion since some communes were disconnected from it and they are now connected to a different substation. However, a capacity increase of 25 MW is recommended in order to care for proposed changes of city structure. The number of transformers in the city is sufficient. Currently, the main problem is power cut caused by insufficient wholesale power supply. The school will be connected to the power supply grid.

Geology

The planned school will be located in Northeast of Shkodra city. It will be built on alluvial and prolluvial deposits of late Quaternary (fig 1). The site consists in Paleocene deposits of Krasta Cukali area represented by flysch and limestone deposits.

For the area under study important are the quaternary alluvial and proluviale deposits. While radical Paleocene rocks represented by flysch and carbonate deposits are found in 50-60 m depth and therefore they are not of much interest. There will be a short description for them.

a-Carbonate deposits. In the valleys of Kiri, Mazrek, etc. the Cretaceous limestone are represented by biomicritic limestone of thin and medium layers, with gray and pink colors. Rare calcarenite and concretion and thin siliceous layers are found between them. In the Northeast of Shkodra city, the upper Cretaceous cutting is dominated by turbiditic material and especially by conglomerate layers created from gravity flow, composed of limestone turbiditic conglobates with rare and thin layers of limestone biomicritic calcarenite with *Globotruncana*. These layers have in particular big pebbles and stones of Upper Triassic.

Upper Cretaceous limestone to the Northeast and Southwest of Shkodra city are represented by white limestone with gray shades and they have average to strong cementation. This limestone has no cracks. They are very compact and when broken they have sparkly breaking.

The upper part of limestone discovered in Shkodra is a little eroded (aerated) and it has cavernous view in contact with coverage formations.

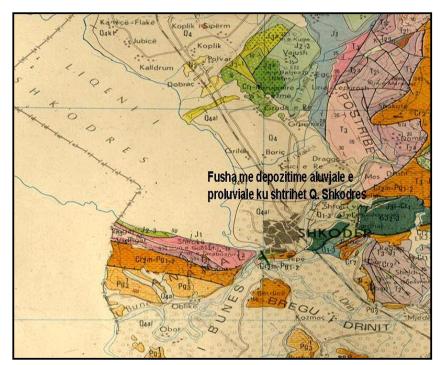
b- Flysch deposits discovered in the southwestern hills of Shkodra city are represented by sandmegelite-alevrolite flysch, thin with dark gray color. It is lightly metamorphosed by the pressing of Mirdita and Alps area in the East and Kruja area in West. Pressing in different directions caused a very detaching tectonics in flysch deposits.

c-Quaternary deposits. These deposits are much developed in Shkodra. They create an almost horizontal cover of 20 to 60-70 m thick. Their thickness increases from north towards Shkodra city. Thickness of 70 m is found in the territory where Shkodra city lies up to the north of former industrial area. In the northern side of Shkodra city near the former industrial area these deposits reach a maximum depth because Kiri River had its bed in the past; later it changed its course direction due to tectonic raising in the South of Tepe hills, where it runs again currently. So, Kiri river has played an important role in the nature of Quaternary deposits that fill the field where Shkodra city lies.

Quaternary deposits of Shkodra city are proluvial deposits in the lower part and alluvial in the upper. In the area next to Shkodra lake swampy deposits are spread (picture 13). The site surface is constructed of fillings like solid waste, brick pieces, stones and organic waste, soil clay, of different lithological composition.

Alluvial deposits are located throughout the area of Shkodra city. Lithologically, they are represented by clay and dust clay deposits in brown color. They are soft and moist and they have average density. There are thin sandy wet and friable lenses inside of them. Sandy lenses thickness is 15-20cm.

Quaternary alluvial deposits are of late Holocene age. Their origin is from Kiri river flows during periods when waters ran out from their bed and they covered all the areas of Shkodra city. This explains their construction with combination of layers of different litology. Their thickness is different in different positions, decreasing next to the hills and increasing towards Shkodra Lake and in the North of Shkodra city. They are found in the area under study and they are 1.5 to 2 meters thick.



Proluvial deposits are widespread throughout the area of Shkodra city. They are spread in extension and depth. Proluvial deposits are found in 2-2.5m depth and they continue with different combinations up to root rocks contact. The biggest depth reaches down to 70 m. It is found in the North of the city next to the former industrial area, where the ancient bed of Kiri River has been. Alluvial and proluvial deposits are not very thick near the hills and it increases towards the

lake and the North, following the former paleo-valley form of Kiri River. Proluvial deposits in this area originate from Kiri River flows, the valley of which passes through the mountainous terrain; its waters possess a considerable force to transport solid materials.

Transporting power of Kiri River waters decreases with the valley passing from the mountainous terrain to field. Consequently, all materials were deposited in quiet area of Shkodra field. This is the reason that we meet very thick proluvial deposits dominated by limestone and magmatic pebbles with different sizes.

Hydrography and hydrology

All the area of Shkodra city is surrounded by a dense hydro network that consists of streams and rivers where large water quantities are circulating throughout the year. The most important are Drini



Figure 14 Rivers Drin and Buna

River, Kiri River and Buna River and together with Shkodra lake they create a corridor which has an important contribution to Shkodra ecosystem and the whole around it. area The streams Vraka, Rrjolli and Prroi i Thate flow on the field above Shkodra the North in and Northeast.

The school site lays approximately 500 m east away from the river bed of Buna river.

Underground water levels in Shkodra territory is different in different sectors. It is closely associated with rainfall and water flow regime in the hydro network circulating the area where Shkodra city lies. In the area near the lake shores the underground water levels vary from 1.5 - 2 m, in the other part more in the East and Southeast underground water level varies from 5-6 m, increases from the city towards the East and North.

In the site area under study the water level is 6-7 m from the surface.

It is important that ground waters of the area of Shkodra city are found in Quaternary alluvial and proluvial deposits layers. They are of lithological type of clay, sand, gravel and gravelite, and they are soft neutral natural waters which are not aggressive for steel and concrete.

Hydro-geological and seismic risks

Land losses, erosion, flooding

The land loss in some coastal areas and the sea is advancing towards the land. River systems along the coast have changed as a result of events during the historic period. Buna, Drini and Kiri Rivers are joined in the South of Shkodra. Water flow reaches a high level in winter and it blocks the Shkodra lake flow. It causes flooding, but it also stops water flow from drainage channels and urban areas sewerage. The situation is worsened also by materials that the river takes with it which reduce its flow capacity.

Of course the water is collected in the lowlands, floods occur because underground water levels increase significantly or in heavy rainfall. Drainage and collection points are also influenced by the water level of Shkodra Lake, with a maximal increase of 9.7m in the lake and in the system of Buna, Drini and Kiri Rivers. An open drainage channels network is installed to prevent floods. Excess water flows through these channels towards the four mills built to use this natural energy source in the lower part of the city. Definition of eroded areas and land losses are given in details in analyzing maps.

Potable Water Quality

For this project purpose, the Ministry of Health, Regional Directorate of Primary Health Care in Shkodra, tested on June 01, 2010, the potable water of the network that supplies the city of Shkodra on, which shall supply Mar Lula School. Physical – chemical, microbiological and toxicological analysis were made. Analyses results show that the water is suitable for drinking. No coliform or streptococci bacteria, no PAHs or pesticides were found (analysis results are attached to this document).

Kiri River Waters Quality

For the project purpose, the Ministry of Environment, Forestry and Waters Administration informed the Ministry of Education and Science (MES) on Kiri River water quality. Surface waters monitoring program in 2008, implemented by Environment and Forestry Agency received data on Kiri River from two monitoring stations: before entering Shkodra city and after exit from Shkodra city.

Station	Clas P _{total}	Clas, NO ₃	Clas NB05	Clas NKO	Clas NH4	Clas O ₂
K1: Before entering Shkodra city	П	Ι	Ι	Ι	Ι	Ι
K2: After exit from Shkodra city	П	Ι	Ι	П	Ι	Ι

Table 2 Classification of Kiri River

Source: Environmental Situation Report 2005-2007, (MoEFWA)

According to the above analysis, the Kiri River water quality is good.

Air quality and emission source

There is no air quality monitoring network in Shkodra. Nevertheless there is no thermo power plant or incinerator or heavy industry that may cause significant air pollution in the surroundings of the school. The nearest pollution source is urban solid waste dump of Shkodra Municipality, which is 700-800 meters away in the Eastern part of the construction site, beyond the river. The waste dump is planned for closure as a regional landfill has been constructed and waste from Shkodra is disposed there. To minimize burnings and odors from the waste dump, the municipality has covered the dump with the layer of soil.

Traffic in general can contribute significantly to air pollution; however, there are no major roads in school surroundings. The road Shtate Shaljanet presents a source of air pollution currently as the road is unpaved; and this road will be paved before school construction starts.

Soil Quality

For the project purpose, the Faculty of Natural Sciences, Center of Nuclear Physics took 5 soil samples in the study area and they analyzed it for heavy metals and radioactive isotopes.

The soil shows no radioactive pollution.

The concentrations of heavy metals are presented in the table below and are compared to New Dutch list for soil criteria used in the Netherlands for contaminated land. The new Dutch list defines intervention values and according to the table bellow copper exceeds the threshold. These levels are only an indication of higher concentration of metals that can be of natural or anthropogenic origin. The Dutch list is given for typical Dutch soils. According to geological characteristics of the area (reference Geographic Atlas of Albania authored by A.Tashko, A.Mazreku, at all. 1997-1998). This statement has been confirmed by the Faculty of Natural Sciences, Center of Nuclear Physics. Due to the high level of copper in the soil the wider area of Shkoder is known for copper mining activities.

mg/kg of dry soil	Sample 1	Sample 2	Sample 3	Dutch list - action required
Cr	257	301	192	380
Mn	739	716	661	
Ni	195	178	163	210
Cu	347	412	254	190
Zn	285	405	209	720
Pb	48	47	23	530
As	14	25	8	55
Cd	< 0.3	< 0.3	< 0.3	12
Hg	< 0.1	< 0.1	< 0.1	10

Table 3 Concentration of heavy metals in the soil compared to Dutch list

The soil was not tested for oil/PAH pollution because: a) there is no history of economic activity on the proposed site or its surroundings which could indicate PAH oil pollution; and b) basic (organoleptic) examination of soil samples did not indicate any presence of such pollutants (see

annex). In addition, previous land use (as well as in the surroundings of the site) did not include intensive agricultural activities; therefore testing on pesticide presence was not carried out.

Noise

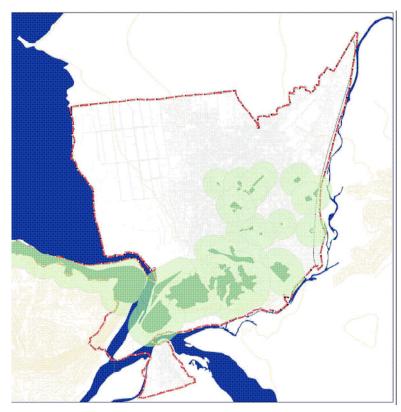
Currently there are no significant noise sources near the studied area. The site is located between two roads: "Besnik Ceka" road which it connects Shkodra city and Vau i Dejes and another road called "Shtate Shaljanet" which is located in the eastern side of the studied area. Traffic noises are in medium level as these are not the major roads and traffic is not very frequent. There are no other significant sources of noise in this area.

The reconstruction of "Shtate Shaljanet" road has started, and this road will be paved before school operation starts, i.e. by March 2012..

BIOLOGICAL ENVIRONMENT

Green areas

The issue of Urban Greening summarizes the current situation assessment and planning of green roads, district parks, and urban parks. Under current national provisions, reference standard is 8 m^2 per person, which is almost fully compliant with the EU countries practice.



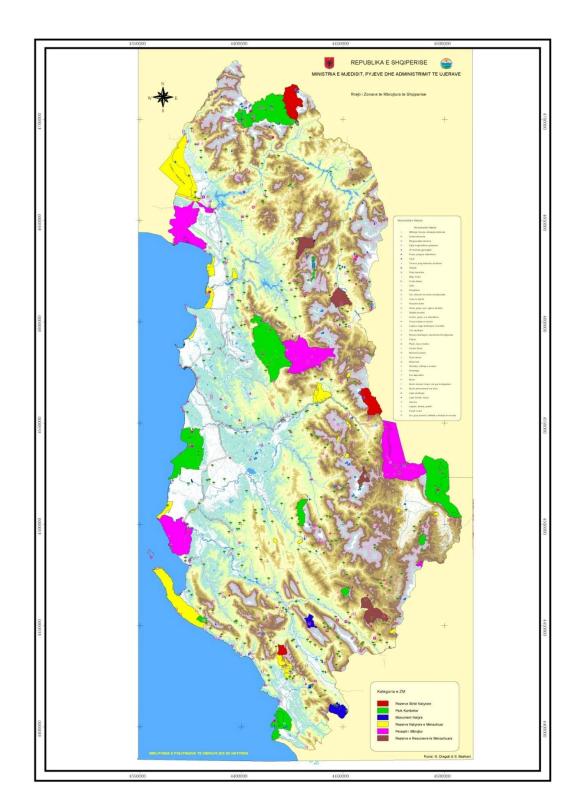
Regarding parks and neighborhoods Shkodra city has 6,4 17,000 m² and 13,000 m² are gradually transformed from occupied or abandoned areas to public parks.

Protected areas

The Shkodra lake is has a protection status and it belongs to managed natural reserves. The lake was proclaimed protected in 2005. Protected areas in Albania are divided in three protection categories:

A) Essential area (shown on the map with 1/a, consisting of lake shore on the west end of Zogaj up to Montenegro border and the slope with an altitude of 494 m in the South up to 200m in lake waters. B) Managed habitat area (shown in map

with 2/a) consists of the entire water surface of the lake except for the area included in the above mentioned 1/a; Albanian western coast from East of Buna to West of Zogaj, including the entire length of this segment up to a height of 300m in Tarabosh slope in the South. C) Area with traditional development (shown on the map with 3/a) consists of eastern area of Shkodra lake to Shkoder-Hani Hotit road. Albanian border side of the lake is also declared Ramsar area. Ten employees of Ministry of Environment, Forests and Water Administration carry out the administration and management of Shkodra natural reserves.



The site selection of proposed study area for school construction is not included in the protected arealistnoritisadjacenttoit.

SOCIAL AND CULTURAL ENVIRONMENT

Shkodra Region



The Shkodra Region includes Shkodra lake shores, the coast and it is rich in water resources. Mountains in this region are more forested than in other regions of the country. Historically, the economic development of this region was linked to natural resources, but currently it is characterized by a low economic level, high level of unemployment and low production.

Population

The Shkodra District ranks fifth nationwide in terms of population and it ranks second in terms of surface. The average population density in Shkodra region is about 71.8 inhabitant/km², which is below national average. Shkodra city has the highest population density in the region with 94 inhabitant/km².

The Shkodra Region consists of three districts, which include five municipalities, six cities, 29 communes and 269 villages.

Most of Shkodra region population, about 62% lives in the countryside; it is similar to the average country rate that is 58%. About two-thirds of the population lives in the Shkodra district. Approximately 54% of Shkodra district population lives in villages in the periphery, whereas in Malesia e Madhe 89% live in village and in Puka 82% live in village.

The Shkodra district has experienced demographic changes at the beginning of 1990. The population

decreased by 10% due to internal migration. This decrease appears mostly in Puka District, where about 30% of the population emigrated in the last 10 years, mainly to Lezha district.

<u>Agriculture</u>

Although, the Shkodra district covers about 413.021 ha, only 13% is agricultural land, about 64% is forest and pasture land and the rest is abandoned. About 29% of the agricultural land is not used. Uncultivated agricultural lands in Puka and Malesia e Madhe districts cover about 50%.

Forests

The Shkodra region is very rich in forests. Forests area is approximately 4.7 times higher than agricultural land. After 1990, forests in Shkodra region had damages due to over-exploitation, illegal cutting and hunting.

<u>Shkodra Lake</u>

The Shkodra Lake is the largest aquatic ecosystem in the Balkans with significant natural, historical and economic values. There are 1200 studies by local and foreign scholars on its flora, fauna, hydrology, water quality, microbiology, lake hydrology so far. Shkodra Lake has about 850 plant species and 600 animals.

<u>Hydropower</u>

Approximately 90% of Albanian hydropower is generated by three hydro power plants on Drini river cascade in Shkodra region.

Until 1988, there were 83 small hydro power plants with a capacity from 5 to 1200 kW and a total capacity of 14 MW. 8 of them were built in Shkodra region, with a total capacity 5.52 MW. Currently, all small hydro power plants need urgent rehabilitation. Only two of these plants, are currently in operation. Shkodra region has a potential to build at least five hydro power plants more with installed capacity of 34 MW.

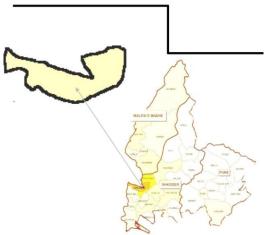
Main mineral resources

Copper mining is known in Shkodra region (Paluc, Lak Roshi, Tuc, Qafe Bari, Munelle, two mines in Palaj, Karmaj) and there are two processing factories (Mjede and Fushe-Arrez). In 1989, about 1500 employees were working in copper extraction and processing and about the same number in sectors related to this activity. Since 2001 it decreased to 43 workers. Cooper sector collapse in Shkodra region reflects the general collapse of this sector after 1991 in Albania, which covers only 1.5% of the number of workers in 1989.

Shkodra City/Shkodra Municipality

Geographic Position

The Shkodra city is located in Northwest of Albania. The city is mainly located on the plain area. In Southwest-Northeast direction quota is from 5.9 m to 24 m above sea level. The lake is located in



Northwest of Shkodra. The city has three neighborhoods in the outskirts: Bahçallëk in the South, and Zogaj and Shiroka in the West, which cover a total area of 180 ha. It is bordered by Kiri River in the town East, which flows from Northern Mountains and it is 43 km long. This river runs into Drini River that surrounds the southern part of Shkodra.

Buna springs River from Shkodra lake that runs into the Adriatic Sea and is 44 km long. Downstream, Buna River separates the border with Montenegro.

Shkodra is surrounded by a range of hills with an altitude up to 110 m in the East and the South, Rrenci hills in the East and Tepe hills in the South. The

rocky hill of Rozafa fortress is in the Southwest, a strategic point for centuries. The field of Mbi-Shkodra extends to the North and the Northwest; Albanian Alps are beyond it. Adriatic coastline is about 30 km in the Southeast with Velipoja Beach.

Social Economic Data

Number of population: 113,350 inhabitants. Number of households 35,883

Private Business:

Business Unit	1337	Big business	241	Small Business	1096
Producing Unit	184	Big business	99	Small business	99
Construction Uni	t 118	Big business	11	Small business	107

Employment:

Total employees

- Private Sector 9444 employees
- State Sector 8590 employees

- Families with financial assistance 4907.
- Assistance 469 people.

Education Sector:

	Total	Public	Private
Kindergartens	28	24	4
9 Year Schools	27	19	12
High Schools	17	12	5
University	1	1	0

Health Service:

	Total
Health Center Organized	5
Ambulance for adults	28
Ambulance for children	16
Mother counseling	4
Counseling for children	8

Cultural Heritage

Shkodra has always been a multicultural city, with each religious or ethnic community playing an important role in the economy and cultural development of the city. After 1990, the four main religions in Albania (Islam, Orthodoxy, Roman Catholicism and Bektashi faith) get along very well, and the monuments dotted around Shkodra attest to this traditional spirit of tolerance and cooperation. The city of Shkodra is known for cultural achievements. As a result of various activities, Shkodra is also famous for its magnificent art and architecture. In the diamond shapped city, the 90 cultural and historical monuments make the city to be the cultural capital of Albania. The most prominent cultural monuments are: the Museum of the City, the Rozafa Castle, the Lead Mosque, the Turkish Bath or hamam, the Large Church which is the largest church in the Balkans, Mes Bridge, and the Migjeni Theater. In the surroundings of the school there are no cultural heritage monuments.

ALBANIAN ENVIRONMENTAL LEGAL FRAMEWORK AND WORLD BANK PROCEDURES

5.1 ALBANIAN LEGAL FRAMEWORK

5.1.1. Objectives in environment field

Albania has an environmental legal framework that is adapting gradually to European Union legislation.

Institutions are organized or are being organized to implement, monitor and enforce laws, but there is still a long way ahead to achieve sustainability.

The Ministry of Environment, Forests and Waters Administration (MEFWA) is the authority that approves the request for EIA. This ministry has 12 Regional Environment Agencies (REA), which are responsible for the implementation of environmental legal aspects. These agencies approve relevant EIAs in principle.

5.1.2. Principal strategic documents in environmental field

Cross Sector Environment Strategy

The *Cross Sector Environment Strategy 2007* (CSES) is a basic document that sets the State policy in environmental protection field. The final goal of its development, approval and implementation is to meet its constitutional obligation towards citizens that enjoy the right to a healthy and ecological environment, sustainable development of Albania by rational use of natural resources, preserving them from pollution and degradation and promotion of environmental values in order to turn them into important assets for the further economic development of the country.

The environment as a sector needed a "cross sector" strategy. This conception accepts firmly the shared responsibility among many government institutions, of central or local level on environmental protection and achievement of a sustainable country development.

The CSES is supported by more detailed action programs that address specific issues such as:

- Strategy and Action Plan for Biodiversity,
- Strategy for Development of Forests and Pastures Sector,
- Strategy for Fisheries and National Plan of Waste Management.

Though there is legislation and bylaws for construction sector, urban and territory, development, yet their implementation is still not as it should be. The responsibilities of the various institutions, agencies and organizations that operate and have powers in this sector are often overlapping, dim and unclear. This chapter presents the basic legislation that operates and regulates developments in sector of construction and territory control and other laws related indirectly.

Legislation regarding territory and urban development control:

- Law No.9482 of 03.04.2006 "On Legalization, Urbanization and Integration of Illegal Buildings"
- Law No.8405 of 17.09.1998 "On City Planning", amended
- Law No. 8402 of 09/10/1998: "On Construction Control and Disciplining"
- Law No.8652 of 07.31.2000 "On Local Government Organization and Functioning"
- Law No.9244 of 17.06.2004 "On Agricultural Land Protection"

- Law No.9048 of 04.07.2003 "On Cultural Heritage"
- Law No.9780 of 16.07.2007 "On Building Inspection"
- Law No. 9232 of 13.05.2004 "On Social Programs for Housing of Residents in Urban Areas." amended by Law No.9719 of 23.04.2007.
- Law No.9290 of 10.07.2004 "On Construction Products"
- Law No.9780 of 07.16.2007 "On Construction Inspection".
- Decree No.722 of 19.11.1998 "On Approval of City Planning Regulation "

After 2002 Albania put great effort in establishing an environmental legislation framework. This legal framework includes all types of legislation ranging from Constitution of Republic of Albania, general environmental laws and its specific components, Council of Ministers Decrees, orders and instructions of ministries, specific regulations, norms and standards etc. This framework is based on the European Union standards and it was also compiled with foreign experts' assistance, respecting international conventions whereof Albanian State is a party.

However, the implementation of environmental legislation and adjustments continues to be in an intensive process of completions and improvements, in order to adapt to the best environmental standards and norms so as to ensure a sustainable development of country's economy.

Reporting on Environmental Impact Assessment is based on the following environmental legislation and it aims to identify, envisage, minimize and even prevent the activity negative impact on environment.

Law No. 8934 of 09.05.2002 "On Environment Protection, amended by Law No. 9890 of 03.20.2008 in Article 26" Environmental Impact Assessment Process" sets the obligations for provision of Environmental Permit of natural and legal entities who request to exercise an activity that has impacts on environment. Chapter IV of this law "Permit on activities with environmental impact" Articles 35-48 define modalities of environmental permits issue.

Law No. 8990 of 23.01.2003 "On Environmental Impact Assessment"

Chapter II, "Environmental Impact Assessment" Article 4, Section 2 defines the review levels for Environmental Impact Assessment:

a) profound EIA process

b) summarized EIA process

in points 3 and 4 of this article define activities that should be subject to the above levels.

Decrees of Council of Ministers (DCM) and guidelines:

- Decree No.103 of 31.03.2002 "On environment monitoring in Republic of Albania"
- Decree No.249 of 24.04.2003 "On approval of documentation for environmental permits and environmental permit elements"
- Decree No.268 of 24.04.2003 "On certification of specialists for environmental impact and environmental audit assessment."
- Decree No.805 of 04.12.2003 "On approval of list of activities affecting environment, for which Environmental Permit is required.
- Decree No.24 of 22.01.2004 "On environment inspectorate activities"
- Decree No.177 of 31.03.2005 "On allowed norms of liquid discharges and criteria"
- Decree No.1189 of 18.11.2009 "On regulations and procedures for drafting and implementation of national program on environment monitoring"

- Guideline of Minister of Environment No. 3 of 17.08.2004 "On approval of list of activities, application formatting, rules and procedures for consent and environmental authorization granted by REA.
- Regulation of Ministry of Environment No. 1 of 17.08.2004 "On public participation in environmental impact assessment process"
- Guideline of Minister of Environment No. 1 of 30.11.2005 "On service fees for Environmental Permit"
- Guideline No. 6 of 27.12.2006 "On approval of methodology of preliminary environmental impact evaluation of an activity."
- Guideline No. 2 of 21.05.2007 "On approval of list of activities with environmental impact, mode of application, rules and procedures for environmental authorization and consent issued by Regional Environmental Agencies."

5.1.3. EIA Report

Law No. 8990 of 23.01.2003 "On Environmental Impact Assessment", does not recognize construction of schools as an activity which would require an EIA; however, based on this law, some relevant Decrees and guidelines are issued for this purpose.

- DCM No. 249 of 24.04.2003 "On approval of documentation for environmental permits and environmental permit elements"
- Guideline No. 6 of 27.12.2006 "On approval of methodology of preliminary environmental impact evaluation of an activity."
- Guideline No. 2 of 21.05.2007 "On approval of list of activities with environmental impact, mode of application, regulation and procedures for authorization and environmental consent issued by Regional Environmental Agencies."
- Guideline No. 5 of 28.12.2007 "On service fees for environmental permits" of Minister of Environment, Forestry and Waters Management.
- Instruction No. 1 of 07.01.2008 "On necessary documentation for requesting environmental permit".
- Order of Minister of Environment, No.429 of 17.11.2009 "On regulation and procedures for issue of environment permit in the framework of National Licensing Center.

On the basis of the above legal provisions, based on the Guideline No. 2 of 21.5.2007 of the Minister of Environment, Forestry and Waters Administration, the construction of this facility: 9 years School, Mark Lula Neighborhood, Shkodra, is included in Annex 1 - List of local activities provided with Environmental Authorization, and categorization belongs to "Construction of residential and service facilities, with a surface bigger than 1000 m^2 ." but also in Annex 2 - List of Local Activities provided with Environmental Consent, Item 2) Special social and cultural objects, Item b) Schools

This implies that for the construction of schools, the preparation of a file for Environmental Authorization or Consent is required.

1)-List of documents to be submitted to REA for environmental authorization issue:

d) - Summarized report of environmental impact assessment of the activity, compiled by certified environmental experts.

2)-In the case of Environmental Consent, documents should be presented to REA for the environmental authorization issue.

c) - A brief report of the environmental impact assessment.

Based on Guideline No. 6 of 12.27.2006 "On approval of methodology of preliminary environmental impact evaluation of an activity", knowing the considerable environmental impact of construction sector, taking into account the large surface of construction site and the surface of facility building, as an expert of the field, the project environmental consultant recommends that the activity "Construction of Mark Lula 9 year School", should be provided with Environmental Authorization, and conditions included in this document should serve as a baseline document for issuing Environmental Authorization and after which permit.

5.1.4. Service Fee

The Ministry of Environment, Forests and Waters Administration, the competent authority to issue Environmental Permit, set service tariffs.

Based on Guideline No.5 of 28.12.2007 "On service tariffs for environmental permits" of the Minister of Environment, Forestry and Waters Management, item 14) tariffs for issue of Environmental Authorization, item a) for activities all items of Guideline Annex I, the service tariff is 20,000 lek, with the exception of Annex items 4, 5, 8, 9.15, 17, 19, 21, 25, 26, 27, 28, 29, 32, 43, 35, service tariff of which is 10,000 lek.

The service tariff that the investor will pay to the Ministry of Environment, Forests and Water Administration is 10,000 lek.

5.2 WORLD BANK PROCEDURES AND PROJECT REVIEW

The Bank assesses every project against its safeguard policies. A World Bank environmental review classifies projects as category A (significant adverse environmental impacts), Category B (potential adverse environmental impacts less serious than category A) and category C (probability of minimal or no negative environmental impact). An Environmental Assessment made confirms that the project will not have significant, irreversible, cumulative or long-term adverse impacts, and no potential A category subprojects shall be financed.

Since expected adverse impacts will not be significant or irreversible, and since they can be prevented or reduced through appropriate preventive actions or mitigation measures, the Project is classified as a Category "B" project, which requires only partial environmental assessment under this policy. To ensure that these issues are duly recognized, described and addressed, EAs are prepared for individual sub-projects. This EA, with its EMP ensuring that recommended preventive actions and mitigation measures will be taken, satisfies World Bank OP 4.01 policy on Environmental Assessment.

A Project Operation Manual (POM) was prepared, which describes environmental due diligence procedure and subprojects screening. The POM presents also the overall environmental management plan. The POM review procedure requires preparation of documents for Environmental Assessment of different fields for each subproject as shown in table 2, because investments envisaged under the project might have different levels of environmental impacts. Therefore, for the school rehabilitation activities, POM section in the EMP defines environmental mitigation measures and monitoring, whereas for enlargement or construction of new schools within the existing schoolyard, the POM determines the requirement of preparing an Environmental Management Plan (EMP) checklist for each subproject. For construction of new schools on new sites, Environmental Assessments with the EMPs will be prepared as the impacts will depend on the chosen location, i.e. previous activities on the site, distance from protected historical or nature sites, etc. Table 3 contains required Environmental Assessment documents. Because of the need for land acquisition, the project employed Compulsory Resettlement (OP/BP 4.12) policy. Land acquisition will be done according to Land Acquisition and Resettlement Plan, which is prepared.

 Table 3 Subprojects environmental screening table

Types of	Required Environmental Assessment Documentation	Applicable to:
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Category B Activities		
1.	Environmental Assessment (EA) with Environmental Management Plans (EMP) for each individual construction (subproject)	New schools on new sites
2.	Specific EMP for the site, for each school in the form of a checklist	New schools or enlargements on existing schoolyards.
3.	EMP is not necessary. General measures described in POM are applied	Rehabilitation of existing schools on existing schoolyards.

POTENTIAL ENVIRONMENTAL IMPACTS

The environmental impacts of the project are expected to be manageable, temporary and of local impact, since they relate to general construction activities on an already known site. These include usually: a) Dust and noise due to excavation, demolition and construction; b) Management of demolition and construction waste and accidental spillage of oils and lubricants, etc., c) Infringement of private property limits; d) Risk of damage to historical or cultural properties or unknown archaeological sites; e) Traffic disturbance; f) Impacts/damage to ecosystems; and g) Impacts on waters of the area. Site specific impacts are described more in details in sections 6.1, 6.2, and 6.3. The same sections pays special attention to description of selected site and current impacts on it.

ENVIRONMENTAL IMPACTS RELATED TO LOCATION ITSELF



a) Floods: The Kiri River shores are minimally 400m away from the construction site selected for the school. According to the report on geological-engineering conditions, the selected site represents Kiri River terrace, on which the whole Shkodra city is constructed. Before the railway construction (between school and river shores), this part of the city was frequently flooded by Kiri River overflows, but after the railway construction, protective measures were taken to protect the city and the railway station. Therefore, the selected site is not threatened by floods. The

alluvial underground waters are almost deepest in the city of Shkodra and can be reached at depth of 6 to 9 m.

b) Landfill. In a distance of 720 m from the construction site, towards Vau i Dejes road (south east),



across the river Kiri, the Urban Solid Waste landfill (dump) of Shkodra city is located. Mismanagement of this landfill in the past, waste burning, smokes and odors that spread depending on wind speed and direction became a serious issue for surrounding area inhabitants and consequently for future school pupils. Predominant winds in this area blow from Northeast, Southern direction, meaning avoiding the school area. Since the summer of 2010, due to continuous environmental inspection visits, the Shkodra Municipality took steps in the last few months to

Figure 20 Landfill of solid waste of Shkodra municipality

minimize burning and odor issues, like covering the dump top and sides, which reduced the incidents of summer 2010. Therefore, the landfill as managed now does not present significant impact to school pupils or employees. In addition, the Shkodra Municipality completed the design and approved the project to close the urban solid waste dump. That Project value is estimated at about 1.1 million euro. The Municipality is trying, with different donors, to find the funds needed for the closure which is expected in 2011 or early 2012. Also, the Municipality is starting to use the regional sanitary landfill in Bushat Commune, as the agreements between the three participating municipalities are being signed. *There are no data on air pollution caused from the waste dumps*.

<u>c) Soil quality on school site</u>. Based on measurements of Applied Nuclear Physics Center and values of different measured parameters, *there is no pollution of anthropogenic nature*. Olfactory (sensory) inspection showed *no signs of any organic pollution*. Radio-activity concentrations, environment gamma doze, and natural and artificial radioisotope activities, are in such levels that correspond to natural land fund, and present no danger to environment or people. Concentrations of heavy metals reflect natural characteristics of the soil in this area. This implies higher concentration of especially copper (see 4.1.13). For this reason implementation of the certain measures is required. Whether the project team will select soil stripping (about 20 cm) or soil isolation, this will depend on purpose of area. For example, all green areas should be stripped and soil should be replaced. Surface isolation with other kinds of materials would suffice for paths and access roads.

The plot has a flat terrain with a little difference of quotas. The site has a south western inclination of about 80-10. According to the geological-engineering report, site drillings encountered topsoil brought to the site (on some parts) and depth of new fillings goes down for 1.2 m. The material brought presents construction waste, i.e, excavated soil from some different site in the area, with similar characteristics). *The soil shows no sign of anthropogenic pollution*. The recommendation is that buildings and other formations (open sport surfaces) foundations should go as deep to be under the fillings or the soil layer brought. The excavation and processing of this material will be based on the design and the required depth of foundations. The extra material should be placed either on a landfill or site agreed with the city of Shkoder and Regional Environmental Agency. The removal should be done for stability purposes, especially for structures that do not require deep foundations (open sport surfaces)

d) Waste in school surroundings. Next to the school site a small amount of waste is deposited (see e) bellow). The waste will be removed during finalization of the road and containers will be brought to the site. The municipality should reserve funds to clean up urban waste near the school if the projected (road) does not follow school construction rhythm --according to the current schedule, the road should be paved prior to the school construction.

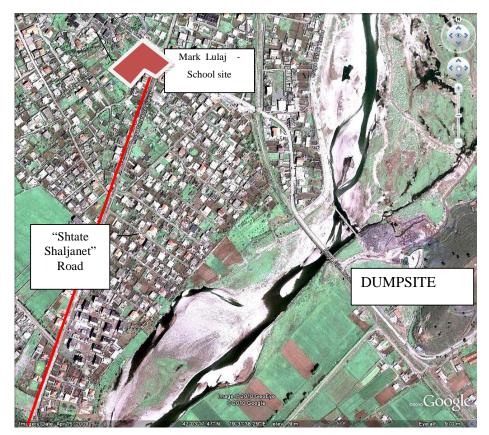


Figure 21 Wider surroundings of the school

e) Construction of the road (pavement). Construction of "Shtate Shaljanet" street in the eastern part of the building will have an impact on air quality, noise and safety.



Figure 22 Waste next to the school site on street Shtate Shaljanet

The following figures present the situation in Street "Shtate Shaljanet". The street pavement project will also help to eliminate the spread of garbage in this road and near the school site. Traffic currently is a contributor to air pollution, especially in the south eastern part of the site, as the road is not paved there.

. The rehabilitation of the road has already started from the more distant end and it is expected to be finalized prior to the school operation, i.e. by March 2012.

Since the street is close to the school it is necessary to apply additional protection measures to minimize noise impact and to increase security. These measures should include a wall for noise protection, fencing and prohibition of access to street and

regulated speed limit on that street segment. To reduce noise impact on school staff and children, a *Noise Reduction Assessment* should be prepared (as part of project documentation for construction). Noise Reduction Assessment should identify technical measures (type of insulation, noise protection walls, etc.) to maintain noise levels in the school building at 35-40 dB. These technical measures

should be included in the basic design and they should be reviewed by the MoES environmental consultant. Construction materials with the best sound insulation should be preferred.

ENVIRONMENTAL IMPACTS DURING CONSTRUCTION PHASE AND MITIGATION MEASURES

Engineering construction will include construction of building, site paving, paths and connection to sewage. The following actions are expected: soil excavation, foundation construction, walls, plastering, waterproofing, tiles paving, partition of facilities, collector construction, painting, network installation for water supply and sewerage and soil leveling.

The Construction area fencing will be made by sheet metal in its entire perimeter to prevent unauthorized access, accumulation of various solid wastes, to make a better organization plan of site and to avoid also the negative impact that works create.

This Environmental Impact Assessment Report was drafted and it examines the facility construction and operation phase. The following materials are envisaged to be used in school construction:

Wood materials, including planks to be used to make frames, beams to hold frames. It is necessary during the construction process to select, and store all wood materials according to destination use in the construction site. It is necessary to separate and eliminate all used wood materials that can no longer be used in special places designated for this purpose.

Construction iron should be of high quality, controlled and certified, in order not to have radioactive radiation as required by Albanian legislation. It should be stored on a special place in the site, separated from other materials near the places where it will be prepared for construction. It is necessary for iron materials not have contact with underground waters. This is recommended in order to stop iron oxides from entering into water holding formations, which could bring about their pollution.

Cement should be systemized in store and packaged, never open. It can be used unpackaged only when it is kept in silos and has no contact with open environment. In concreting processes prepared and unprepared cement should not be spilled inside and outside the construction site, in order not to pollute the land surface and prevent its penetration in depth, where it may pollute underground waters. When during concreting processes excessive concrete is left, it should never be deposited in open environments inside and outside the construction site, but it should be taken to the special place near the section for concrete preparation.

Different construction materials as *sand and gravel* in the site construction should be kept in special places and covered with oilcloth. This is recommended in order not to have air pollution during strong winds. It is also necessary to keep them wet with water during their use so as to minimize distribution of powdery particles in the air, which might pollute it and consequently its quality would not comply with allowed norms for PM 10 contents.

Mortar prepared in construction site should not be in contact with ground cover but it should be isolated from it by placing it on impermeable material as oilcloth, or on tracks prepared before.

Bricks should be systemized in the construction site and waste from their transport should be collected and transported in special places for them.

Air pollution

Construction activities may cause spread of dust in the atmosphere and a significant reduction of local air quality mainly due to vehicles driving on unpaved surfaces, vehicles driving with uncovered load and through emissions of poorly maintained machinery.

These impacts can be reduced to minor levels through standard practices of good site management, such as water sprinkling to limit dust emissions in the area near the construction materials and non-asphalted roads, covering of surfaces with plastic covers during storage and materials transportation,

limiting vehicles speed (30 km/h) in the area and access roads, periodical cleaning of site and access roads, efficient use of modern attested construction machinery to minimize emissions, provided with mufflers and they should be maintained in good and efficient operation condition.

To minimize dust from construction material collection, the time materials are kept on the site should be reduced to a minimum, in order to minimize exposure to wind erosions.

Air quality will be mainly reduced due to construction and transport activities. Building construction requires excavation, which is usually accompanied by dust dissemination in the atmosphere, mainly PM10, which causes air pollution.

6.2.2 Waste generation

Waste generation is expected to have the most important environmental impact. The foreseen works under the project will produce several types of waste. They are classified according to European waste catalogue and hazardous waste list since Republic of Albania harmonized the waste legislation to the EU legislation. This chapter presents only the waste group names, which are marked with numbers as in the European waste catalogue. Types of waste under each group can be marked with sign (*) which represents hazardous waste. The exact waste subgroup with its key identification number will be identified on site.

Major waste group types expected on the site may be as follows, but other wastes are not excluded:

- 08 Wastes from manufacture, formulation, supply and layers use (paints, varnishes and glass enamels), sealants and printing inks;
- 13 Oil wastes and liquid fuel wastes (such as hydraulic oils from equipment);
- 15 Package waste; absorbents, wiping cloths, filter materials and protective clothing that are not otherwise specified;
- 17 Construction and demolition wastes (including excavated soil from contaminated sites); and
- 20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions.

Prevention measures of waste management

Hazardous waste is expected in low quantities. In new constructions it will include different residues of varnishes, paints, as well as oil wastes from equipment. These wastes should not be mixed with solid ones. The contractor is obliged to provide special labeled containers for these types of waste.

For hazardous waste, the contractor has to follow hazardous waste separating procedure on the site. The contractor has to hand over the waste to the company authorized for hazardous waste management and to complete the accompanying documentation which should be kept as evidence of good practice in waste management.

It is recommended to separate different waste types (plastic and glass package) for which there are special collecting/recycling systems from non recyclable waste and they should be sent to appropriate collection places together with accompanying documentation.

Non-recyclable waste has to be sent to an approved landfill.

The construction site will be cleaned and all trash and waste materials will be disposed in accordance with clauses specified estimates. Illegal burning or waste dumping is strictly forbidden. Municipal waste and other waste have to be collected in special containers designed for that purpose and they will be regularly removed.

Due to high contents of copper, soil (natural conditions) excavated from the site should be removed and disposed on a site agreed with or approved by Ministry of Environment (or Regional Environmental Agency) and Shkodra Municipality authorities. The site should be visited by an environmental consultant of Ministry of Education and Science prior to disposal of excavated soil. The MoES will then inform the Bank about the choice, providing a brief justification for the site. Removal of soil that will come out during excavation of foundations shall be carried out with in a very short time from their creation with no pollution to the surrounding environment. Removal will be made between 17:00 and 19:00 taking measures to avoid traffic disturbances. The cargo will as well be covered or wetted to minimize road and air pollution.

6.2.3 Noise

Noises are an unavoidable environment impact during construction. Noise may be limited by following good management practices (calibrated equipment/machinery) which means that works will be carried out only during regular hours of work shifts.

Construction equipment shall meet all applicable standards of the EU Directive 2000/14/EC. This Directive applies to manufacturers of equipment that cause noise. All equipment must be maintained in good operating condition and be attested.

Time of building materials transport in exit routes will be set carefully in order to avoid any local traffic concern. Construction site operation will be stopped from 19:00 hrs to 7:00 hrs every day.

Noise pollution may originate from vehicles driving at site. In the project under study, noise will be caused mainly during the construction phase by heavy excavation, transport, loading/unloading machinery.

Noise will be temporary. Employees will be asked to implement technical security measures in work, as use of ear phones.

Soil and water pollution

Soil and water pollution is not expected as it can be prevented. However, soil and water pollution may be caused by direct or indirect contamination due to accidental spills or careless use of hazardous materials such as fuels, equipment lubricants, paints, varnishes, etc.

Potential impacts and their effects on surface waters during construction include: incorrect storage of fuel by contractor and activities on site that may bring about accidental spills of liquids or contaminated leaks and consequential deterioration of surface waters quality.

The site will have appropriate measures to control erosion and sediments such as hay bales and silt fences to prevent sediment from moving and causing excessive turbidity in nearby drainage.

Keeping heaped materials for a long time on the site should be avoided. If it is temporarily required, proper storage conditions should be created on site, for example, the use of covers for protection from atmospheric conditions. All materials should be kept and handled in accordance with instructions included in Material Safety Data Sheets (MSDS) available at the construction site. Training of operational staff and construction staff on safety measures and mitigation measures will continue.

If installation of fuel storage tanks will be needed, they will have secondary tanks with sufficient volume to contain a spill from the largest fuel tank in the structure. The containment area will have a device (pump) to remove accumulated water.

Materials to be used will originate from licensed activities of quarries, asphalt and gravel.

Construction works will not cause deterioration of underground waters regime of the area where the site is and on drainage system. Drainage channels of the area will be connected to discharging channels of project site, but without intervention that may destroy their operating system.

Archeological accidental finds

There are no significance archaeological centers near the site, so no specific archaeological protection measures are required. However, if during excavations some archaeological finds are encountered, works will be stopped immediately and the competent local authority will be informed. Works will resume only after appropriate measures have been taken as required by relevant authority and after it confirms that works may continue.

Flora and Fauna

The site and the surrounding territory where the project will be applied do not comprise any sensitive area or area of special protection status.

The territory on which the construction site is located will be completely stripped off from vegetation layer. After construction works completion, the area will be rehabilitated and grass will be sown. Existing trees on the site should not be removed if blueprint of the future school allows it, i.e. if the trees are located on the future green zone of the school yard.

ENVIRONMENTAL IMPACTS DURING OPERATIONAL PHASE

The environmental impacts during the operational phase related to project investments concern primarily waste generation and treatment of hazardous substances in laboratories.

Waste generation

Waste generated during operation relate to maintenance activities and regular school operation activities.

Potential types of waste are classified according to the European waste catalogue and hazardous waste list since Republic of Albania is approximating waste legislation with the EU legislation. Waste marked with item (*) in the catalogue represents hazardous waste.

The (hazardous and non-hazardous) waste should be divided, collected and stored according to Law on Waste.

Hazardous waste (which includes laboratory chemicals and its package – group 15 according to waste catalogue) present the primary concern. Special signs and MSDS should be placed in laboratory near the sinks to avoid chemicals and hazardous mixtures spilling. At the beginning of the school year a teacher of natural sciences should dedicate one class to treatment of chemical substances.

Labs should have special containers for chemicals and to be disposed. Chemical waste treatment should be made by teachers of natural sciences. In addition, special containers should be available for collection of spilled chemicals.

Waste should be handed over to the company authorized for hazardous waste, which should provide the school with documentation on disposal methods.

Municipal waste should be collected by the company that collects waste and they should be disposed at the landfill.

The major expected waste groups are as follows, but other kinds are not excluded: package, chemicals and municipal waste.

ENVIRONMENTAL MANAGEMENT PLAN

The current Environmental Management Plan (EMP) includes measures to address potential impacts during construction activities preparation and school operation. Mitigation plan with impacts, measures and identified responsible parties, is presented in tables 3, 4 and 5 and Monitoring Plan for these mitigation measures is included in table 6.

During construction, the contractor will implement all environmental mitigation measures. The MoES will consult the World Bank team on the acceptance of design and proposed measures expected to be implemented prior to construction. The MoES, Municipality and the Supervisory Engineer (consultant contracted by MoES) will monitor EMP implementation during the construction phase. During the operation phase, the environmental mitigation measures will be applied by school staff. Supervision during operation will be done by teachers of natural sciences and REA inspectors. Overall potential environmental and safety impacts can be avoided easily by adopting good engineering practices.

In monitoring project preparation, specialists will consider the possibility to perform a realistic monitoring of elements with environmental impact. In the construction phase, monitoring will include routine inspections by the entity that will implement the works and local government and investor itself.

MoES will ensure that the contract documents include relevant environmental protection clauses and that the EMP is an integral part of the contract. . The Contractor that will execute the civil works will also follow requirements of current Albanian construction and environmental regulations. To assure a degree of influence on Contractor's environmental performance it is recommended that an appropriate clause is introduced in works contracts, specifying penalties in case of noncompliance with the contractual environmental provisions, for example, in the form of withholding part of payment, the amount thereof depending on contract breach gravity. The contract would in that case provide for contract termination in extreme cases. A monitoring report by the engineer supervising the works will be a condition for full contract payment, equal to technical quality criteria or quantity surveys. Compliance with Albanian regulations and present EMP terms will be monitored and verified by regular visits of Supervisory engineer and random visit on the ground by the MoES environmental consultant and Municipal representatives. The Supervisory Engineer will supervise construction works and EMP implementation. The Supervisory Engineer will prepare biweekly reports on EMP implementation for MoES, and a) ensure that it is updated and relevant to the situation on the ground; b) ensure that non-compliance and corrective actions are appropriately documented; c) review implementation status; and d) evaluate corrective responses of contractor. The Supervisory Engineer will pay attention to every new critical issue that may come up during construction works and will inform MoES and suggest actions for various agencies. MoES will report on progress to the Bank regularly. Semi annual reports on overall safeguard compliance for all civil works will be submitted to the Bank.

The MoES together with school management and maintenance team should implement EMP mitigation measures during after the school is operational.

Relevant Government authorities will be involved in auditing the school construction; the MoES should provide them with the appropriate monitoring reports. Tables 4 and 5 summarize the proposed mitigation activities expected from the constructor and to be supervised by Government authorities prior to the construction and during the construction, including frequency and duration of monitoring. Table 6 presents the expected mitigation measures to be in place once the school is operational. Table 7 presents the Environment Monitoring Plan to be used as a guideline for supervising the construction and reporting back to the MoES and Bank.

Impact due to:	Impact Mitigation Measure	Place and Time of Performance	Implementation Cost	Person in Charge	Control function performed by:
Proximity of paved road "Besnik Ceka" and road "Seven Shaljanet"	Because of road proximity to school site, additional measures should be reflected in the design to minimize impact of noise and increase safety. Noise measures should be designed to reach 35 – 40 dB level in the school premises. These measures, presented in noise reduction, could include noise protection wall, fencing and preventing access to the road as well as limitation of speed on that road section. A Noise Reduction Assessment will be prepared.	Design phase, prior to construction	The designer will bear the cost of the preparation of Noise Reduction Assessment, and all measures will be reflected in the design. The implementation cost of these measures will be borne by contractor	Municipality Shkodër, Designer	MoES, REA Inspection, Civil engineering inspection
Waste next to the school site on Seven Shaljanet road	Municipality should support the cleanup of waste along the future school site either through implementation of the road construction, or separately if the project (road and sewerage) do not follow the school construction pace. The finalization of the road which has started already has been planned for March 2012.	Design phase, prior to construction	Cost can be significant, it should be borne by Shkoder Municipality .	Shkoder Municipality	MoES, REA Inspection, Civil engineering inspection

Table 4 Environmental Mitigation Measures and actions required prior to Construction Phase

Table 5 Environmental Mitigation Measures for the Construction Phase

renormance performed by.	Impact due to:	Impact Mitigation Measure	Place and Time of Performance	Implementation Cost	Person in Charge	Control function performed by:
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Air pollution related to transfer of materials, stockpiling and poorly operating vehicles	Dust from transportation of construction material and waste will be minimized by use of water, by minimizing speed of vehicles and by covering the cargo when supervising engineer demands it. Transport should be avoided on access roads during peak hours. Dust from stockpiling should be prevented, by covering materials and reducing the stockpiling period Sidewalks and roads should be kept free of debris to minimize dust All vehicles should be maintained in good condition and posses certificates. During soil excavation work, workers should be equipped with masks. To minimize dust generation during excavation soil should be lightly watered	During all time of construction	They could be significant Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Contractor	Site supervising engineer, MoES REA Inspection
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Waste	 Waste collection and disposal pathways and sites should be identified for all major waste types expected from construction activities. Different types of waste should be separated and stored in appropriate containers on the site. Waste should be collected by licensed collectors Records of waste disposal will be maintained as evidence of good management. Whenever feasible, contractor will reuse and recycle appropriate materials. Hazardous waste is expected to be in small quantities and it has to be separated from solid waste, i.e. collected in separate containers. Hazardous waste can include but is not limited to varnish and pain residues, spilled or waste lubricants from equipment, batteries, etc. For hazardous waste, contractor has to follow the procedure for hazardous waste management, this implies collection, and waste handover to company authorized for hazardous waste management and completing accompanying documentation. Burning or illegal dumping of waste is strictly forbidden. Soil excavated from site should be removed and disposed on site agreed upon with Municipality and Ministry of Environment. 	During the entire construction time	They could be significant Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Contractor	Site supervising engineer, MoES REA Inspection
High level of copper in the soil	Although not of anthropogenic origin, the natural concentration of copper in the soil is high. For that reason, all future green areas of the school yard should be stripped (cca 20 cm) and soil replaced with better quality opsoul	At the final stage of construction works (landscaping phase)	Cost should be around 700000 lek	Contractor	Site supervising engineer, MoES REA Inspection

Noise	standards in the EU Directive 2000/14/EC, May 2000.		Part of the contractor regular practice	Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Site supervising engineer, MoES
Accidental spills in water and soil	If there will be a need to install fuel tanks they will have secondary tanks with sufficient volume to contain a spill, or 110% of the largest tank, or double layer containers will be installed. The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and/or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby channels.	During construction period	Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Contractor	Site supervising engineer, MoES REA Inspection
Toxic material management	All materials should be handled in line with instructions included in Material Safety Data Sheets present at the construction site. These can include, but are not limited to paint thinners, varnish, solvents, etc	During construction period	Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Contractor	Site supervising engineer, MoES REA Inspection
Degradation of important historical or cultural finds	If encountering archaeological finds during site preparation, contractor should stop works and follow the procedure to notify authorized bodies	During earthworks	Contractor's obligation may be transferred to contractor by the agreement of municipality of Shkodra / MoES	Contractor	Site supervising engineer, MoES REA Inspection

Traffic disturbances	lighting, traffic safety signs, barriers and flag	During construction period on access roads	Part of contractor's regular practice	Contractor	Site supervising engineer, MoES REA Inspection
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Table 6 Environmental Mitigation Measures for the Operation Phase

Impact due to:	Impact Mitigation Measure	Place and Time of Performance	Implementation Cost	Person in Charge	Control function performed by:
Waste generation (municipal waste and chemicals from laboratories)	Special signs and guidance on chemical handling should be clearly displayed in chemical lab and near the sinks. Pouring of chemicals into sinks and mixing of chemicals is strictly forbidden. A special container for waste chemicals should be identified and marked clearly. Special containers for spills should be available at the lab. Different type of waste should be separated and stored in appropriate containers in the school. Hazardous waste is expected in small quantities and it has to be separated from solid waste. Waste should be collected by licensed collectors Records of waste disposal will be maintained as evidence of good management.	During operation period	Funds for regular maintenance should be borne by school	School maintenance Natural sciences teachers	MoES, REA Inspection
Hazardous material management	All materials should be handled in line with instructions included in Material Safety Data Sheets present in laboratories. Instructions should be clearly written and posted in the chemical labs and near the sinks.	During operation period	Funds for regular maintenance should be borne by school	Chemical lab teacher	MoES, REA Inspection

	in the chemical labs and near the sinks.				
Accidental fires	School should prepare Emergency Management Plan and implement regular training and drills.	During operation period	Funds for regular maintenance should be borne by school	School manager	MoES
Heating system and storage for crude oil or diesel for emergency generators	Fire protection measures should be implemented Emergency Operation Plan should be done if fuel storage exceeds the volume of 5000 liters (crude oil) and / or 500 kg of gas.	Cost included in operation of schools	Minor cost. Cost included in operation of schools	School maintenance	MoES, REA Inspection

Table 7 Environmental Monitoring Plan

Phase	Which parameter shall be monitored ?	Where shall the parameter be monitored?	How shall the parameter be monitored?/ type of monitoring equipment	When shall the parameter be monitored? (at what intervals or continuously)	Required Funds /Cost/	Organization in charge of Monitoring
Preconstruction	Site Organization	On Site	By checking proper fencing, security measures, installation of temporary sanitary facilities	Prior construction works commence	Contractor bears full cost, usually it is not identified as separate category	Supervising site engineer Municipality of Sh kodra MoES Ministry of Environment (inspection)

Construction	Air quality (dust)	On the site	Visual observation	Continuous, however special attention should be put during tracking of material and excavation works	Contractor bears full cost, usually is not identified as separate category	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Source of construction materials (asphalt, quarry, sand/gravel)	On Site	Checking that quarries, etc. have valid operating permit Copies should be kept on site	At the start of the contract	Contractor bears full cost, usually is not identified as separate category	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Noise	On site and neighborhood	Sound level detector	In the first week of construction and after any complaint from local population	800 Euro / measurement Contractor should bear the cost	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Water and soil pollution due to improper spills storage, management and use of materials	On construction site	Visual observation	Continuously (on a daily basis)	Part of supervising engineer's contract Contractor	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Waste generation	On construction site	Waste accompanying documentation that is submitted to Ministry of Environment, in which type and quantities of waste are identified	Continuous during construction, i.e. each time waste is taken from the site	Part of engineer's contract during construction Contractor	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)

Construction	Incidental finds	On site	Full supervision by site inspector during excavation works	During excavation works for foundations	Part of supervising engineer's and contractor cost Contractor	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Toxic / Hazardous material	On site	Proper handling and storage is checked according to MSDS material sheets	Continuously (on a monthly basis, and on random site visits)	Part of regular contractor's cost	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Workers safety	On site, checking weather protective gear, safety helmets, safety belts, ear protection when needed is worn, checking the fencing and warning signs.	Visual observation	Continuously (daily) checking that appropriate protective equipment is used	Part of regular contractor costs	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Construction	Hazard to public traffic and pedestrians safety	On site and roads allowed to access the site	Visual observation and potential complaints from the public	Daily checking the signs, fences, accesses and traffic signalization and patterns	Part of regular contractor costs	Supervising site engineer Municipality of Shkodra MoES Ministry of Environment (inspection)
Operation	Toxic/Hazardous material management	In school laboratories	Proper handling and storage is checked according to MSDS material sheets	Continuously, on a weekly basis	Part of operating costs	Laboratory teacher and Work safety Inspection, MoES

Operation	Waste management (municipal waste and lab chemicals)	In school and schoolyard	Waste accompanying documentation that is submitted to Ministry of Environment in which type and quantities of waste are identified	Continuously during operation	Part of regular operation costs	Ministry of Environment (inspection), MoES
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INSTITUTIONAL CAPACITY BUILDING

The Ministry of Education and Science has no experience in environmental management. For that reason there will be clear division of responsibilities and duties within the Ministry and environmental consultants who will be contracted to facilitate environmental management. The MoES Secretary General is responsible for coordination and monitoring of activities in the technical level, including environmental planning and management. The environment consultant should have a strong background of EIA processes and s/he should speak Albanian and English language fluently. Directors of MoES relevant departments, mainly the Department for Budget Planning and General Directorate of Supporting Services and heads of institutes will be responsible for the implementation of activities. MoES will be responsible for hiring and overseeing the required environmental consultant, architects, engineers and contractors. In the framework of school rehabilitation, enlargements and constructions, the MoES role is to manage designing, bidding, supervision of projects (including civil works, goods and services). Specifically, the MoES responsibility includes:

- to contract the environmental consultant who will prepare environmental due diligence documents for individual sites in coordination with MoES and municipalities and during the project implementation phase s/he will supervise EMP implementation and report on it (municipality will contract its supervising engineer who will be present at the specific site in the entire construction time);
- to supervise the work performed by the environmental consultant, engineering/designing companies to ensure that they are applying the right standards and they are following the approved procedures and approved environmental plan.
- to organize tendering procedures, to review tender evaluation performed by architectural/constructing companies, and assure that contracts are signed in accordance with procedures approved.
- to ensure that the environmental consultant is providing adequate site supervision, particularly supervision of environmental management plan implementation.
- to establish a team for construction and environmental issues in Department of Budget Planning in MoES.
- to report to the Bank on progress and issues in terms of the environmental safeguards and the civil works.

The Ministry does not have a separate environmental unit. Since EEE-P implementation will have a direct impact on environment through school rehabilitation, enlargement and construction, a team in Department of Budget Planning is responsible for coordination and supervision of environmental plans and risk mitigation measures undertaken in the Project and cooperation with territorial departments for environment protection. To compensate the capacity shortage in the Ministry, an environmental consultant has been contracted by the Ministry reports directly to the team in the Department for Budget Planning, to General Directorate of Supporting Services and Secretary General in the Ministry on EMPs implementation. The World Bank has reviewed and provided the the no objection to ToR for the environmental consultant. The environmental consultant will have significant experience in EIA process and s/he should be fluent in English.

The environmental consultant has been contracted full time during is responsible for EMP preparation and supervision of their implementation, reporting to MoES and WB. He is also involved in the training. In the first report on project implementation progress a team in the Budget Planning Department, advised by environmental consultant, will propose a training program for the technical staff team in Department of Budget Planning, members of municipalities who will supervise the works, supervising and site engineers. The team in Department of Budget Planning will work in close cooperation with General Directorate of Supporting Services that will be in charge of procurement and legal aspects of the project and Secretary General will be responsible for program coordination. With the environmental consultant's support, the team will:

- ② coordinate environmental training for staff, designers and local contractors;
- ② disseminate existing environmental management guidelines and develop guidelines related to issues which are not covered by existing regulations, on implementation, monitoring and evaluation of mitigation measures;
- ensure contracting for construction and supply of equipment includes reference to appropriate guidelines and standards;
- ② coordinate environmental review of subprojects;
- ② help organize public consultations of EIA/EMPs;
- ② perform periodic site visits to inspect and approve plans and monitor compliance with EMPs;
- ② prepare its own reports and consolidate reports received from Municipalities and site supervising engineers on EMPs implementation.

Communes and Municipalities will be responsible for supervision of construction to ensure, inter alia, full compliance with environmental guidelines included in this POM and individual EMPs.

Communes and Municipalities where new schools will be built (on existing schoolyards or new locations) will be responsible for procuring and supervising all related works. Communes and Municipalities will be responsible for:

- ② procurement of works related to construction of new schools financed under EEEP and site supervising engineer;
- ② ensuring that measures and monitoring in Environmental Assessments/ individual EMP become part of contractor's agreement, site supervising engineer; and
- ② supervising construction to ensure, inter alia, full compliance with environmental guidelines included in this POM and individual EMPs.

After construction finalization, "Mar Lula" Shkoder School staff will be mainly responsible for monitoring, especially teachers of natural sciences labs, who will be responsible for waste management originating from laboratories and school maintenance staff will be responsible for municipal waste management.

In addition to the of Ministry of Education and Communes/Municipalities, the Ministry of Environment can participate with its inspection unit in supervision of individual subprojects implementation.

Control of environment situation is the duty of Environmental Inspectorate, assigned by the Minister of Environment, and Regional Environmental Agencies.

The Environmental Inspectorate is expected to visit the project site from time to time and check if performed activities are in accordance with environmental legislation. The Inspectorate is authorized to close down, to suspend, to terminate partially or totally the activity of natural and legal persons, who have caused environmental pollution or damage and defines relevant tasks on situation improvement. Duties of State bodies related to environmental control are described in Annex 1.

Implementation of EMP provisions will be regularly reported to the Bank in the semiannual progress reports. Input for reports will be provided by the site supervising engineer, consultant supervising project implementation, municipality and environmental consultant contracted by the Ministry.

Table 8 Environment responsibilities during construction and operation

Responsibilities for	Environmental	Decision making chain for environmental
mitigation and	information flow	management (to take action, to authorize
monitoring	(reporting)	expenditures, to terminate, etc.)

		Activities	Responsibility Institution or person
During Construction:			
Environmental Consultant and team in Department for Budget Planning in MoES Shkoder Municipality Contractor	From Site Supervisory Engineer to MoES environmental consultant / MoES environmental consultant to Secretary General, General Directorate of Supporting Services and Department of Budget Planning Environmental Inspectorate of Regional Environment Agency	Monitoring of EMP and EA provisions Implementation	Site Supervisory Engineer, Environmental consultant Environmental Inspectorate of Regional Environment Agency
During Operation:			
Team in Department for Budget Planning in MoES Municipality School	School / Municipality to Secretary General in MoES	Monitoring of EMP and EA provisions Implementation	Appointed person from school maintenance Environmental Inspectorate of Regional Environment Agency

PUBLIC PARTICIPATION

Public participation for Education Excellence and Equity Project will follow World Bank procedures.

According to the World Bank policy on Environmental Assessment, for all Category B projects, during the EA process, the Borrower consults with project-affected groups and local non-governmental organizations (NGOs) about project environmental aspects and takes into account their views at least once. The Borrower initiates such consultations as early as possible. In addition, the Borrower consults such groups throughout project implementation as needed to address EA-related issues that affect them.

The proposed school project and and corresponding report of environment impact assessment should be submitted to public consultation. Consultation should be organized by local the government where the project will be implemented and by proposer; the MoES can advise and support the local government on this process. The local government is expected to invite stakeholders, make the EA report publicly available before and during consultations, decide on the date for the debate and notify participants for the meeting day, time and location. The EA should be available to stakeholders three weeks before the consultation. The EIA will be posted on the website of the MoES and municipality, as well as on Municipal information board as hardcopy.

During consultations, the municipality should inform the public on the following: a) Project implementation site/location; b) Type of activity; c) If it is possible raw materials, energy, water to be used; d) Project duration; e) Waste to be generated, type and if it is possible quantity; f) Possible/expected negative impact on health and environment (water, air and soil/land discharges); and g) Measures to be taken for possible impacts reduction. The municipality should consider relevant recommendations/concerns by stakeholders and, to the extent possible, incorporate them into the final plan and EA. Minutes of this meeting should be prepared highlighting key concerns and recommendations made by stakeholders and agreements reached. The minutes of the meeting should be attached to the final document and submitted to the World Bank for final disclosure.

ANNEXES

ANNEX 1 ROLE AND RESPONSIBILITY OF STATE BODIES RELATED TO ENVIRONMENT

Environmental institutional network

All specialized bodies, commissioned by law with environment protection in Republic of Albania represent the environmental institutional network of the country.

Environmental institutional network comprises Ministry of Environment, REAs, and Environmental Inspectorate, environmental bodies under the main central and local authorities, as well as interministerial bodies, approved by Council of Ministers to follow important environmental issues.

Central and local government bodies, as legitimate administrators of various environmental elements, realize environment protection through implementation of this function.

Ministry of Environment

As a specialized institution on environment protection and as a technical supporting body to Minister of Environment, Ministry of Environment performs these main duties:

- It cooperates and coordinates with central and local government institutions, with public and nonprofit organizations to increase the level of enforcement of environmental legislation.
- It prepares bilateral or multilateral draft agreements, protocols, projects and programs of cooperation with governments, international bodies and organizations for environmental protection and follows their implementation.
- It studies the country needs for specialists and coordinates qualification and specialization activities of personnel dealing with environmental protection in cooperation with Ministry of Education and Science.
- It supports projects on scientific research, improvement of environment situation, the introduction of ecologically clean technologies and promotion of nonprofit organizations activities.
- It assists local government bodies on environmental protection and preparation of local environmental action plans.

Regional Environmental Agencies

Regional Environmental Agencies (REAs) are bodies under Ministry of Environment specialized for environmental protections which operate on prefecture level.

Implementing objectives and priorities of Ministry of Environment, REA-s:

- Implement legislation on environment protection in a local level;
- Assist local government bodies in the field of environmental protection and management within their jurisdiction; they cooperate with the local government for development of local environmental actions plans, programs and projects;
- Promote the use of clean technologies and introduction of environmental management systems;
- They are involved in the process of environmental permit and declaration approval by performing the duties defined by the Minister of Environment in a special regulation. They provide the environmental consent and authorization for local activities.

• Undertake awareness activities for environment protection and cooperate with community, public and environmental NGOs and professional business organizations.

Environmental Inspectorate

Environmental Inspectorate functions within the Ministry of Environment, as a body specialized on environmental control. Environmental Inspectorate is composed of: Chief Inspectorate, inspectors of Ministry of Environment and inspectors of REAs. Inspectors of Ministry of Environment exercise their control activity in the entire territory of Republic of Albania, while inspectors of REAs operate within prefecture territory.

Environmental Inspectorate:

- Exercises continuous control on environment and polluting activities in order to ensure environment protection through environmental legislation application and conditions of environmental permit and declaration.
- Requests participation of local government authorities, representatives of municipalities, nonprofit environmental organizations during environment controls.
- Creates the environmental file for every activity provided with an environmental permit. Minister of Environment defines detailed rules on the format, content and administration of environmental file.
- Assists natural and legal persons to perform self-monitoring, verification and implementation integrated management systems and controls their implementation.
- Orders implementation of obligatory measures to be taken on environment improvement, mitigation of pollution and environment damage.
- Informs local authorities regularly on environment situation, approved activities, projects and installations, according to provisions of this law.
- Controls pollutants register, inner technical and technological regulations and other documents related to the activity and risks of pollution.
- Imposes sanctions, according to this law and other legal acts that protect special elements of the environment.
- Publishes results of each exercised control.

Public media

Public media assist in:

- protection of national interests in environmental protection field;
- increase of contemporary knowledge and culture on environment;
- realization of public right to be informed on environment situation;
- diffusion of technical and scientific achievements in environmental field and national activities in this field.

Local government authorities

Local government authorities represent the most important governmental structure for administration and protection of environment under their jurisdiction, by implementing responsibilities, rights and duties conferred to them by Law No.8652 of 31.07.2000 "On Organization and Functioning of local government". They have the following duties in environmental protection field:

- To realize implementation of environmental legislation;
- To draft local plans for environmental protection and plans for territory adjustment;
- To publish programs and measures for environment protection;
- To inform the public on environment situation and local activities that are subject to environmental impact assessment;
- To promote and support activities of non-profit organizations for the environment, by considering their opinion in the environmental decision making process;
- To define the sites for collection and processing of production and human life wastes in accordance with environmental criteria and development plans;
- To organize dumping of wastes and hazardous substances and protection of green areas in urban centers and around them;
- To administer urban wastes, waste water treatment and solid wastes plants; and
- To discipline transport and constructions in urban environment.

ANNEX 2 POTABLE WATER ANALYSIS

Republic of Albania Ministry of Health

Public Health Department of Shkodra Region

Ref. No. 833

Tirana, on 07.06.2010

Subject: Reply To: Ministry of Education and Science Department of Development Program Secretary General, Mr. Skender Uku

Based on your application No. 3017 of 03/05/2010, regarding tests of potable water that will supply the nine years school in Mar Lula neighborhood, results of chemical, physical and bacteriological tests are in accordance with standard norms. Please, find attached a copy of physical-chemical and bacteriological test.

DIRECTOR

Irena Shestani -Shala

REPUBLIC OF ALBANIA MINISTRY OF HEALTH Directorate of Primary Health Care Physical-Chemical Laboratory, Shkodra

Shkodra, 01.06.2010

WATER TEST SHEET

Sample: <u>City Water Supply System</u>, received by: A. Hoxhija, No._____ Record No._____ date_____, presented in the laboratory for tests, date______, address Lagjia, Mar Lula - Fusha e Druve, Shkoder

Test Results

1.)	Odor:	acceptable
2.)	Taste:	acceptable
3.)	Turbidity:	no turbidity
4.)	pH = 7.5	
5.)	Nitrate (NO2):	none
6.)	Ammonia (NH4):	none
7.)	Chloride (Cl):	14.2 mg/l
8.)	Organic Material:	0.8 mg O ₂ /l
9.)	Free Chlorine:	0.7 mg/l

Laboratory Chief

Chief of Hygiene Service

Eng. L. Kuçi

TIRANA UNIVERSITY OF FACULTY OF NATURAL SCIENCES

Centre of Applied Nuclear Physics

Address: Bulevardi "Zog I", Tirana, Tel & Fax: + 355 4231120; www.fshn.edu.al

Ref. No.1106

Tirana, on 19.09.2010

Subject: Delivery of soil test report from areas where new schools are planned to be built

Ministry of Education and Science Mr. Skender UKU, Secretary General Tirana

In response to your application No. 3021 of 3.05.2010, regarding evaluation of environmental pollution in areas where new schools will be built under the project "Quality and Equality in Education", respectively in Shkodra, Kamza, Tropoja and Dibra, please, find attached reports with measurements made by Centre of Applied Nuclear Physics on evaluation of radioactive pollution and heavy metals in soil of respective areas.

We are sending attached the bill of costs related to performance of required monitoring.

DEAN Ilirjan MANOLLARI

ANNEX 3 SOIL TESTS

Evaluation Report of radioactive pollution and heavy metals in soil where new 9 Year "Mar Lula" School, Shkoder, will be built

Upon request of Ministry of Education and Science under the project "Quality and Equity in Education" during 25-30 June 2010 survey of terrain was held and sampling of soil. Samples were taken in the area planned for construction of new 9 - year school in the neighborhood "Mark Lula", Shkoder. The aim of this survey and sampling was to monitor for any radioactive presence and serious pollution by metals in the surface of the area on which schools will be built.

Geographical data of the monitored area are presented in Table 1.

Place/Location	Coordinate (latitude/longitude)	Elevation
Shkoder	N: 42 03.502'	17.9 m
	EO: 19 31.461'	

In the entire area, samples were collected in three soil surfaces (see fig. 1) with the size 35×35 cm, so as to cover better the monitored area.

After subjecting to the process of drying, cleaning, the roots of plants and grinding and homogenization, samples in question were prepared according to stipulated procedures for further tests in laboratory.

Sensory (olfactory) inspection of samples

All samples were taken in the area with normal vegetation. They are of gray light soil that does not contain grit.

Samples have low moisture, they crumble without difficulties and they do not appear to contain oil.

There is no doubt about samples having the characteristic of odor of PCB contamination, etc..

As a conclusion, we state that sensory inspection noted no signs of any possible pollution.

Evaluation of Radio-Activity

1.1. Assessment of Environmental Gamma radiation dose

Survey of terrain was conducted measuring the dose of gamma radiation environment, which resulted in values 0.031-0.043 $\mu Sv/h$

1.2. Measuring of spectrometric gamma

After keeping closed for a three week period sufficient to achieve the balance among radioactive families, samples were tested in spectroscopic range measurement system.

Average values of results of gamma spectrometric test of the above-mentioned samples are shown in the table below.

Place of	No. of sample	Activity 238U	Activity 232Th	Activity 40K	Activity 137Cs
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sampling		(Bq/kg)	(Bq/kg)	(Bq/kg)	(Bq/kg)
Shkoder	3	11.13±1.76	13.23±0.84	292.03±18.46	9.60±0.98

Average value of radio-nuclide activities measured in samples. Errors reported in the table above correspond to value of a Sigma (k = 1).

Gamma-spectrometric measurements showed the presence of natural radio-nuclide as 238U, 232Th, 40K and byproducts of 238U and 232Th elements with half time and relatively long degradation that is characteristic and consistency of chemical composition of studied samples and that is the same. The main contribution of time and natural soil font. The presence of 137CS was also noted, explained by the fact that the sample area was undeveloped area and samples were taken at a superficial level.

Assessment of contamination with heavy metals

Following appropriate processing samples underwent tests to determine the heavy metal content. Tests were performed with the method of X-ray fluorescence and atomic absorption it.

Search the content of heavy metals along with those of several key elements presented in table 3.

Relative standard deviation concentrations of values for heavy metals is 10-15%, and <5% for major elements.

	Sample 1	Sample 2	Sample 3
Cr	257	301	192
Mn	739	716	661
Ni	195	178	163
Cu	347	412	254
Zn	285	405	209
Pb	48	47	23
As	14	25	8
Cd	< 0.3	< 0.3	< 0.3
Hg	< 0.1	< 0.1	< 0.1
K(%)	1.63	1.50	2.23
Ca (%)	7.03	10.08	6.74
Ti (%)	0.32	0.30	0.43
Fe 1%)	3.97	3.8	3.89

Table 3. Results of the heavy metal content (mg / kg)

These results do not attest any contamination of soil in monitored area. Values of Cr, Mn, Ni, Cu and Zn should reflect the natural characteristics of soil in that area.

Conclusions:

Based on values of different parameters that were measured during the monitoring in the area where the school will be built, no anthropogenic pollution is found. Sensory inspection shows no signs of any possible pollution with organic nature. Concentrations of heavy metals are generally within allowed rates and, in each case they reflect natural characteristics of soil in that area.

Parameters of radio-activity, gamma dose environment, and natural and artificial activities of radioisotope, have normal levels that correspond to natural land fund, with no risk of causing problems in radio-ecological environment and population health

Dr. Durim Kryeziu

Prof. Assoc. Nikolla CIVICI

ALBANIAN REPUBLIC



SHKODRA MUNICIPALITY

Boulevard ., 13 Dhjetor i "Shkoder, Tel & fax 355-2224 37-20

REPORT

Held today, on April 25th, 2011, at 18:00, in Mar' Lula neighborhood, in the meeting held between Shkodra Municipality representatives: Deputy Mayor Ridvan Troshani, Director of Urban Planning Directory Aida Shllaku and Specialist in urban planning from the Directory of Education and Culture Besmira Dyca, and 30 community representatives of this neighborhood.

The purpose of this meeting was the presentation and environmental impact assessment of the project of the New Secondary School planned to be build in this neighborhood, part of the developmental project of the Ministry of Education and Science "Quality and Equality in Education" and which will be financed by the World Bank. The study of the environmental impact resulting from the implementation of this project, prepared by eng. Arben Lici, is exhibited in Shkodra Municipality, in the environments of the Public Information Office, since April 07th, 2011.

The meeting started with the presentation of the project and its environmental impact, according to the prepared and exhibited format. After the project presentation, questions and comments of the community representatives were welcomed, which were positive and supportive to the project.

The following were among the main questions:

- When will the implementation of the project start and when is it expected to finish? <u>Answer</u>: The project implementation will start as soon as the contract with the building firm is bind, right after the procurement procedures are finished, which are expected to last no more than 2 months. The school construction is expected to last up to 18 months.
- 2) When will the school start to function? <u>Answer:</u> The school implementation is expected to be finished by May 2013, after the fore mentioned procedures, and is supposed to start functioning by the September of that year, thus to start its function for the 2013-2014 academic year.
- 3) Will it be possible to employ member of this community in the academic staff, given they have a university degree in education? <u>Answer:</u> The process of teachers' selection is not one of the Municipality's competences, but we will suggest to Education Directory and Ministry of Education and Science to give priority to the teachers of this community during the selection process.
- 4) Will it be possible to use the school environments, especially the closed gym and open air sport area, from other members of the community?

<u>Answer:</u> This school, besides its didactical functions, is projected to function also as a social center for the community, to whom it serves, that is why it will be considered as an open school, serving

all the children and activities organized from the community in accordance with the school managers.

5) Are the problems related to the late Mr. Vuksan Vitaj solved?

Answer: With the insistence of the World Bank, compensation of the damage claimed from late Mr. V. Vitaj, as a result of the intervention to prepare the site for construction. The compensation fund appointed with a Decree of Ministers' Council was transferred, through the necessary legal procedures, to the family members of the late Mr. V. Vitaj. Now the process is closed and there are no obstacles of this nature to prevent the construction of the school.

The meeting proceeded with other questions, of a more general nature, about the main problems affecting the inhabitants of this neighborhood regarding to: the ending of the rehabilitation process of the main street, planting of green areas, the final closure of the waste disposal area close to Kir river, further identification of the families in economical difficulty, setting of public transportation for the children living in the peripherical areas of the neighborhood in order to ease their way to school. The solutions of these problems from the municipality will be organized in a series of interventions for the years to come in the most efficient way possible.

Conclusion: The meeting can be considered positive, since all the participants were satisfied and supportive for the construction of this school, which not only offers optimal schooling and education to the children of this community but also serves as a social center for the community. Generally, the problems together with the solutions proposed during this meeting were supported by the participants of the meeting. Enthusiasm and good will for this project implementation were noticed among the participants.

This report will be held in 6 copies, from which one copy will be handed to the representatives of Word Bank, one copy to Ministry of Education and Science, one copy to Mr. Pal Pepaj, Head of the administrative unit nr.5 and 3 other copies to the representatives of the Municipality. A list with all participants' names and signatures is attached to this report.

Compiled by:

Specialist in the Directory of Education and Culture:

Besmira DYCA

Director of the Directory of Urban Planning

Aida SHLLAKU Aflula ku

Head of the administrative unit nr. 5

Pal PEPAJ

Approved by:

Deputy Mayor of Shkodra Municipality:

Ridvan TROSHANI



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