

**Phare CBC Projekt  
Engineering Works for Closing of  
the Uranium Mines at Eleshnitsa and  
Dospat  
Diaphragm wall intake structure**

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**Project**

**Objective:**

Remediation of tailing pond by contouring and sealing of surface area including the necessary environmental measures. The former tailing pond Eleshnitsa is located in the valley. In the area of reservoir's water there is an underground spring, which water is always discharged into the tailing pond. Using the surface and underground dams this infiltration should be prevented.

**Location:**

Eleshnitsa  
Bulgaria

**Client:**

Ministry of Re-  
gional Develop-  
ment, Bulgaria

**Beneficiary:**

Ecoengineering  
RM Ltd.

**Periond:**

2002 – 2005

**Total value:**

11,0 Mill €

**Initial situation:**

1990 the uranium treatment was discontinued in Eleshnitsa. The tailing pond was not kept safe after this and therefore the leachate occurred reached in the existing receiving water „Wolves Gully“ in the Mesta. The leachate amount was considerably increased due to the infiltration of the spring water. The objective was not only to remediate the tailing pond (surface sealing of tailing pond), but also to prevent the spring water supply. As a solution we choose the applying of bentonite diaphragm, which will fulfil the task together with the thick dam.



**Services provided:**

- Technical assistance for development of preliminary and detailed design
- Site management and site supervision

**Technical data:**

- Bentonite diaphragm wall, d = 60 cm, l = 60 m, height depth = 10 m with combination of coming rock horizon
- Construction of thick dams (clay sealing) d = 2,0 m; h = 2,5 m; l = 60 m