

DESCRIPTION OF MINE AND PREVIOUS ACTIVITY

- Main activity of Uricani South Open Pit was: Extraction of hard coal by open pit methods. It extends on a surface of 11,7 Hectares including mine curtilages and other ancillary activities. The activity ceased in 1989.
- There are not tailing storage and waste tips facilities.
- The nearest community is Uricani Town situated at 2000 m from mine, having 11 000 inhabitants and local water course is River Jiu (West) situated at 1000 m from mine boundary.
- The open pit void will be used to store demolition materials from neighbouring washing plant Uricani.

CULTURAL PROPERTY

It is not anticipated to be applicable. However, if there is an accidental find of something valuable, the Engineer of the Contract will stop any physical operations until competent authority (County Commission for Historical Monuments or Ministry of Culture and Religious Affairs) provides permission to continue.

PROPOSED WORKS

The mine closure and environmental remediation proposals:

- General site clearance.
- Collection of contaminants and contaminated materials and disposal to a special constructed landfill. The location and size of landfill should be decided by the Engineer of the Contract based on quantity of unaccepted material identified on site. Three isolation layers shall be placed onto the compacted surface: a bentonite mattress 2.5 cm depth, a geomembrane layer of 2.5 mm and a geotextile layer of 5 mm. On completion of the final layer of unacceptable material the surface shall be domed to assist water run off. A gas ventilation pipe shall be placed at the highest point.
- Excavation and removal of material from waste tips, benches and slopes.
- Reshape of all mine waste dumps to slope angles below 1/3. Construction of erosion fences and gabion walling to ensure long term stability and erosion control.
- Top soiling, cultivation and grassing of 4 Ha, and planting of 1 Ha with local species of trees or shrubs.
- Protection of rehabilitated surfaces and affluent river by guard ditches and drainage systems in total length of 200 m.

KEY ENVIRONMENTAL ISSUES DURING THE CONSTRUCTION WORKS

Based on works, equipment and methods used for execution of works the following environmental issues might occur:

- Noise, dust and mud generated by earthmoving equipment;
- Potential land pollution by fuel, oil or lubricants because spillage from earthmoving equipment or lorries;
- Potential water pollution by fuel and oil because spillage from equipment while working above, adjacent or in watercourses;
- Potential soil or water pollution by used waters generated by site activities in offices, workshops and messes;
- Damage of existing vegetation from or adjacent of site because of negligent driving of equipment or site operations;

COMMUNITY CONSULTATION (See annex “Consultarea comunitatilor – Obiective scanate”)

Phase/Operation	Issue Mitigation Measure	Cost	Institutional Responsibility / Approval and inspection
	<ul style="list-style-type: none"> - Concrete transport and batching trucks for haulage of concrete; - Cleaning of site at the end of each day; 		Contract
C General Works			Contractor
(a) Working adjacent over or in water courses or accumulation (JIU RIVER)	<ul style="list-style-type: none"> i. Surface waters pollution <ul style="list-style-type: none"> - Working with equipment free of any pollutant in vicinity of river - Fencing or erecting of barriers near river Jiu River; ii. Rainfall control <ul style="list-style-type: none"> - Construction of guard ditches to control runoff and to protect river iii. Underground water pollution <ul style="list-style-type: none"> - Interdiction to use filling material for underground workings which contains deleterious materials 	Contract	Engineer of Contract
(b) Cultivating re-vegetation and curing of existing vegetation	<ul style="list-style-type: none"> i. Pollution with unacceptable pesticides <ul style="list-style-type: none"> - Using only the fertilisers approved by the Engineer; - topsoil, subsoil or natural fertilizer will be tested by laboratory analyses to be free of pesticides heavy metals or any other unaccepted materials; ii. Damage of existing vegetation <ul style="list-style-type: none"> - The Engineer will keep the necessary records of number of trees and existing natural grassed areas. The contractor will restore on his own cost any damage on vegetation. 	Contract	Engineer of Contract
(c) Operation of site offices, workshops	<ul style="list-style-type: none"> i. Pollution of the area adjacent of offices, workshops and storage facilities <ul style="list-style-type: none"> - construction of site facilities on approved areas, having all necessary facilities to deal with domestic and industrial waste; - industrial and domestic waste should be disposed off daily at site landfill 	Contract	Engineer of Contract
D Hazardous materials			Contractor
(a) Storage using distributing of fuel and lubricants	<ul style="list-style-type: none"> i Spill of lubricants and/or fuel <ul style="list-style-type: none"> - Using of spillage collection tanks in storage facilities. Cleaning of the storage area every day disposing off any contaminated material. i. Fuel/oil spillage during refilling operations <ul style="list-style-type: none"> - construction and operate of fuel/oil repository 	Contract	Engineer of Contract

Phase/Operation	Issue Mitigation Measure	Cost	Institutional Responsibility / Approval and inspection
	<ul style="list-style-type: none"> - using only filling pump installed on refilling tank to refill equipment on site; iii. Fire on storage facilities - construction of fuel storage facilities on location and according an approved by the engineer method of construction; - fire extinguishing equipment as regulation for fire fighting and control asks² 		

**ANNEX 2 – MONITORING PLAN
URICANI SOUTH OPEN PIT**

Issue	Where is parameter to be monitored	How is parameter to be monitored	Frequency of measurement	Responsible for the measurement
A. CONSTRUCTION				
i. Noise generated by: <ul style="list-style-type: none"> • heavy machinery • lorries 	On site and inhabited area URICANI	Noise measurement equipment (dB-meter ¹)	Daily	The Engineer of the Contract
ii. Dust generated by: <ul style="list-style-type: none"> • traffic and equipment and lorry's 	On site and inhabited area	Visual	Daily	The Engineer of the Contract
iii. Smoke generated by: <ul style="list-style-type: none"> • equipment and lorry's engines 	On site and inhabited area	Specialised equipment for engines	Monthly and when a new equipment is bring on site	The Engineer of the Contract
iv. Mud generated by <ul style="list-style-type: none"> • traffic on site and public roads 	On site and inhabited area	Visual	Daily	The Engineer of the Contract
v. Soil pollution by fuel oil <ul style="list-style-type: none"> • Fuel and lubricants (tank leaks, engines leaks, other operations involving fuel and lubricants) • Cement or concrete 	<ul style="list-style-type: none"> • Where fuel and lubricants are stored; • Where equipment is refilled; • Where equipment is maintained • Where fuel/lubricants are used; • Where concrete is prepared, transported, used 	Visual	Daily	The Engineer of the Contract
vi. Water pollution <ul style="list-style-type: none"> • Fuel and lubricants • Suspensions carried out by rain fall 	Where working near or in water course Effluent waters; Monitoring points on receptor stream	Laboratory analysis	Monthly during the works or as specified in monitoring program	The Engineer of the Contract
B. POST CLOSURE				
i. Air	Site and inhabited area	Visual	Quarterly at	Conversmin

Issue	Where is parameter to be monitored	How is parameter to be monitored	Frequency of measurement	Responsible for the measurement
			least 3 years	
ii. Water - suspensions - pH	Affluent rivers – JIU	Laboratory analysis	Monthly until the parameters become compliant with approved limits	Conversmin
iii. soil - heavy metals - pH	Rehabilitated surfaces	Laboratory analysis	Yearly until the parameters become compliant with approved limits	Conversmin
iv. vegetation - vegetation growth and density	Cultivated and planted surfaces on curtilage, waste tips	Visual	Yearly	Conversmin
v. stability of waste tips or impoundments - settlement - erosion	Stabilised or deposition areas	Visual and topographic survey standpipes and piezometers	Yearly	Conversmin