



22.07.2008

Project: "00054814 Strengthening Capacities in the Western Balkans Countries to Address Environmental Problems through Remediation of High Priority Hot Spots - Sustainable mining clean up and pollution management in Bucim and Lojane Mines"

Invitation to Bid 35/2008

Повторно објавува барање понуди за набавка на почва за брана на хидројаловиште во рудник Бучим - Радовиш

Re-Announces Procurement of soil of 10 hectares for the tailings dam in Bucim Mine-Radovis

1. For the needs of the UNDP project "Sustainable mining clean up and pollution management in Bucim and Lojane Mines" we solicit offers for procurement of 16.500 m³ of fertile soil for covering 10 hectares of the tailings dam in Bucim Mine -Radovis.
2. The bidder has to deliver the soil at the location of the tailings dam in Bucim Mine in Radovis, plan the surfaces of the dam according to the design and apply the soil in one 15 cm layer.
3. For this purpose we invite you to submit your offer in MKD, VAT exempted, not later than 12:00 (noon) 06 August 2008 at the address below, that will include the following as well:
 - a) Registration of the company;
 - b) Company profile with a reference list of at least three relevant projects completed (preferably in the last 5 years) and client contacts.
 - c) Annual Turnover for the years 2007 and 2006;
 - d) CV of the Team Leader
 - e) List of equipment
 - f) Financial offer
4. The detailed TOR (**Terms of reference**) can be found on the UNDP CO web site (www.undp.org.mk/vacancy/tenderannouncements/announcement) with reference to: **ITB 35/2008**
5. Evaluation and comparison of proposals
The offer with the lowest price among those technically responsive will be recommended for contract award.
6. Your offer should be submitted in a sealed envelope addressed to:

**UNDP
ITB 35/2008 for afforestation of Bucim Mine
Procurement Unit
8ma Udarna brigada 2,
Skopje, Macedonia**

With remark:

"Do not open before 12:00 (noon) 06 August 2008"



7. Bid validity: 90 days

8. UNDP terms of payment:

Monthly, upon reception of monthly invoice, according to site log book, approved by the Engineer (supervision)

9. Interested Bidders may obtain further information in writing, only by fax or e-mail. No phone calls will be accepted

10. UNDP is encouraging the companies that submitted their offers previously to re-submit again.

Contact Person: Tanja Trpevska, Procurement Official

E-Mail: tanja.trpevska@undp.org

Fax: +389 (2) 3249-505



Terms of Reference

for

Procurement of fertile soil for covering of 10 hectares land of the tailing dam in Bucim Mine, Radovis

Background

UNDP Country Offices in the Western Balkan countries developed a regional demonstration programme around demand driven projects in nine locations suffering from the legacy of polluting industries and requiring industrial renewal, environmental clean up and new economic initiative. The aim of the programme is to achieve improvement of environmental situation and quality of life for citizens living in and around polluted area through least cost measures, improved local and national policy dialogue and supply of domestic professional services in the environmental management sector.

The umbrella regional programme focuses on environmental clean up and remediation of polluted industrial hotspots that have been identified as high priority but have seen limited progress so far due to complexity of issues and the costs involved. The programme will contribute to the achievement of the overall objectives in the region: Increased capacity of the national and local governments in the Western Balkan to implement sustainable environmental policies in accordance with EU standards; Strengthened regional cooperation in the Western Balkan to solve problems of cross border contamination due to industrial and mining activities.

Lojane Mine and Bucim Mine, as one of the priority environmental hot spots identified in national strategies/plans will be pilot locations in Macedonia. Proposed interventions under this programme are directed towards addressing the historical pollution and prevention of the future pollution of waters, air and soil resulting from past and current mining processes. At the same time, this programme will facilitate establishment of Public Private Partnership among the state and new owners of the mines.

In line with the overall objectives of the regional component, specific objectives of the national component are: Securing significant progress in mitigation of negative impact of the mining operations to the environmental media in Bucim and Lojane Mines; Enhancing capacities for good environmental management at local and national level; Increasing public awareness/knowledge on issues related to environmental hotspots; Contributing to regional cooperation through improved information sharing and supply of professional consultancy services regarding good environmental management.

Bucim is a copper mine operating since 1979. The mine was restarted again in May 2005 after being bought by the Russian company Romtrade Ltd., which later was transformed into Solway Industries Ltd, registered in Macedonia as a domestic company with a foreign capital.

Bucim presently produces approximately 40,000 of copper concentrate. If the mining operations carry on, with the dynamics of 4,000,000 tons of ore per year, its exploitation could continue until 2015. Given the mining technology used in Bucim till the end of the exploitation period of the mine it is expected that app. 31,250,000 m³ of ore will be extracted out of which 17,390,000 m³ waste rocks and 14,530,000 m³ mining tailings will be deposited. On a yearly basis, approx. 3,500,000 – 6,000,000 t is deposited at the waste rock dump and approx. 3,950,000 t of tailings is deposited at the tailing dam.

Tailings dam (38,7 ha) with over 80,000,000 tons solid residuals from the flotation process (containing remains of Cu, As, Ni and other HM minerals) is the biggest sand dam (body volume over 60,000,000 m³) in wider area. On the flotation tailings dam app. 38.320.000 m³ mining tailings were deposited by now. Around 16 ha of the dam were cultivated i.e. planted with acacia and other suitable trees.

Air contamination by dust, gases (SO_x, NO_x, CO) and noise, which are also reported, directly endanger the personnel and inhabitants of settlement in immediate vicinity of mining operations. Due to very fine



structure of material disposed, erosion processes are extreme, especially the wind erosion at the tailings dam. The airborne particulate pollution is posing a direct risk for the health of the inhabitants of the nearby settlements especially for development of lung diseases.

The new mine operators inherited the tailing dam that was left almost unprotected and prone to wind erosion. In order to prevent the airborne pollution as well as to contribute for stabilization of the dam, the project plans to re-cultivate with vegetation surface of app. 20 ha of the tailing dump by the end of the project life. This procurement is the first phase of this activity.

Scope of the work and expected output:

Contractor's main responsibility will be provision of fertile soil for covering of **10 hectares** of tailings dam, planning the slope of the downstream side (slope) of the dam following the contour lines, fully according to existing main design for afforestation of the tailing dam, and application of the soil in one layer of cca 15 cm.

The complete works shall be executed according to the existing Main Design for Biological Protection of The Tailings Dam And The Immediate Environment (2005, Civil Engineering Faculty Skopje).

Duties and responsibilities:

1. Provision and transport to the site of active fertile soil for covering of the biologically inactive material of the tailings dam. The total required soil quantity for 10 hectares is **16,500 m³**, or 1,650 m³ per hectare;
2. Preparation of terrain by construction of the designed slope (inclined part and plateau with 0 or negative slope), including preparation of small erosion protection dike, according to design;
- 3 Spreading and planning of the active soil in a **layer of 15 cm** following the designed slope of the downstream dam side.

Soil Quality Criteria

The soil supplied shall be ordinary agricultural soil from the surface layer of the topsoil with the following characteristics:

- pH between 5.5 and 7;
- Carbonates content less than 15%;
- Clay content less than 30%;
- Humus content minimum 2%; and
- Heavy metals content less than the recommended maximum allowed content for agricultural soil.

Random probes (samples) of the soil shall be taken and inspected by an expert institution for compliance with the given quality criteria.

Requirements

The Offeror /company is expected to submit the following:

- Registration of the company;
- Company profile with a reference list of at least three relevant projects completed (preferably in the last 5 years) and client contacts.



- Annual Turnover for the years 2007 and 2006;
- CV of the Team Leader
- List of equipment
- Financial offer

Qualifications

The company shall offer a team of experienced staff in similar projects. The supervision of the workers shall be performed by a team leader/engineer with experience in similar projects.

The team leader/engineer shall provide them with guidance throughout their day-to-day work in order to ensure good quality results.

The team leader will report to the Project Manager for the quality of the worker's performance.

The company shall submit the list of equipment to be used for this assignment.

Terms and conditions for provision of services

- Duration: the complete works on soil procurement and application should be completed within not more than 45 days. However, slight changes of this timeframe will be allowed only if case of unfavourable weather conditions.
- Additional supervision by sampling and inspection of the provided soil by an independent and qualified expert(s) will be arranged by the project at certain stage of the works.
- The payment for the delivered service will be executed in as follows:
 - First instalment, **upon receipt of monthly report and invoice, according to site log book, and approved by the Supervising Engineer**, will be paid within eight days of submission.
 - The second instalment, **upon receipt of final report and invoice, according to site log book, and approved by the Supervising Engineer**, will be paid within eight days of submission and completion of all necessary quality assurances.
- The supervising Engineer shall final inspection of the soil quality and issue expert assurance of compliance with the above requirements. The inspection will be carried out by a qualified expert. The contractor shall be responsible for undertaking corrective activities (replacement of the soil).