

UKRAINE; JSC Rubezhnoye Board and Packaging Group (RKTK II)

NON-TECHNICAL SUMMARY

1. INTRODUCTION

The European Bank for Reconstruction and Development (EBRD) provided a loan of USD 14 million to JSC Rubezhnoye Board and Packaging Group (RKTK) in November 2003 for financing the modernisation and expansion of its production facilities. This project has been implemented well and has contributed to further strengthening the RKTK's position as Ukraine's leading manufacturer of corrugated packaging with a market share of 34%. To date the Company has been in compliance with applicable National and EU environmental, health and safety and labour standards as well as international good practice.

RKTK is planning to invest in a new paper machine PM-3 which is being financed by the EBRD. The planned paper production capacity increase of 170,000 t/y (465 t/d) exceeds the threshold limit of 200 t/d of paper in the indicative list of Category-A projects in the EBRD's Environmental Policy, Annex 1, 13b). Therefore, an Environmental Impact Assessment of the project is required.

At the time of the Bank's involvement in the Project, the OVOS had already been carried out in accordance with paragraph 3 article 51 in Ukrainian Law concerning "Environment Protection" and approved by the State Ecological Examination Agency, issued by the State Department of Environment Protection in Lugansk Region (No 08-01-12-3408-139 on 25th June 2007). The OVOS has been carried out by an independent Ukrainian environmental company, ZEFIR, Lugansk and the Engineering and Design Company "PKTP OrgBumProject", Kiev. During the course of the assessment, data from plans, projects and technological processes have been analysed in addition to expert opinions. Modelling calculations have been used in the assessment of material environmental impacts (ambient air emissions, soil, groundwater, wastewater and impact on flora and fauna).

The objective of this Executive Summary is to provide a non-technical summary of the EIA issued for the construction of paper machine PM3.

2. EXISTING ENVIRONMENTAL CONDITIONS

The Company is based in the town of Rubezhnoye in Eastern Ukraine, approximately 800 km east of Kyiv. The site is located on the northern side in an industrial area in Rubezhnoye. The company is bordered as follows:

- To the north, open land and forest;
- To the south, by industrial units and the wastewater treatment plant;
- To the west, by Mendeleyeva street; and
- To the east by industrial units and open land.

RKTK complies with applicable Ukrainian environmental requirements with regard to air emission, wastewater discharges, waste management, noise levels, observance of the sanitary protection zone (SPZ), occupational health and safety standards, as well

as with applicable international guidelines, such as the EU Directive on packaging and packaging waste. RGTK is the technological leader in its sector in Ukraine, and the only plant in the corrugated packaging sector in Ukraine holding an international ISO 9001 quality certificate. The SPZ for this enterprise is 50 m. The nearest residential buildings are located within about 100 m from the emission point.

The Company has its own power plant and upon completion of the 2004-6 investment programme, became self sufficient in the generation of electricity.

3. PROJECT DESCRIPTION

JSC Rubezhnoye Board and Packaging Group is the largest integrated corrugated packaging mill in terms of capacity in Ukraine and the most modern, built as a green field plant in Rubezhnoye in 1990-1992 and further expanded by constructing a second production site near Kyiv (35 km south of the city) in 2002-2003. It produces the full range of corrugated packaging products, from heavy duty through to offset printed microflute, and is self-sufficient in corrugated case materials (“CCM”) and electricity.

RGTK has three subsidiaries:

1. Tripolsky Packaging Mill – a newly built facility near Kyiv which started producing corrugated packaging in early 2003;
2. The waste paper collecting depots in Kyiv (PZP 2), Donetsk (Donmakr) and Kharkiv (Vtorma); and
3. Papirus Ltd, a Russia company collecting waste paper in Russia and dealing with shipping of RGTK products to Russia.

The Rubezhnoye site contains four corrugators and extensive equipment for conversion of corrugated board in two workshops, two paper machines, a power generation plant, and effluent treatment plant. The Tripolie facility has one corrugator and 5 converting lines.

RGTK produces CCM from waste paper, which is then further processed to produce corrugated board. This forms the basis for various forms of packaging. The plant established in Tripolie produces corrugated packaging using CCM supplied from the main plant in Rubezhnoye

RGTK has a current annual capacity of 234 million m² of corrugated packaging products and employs on average 1,700 people.

RGTK’s current production capacity and range of products are the following:

- Paper for corrugation, weight from 100 to 200 gr/ m² and board, weight from 135-300 gr/ m². Board produced by RGTK has brown, white and cloudy surface. In 2006, RGTK developed production of plasterboard liner, which is the basis for plasterboard;
- Corrugated board (2, 3, 5, and 7 ply);

- Corrugated packaging (corrugated board, converted to corrugated packaging through cutting and printing) – full range of this type of product including both flexographic and offset print.

The Company plans to invest up to EUR 117 million in new equipment and working capital to approximately double its production capacity for paper and corrugated packaging. This will be combined with ancillary investments in power generation and effluent treatment. The combination of the two latter components will offer substantial opportunities in terms of energy savings and greenhouse gas reductions. The proceeds of the new EBRD loan would be primarily used to fund the investment of Paper Machine PM3 at the Rubezhnoye site.

4. ENVIRONMENTAL AND HEALTH AND SAFETY IMPACTS & MITIGATION IMPACTS.

In the PM3 paper production the key impacts relate to:

- water usage and
- energy consumption

Consumption of energy supply per tonne of paper and board production.

According to design data provided by AF-CHLEQ (France) these values are as follows:

- Freshwater consumption 6.4-7.5m³ depending on products manufactured
- Steam consumption 2.1-2.56 (summer-winter)
- Electric power consumption 400-450 kWh depending on products manufactured.

These values are comparable with the operational performance of European mills manufacturing the same range of products with the same type of paper machine.

For the purpose of reduction of the **clear water consumption** on the PM3 site the following arrangements will be provided:

- The water reuse system under the flow sheet (water consumption – 3647.0 m³/day)
- The circulating water system and cooling of the process facilities (water consumption – 115.0 m³/day)
- The return water cooling system for vacuum pumps of vacuum system (water consumption – 9200.0 m³/day)

Wastewater containing fibbers will be re-used after treatment. Untreatable waste water will be pumped into the waste water treatment unit.

Rainwater and water created as a result of the drainage of the plant's territory will be collected and conducted through the road channels and discharged into the existing water drainage system at the mill site.

Paper Machine-PM3 will be designed to meet national and EU environmental standards including the EU Integrated Pollution Prevention Control Directive (IPPC).

The level of noise at the plant will not exceed standard requirements; 60 dBA at working places and 80dBA at the border of sanitary protected area. Noise abatement measures to ensure the acceptable will be determined on the basis of measurements after the start-up of PM3. Therefore the level of noise will not have a significant impact on the Project.

The level of pollutants emitted into the ambient air will conform to the best available technique standards and to the limit values applicable in Ukraine with regard to any parameter. The concentration of ambient air emissions on the border of the plant's territory does not exceed 0.05 PDK (maximum permissible level). Therefore the paper machine to be constructed will not have significant impact on the ambient air of the surrounding areas.

There will be no **soil contamination** resulting from the construction and production activity of PM3.

There will be no **process waste** during production. The waste material caused by the production process will come back into production again. The waste from auxiliary materials will be collected in separately in special containers which will be placed in specific locations.

Solid waste will be either recycled or disposed of in accordance with regulatory requirements and will be accumulated in containers and brought to the landfill. Waste handling will not have a significant impact on the environment outside of the plant's boundary.

The construction of the paper machine will have a positive **socio-economic impact** by creating direct jobs for 200 persons.

5. OUTLINE OF ENVIRONMENTAL ACTION AND MONITORING PLAN

As part of the first loan with the EBRD an Environmental Action Plan (EAP) was developed for the facility in Rubezhnoye which included modernisation of the waste water treatment facilities, energy efficiency measures, improvement of waste management practices, environmental monitoring and noise protection measures. This EAP will need to be revised as some of the original measures have been already implemented and will be updated to include the current Technical Study which the Company is undertaking for the upgrade to the power generation plant and the new effluent treatment plant.

6. DISCLOSURE OF INFORMATION AND CONSULTATION

The EIA process in accordance with the Ukrainian EIA law had been completed before the involvement of the Bank in the project and had included public disclosure. No stand alone public consultation was required for the site as modernisation and expansion at the Rubezhnoye plant is carried out within an existing territory not impinging on residential areas.

In addition, several articles regarding the Project have been published in the newspapers with national and local coverage.

- **Newspapers:** Runo, Vestnik Nedely, Nasha gaseta, Zerkalo Nedely
- **Magazine:** Packaging World.

The full OVOS documentation and a non-technical summary will both be available in English and Russian at the following locations;

1. Rubezhnoye Cardboard & Packaging Mill, Mendeleyev Str. 67, Rubezhnoye, Logansk Reg, 93066 Ukraine. Tel +38 0645392210
2. EBRD regional office in Kiev , 27/23 Sofiyvska Street, 01001 Kiev, Tel: + 380 44 270 6132
3. Business Information Center, EBRD, London UK, Tel + 44 207 338 6747

The non-technical summary will be placed on the EBRD website (www.ebrd.com), in English and Russian which will also contain information on where the full OVOS documents will be available and a link to the company's website.

7. OUTLINE OF THE PUBLIC OPINION AND MAIN ISSUES.

RKTK has informed the EBRD that public opinion towards the Project has been supportive.

8. INFORMATION SOURCES

1. OVOS – JSC “Rubezhnoye cardboard and package mill” main housing Reconstruction of the cardboard and package mill JSC “RKTK” in connection with the installation of the PM3, May 2007.
2. State Department of Environment Protection in Lugansk Region letter of 25 June 2007 on approval of the report on the assessment of the environmental impact of PM3, Ukrainian Ministry of Environment Protection.
3. Measures carried out in accordance with Ukrainian Law concerning “Environment Protection”