



# WESTERN BALKANS ENVIRONMENTAL HOT SPOTS PROGRAMME

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# Clean up component

## Bajza storehouse

### **316,501 USD**

- Initially believed to be heavily polluted with pesticides;
- Actually resulted with chemicals ( $\text{Na}_2\text{SiF}_6$ ) and infected leather bits;
- Storehouse cleaned-up: not hazardous waste disposed to a landfill in Albania.

# Bajza before, during and after

Before....



During.....



After





## Clean up component: Other sites selected for rehabilitation

- **Balez chemical deposit and “satellite” sites** – 210 tons separated, analysed and repacked as per Basel Convention procedures;
- Repts and Rreshen mine tailing facilities:

# Balez Storehouse

476,173 USD

Before...



During.....



After



Reps today.....



proposed solution



# Reps works to be done

222,921.4 USD

- Site survey of terrain, including marking of major points on the site and fixing of level boards of 52503.00m<sup>2</sup>;
- Construction of open trench above the dam as per design;
- Construction of the retaining dam with material from the Tailings Dam;
- Covering the retaining dam with clay above the geotextile layer and compacted it with to a thickness of 20cm;
- Excavation of a trench for the concrete pipe and trench cleaning;
- Excavation of the area where the gabions are will be fixed and construction of the gabions as per design;
- Levelling the terrain surface and face of the dam with compaction;
- Construction of manholes for discharge points;
- Relocation of the existing power supply line;
- Grass planting of covered spaces.

Rreshen today.....



Proposed solution



# Rreshen – works to be done

246,186.31 USD

- The complete mine tailing surface is 25451 m<sup>2</sup>. It is located about 130 m above sea level.
- Construction of open trench above the dam as per design;
- Construction of the retaining dam with material from the Tailings Dam;
- Covering the retaining dam with clay above the geotextile layer and compacted it with to a thickness of 20cm;
- Excavation of a trench for the concrete pipe and trench cleaning;
- Excavation of the area where the gabions are will be fixed and construction of the gabions as per design;
- Levelling the terrain surface and face of the dam with compaction;
- Construction of manholes for discharge points;
- Relocation of the existing power supply line;
- Grass planting of covered spaces.

# Capacity building and pilot projects

- Chemicals management and REACH framework – December 2009
- Mining and risk assessment- December 2009
- Air and water monitoring Upgrade of waste management systems in Bajza and Mesi;
- Water quality monitoring- February 2010;
- Air Quality Monitoring- May 2010.
- Public informed, responsive, aware and conscious- aware that the railway does not present any harm to their health and environment;
- Storehouse can be used for the storage as per the activities of the railway;
- Waste management system improved: purchase of Truck and bins;
- Creation of a simple composting facility – pilot project.

# Origins of the hotspots

- 25 years of oil and gas exploration (South-West parts of Albania);
- Chrome, copper and iron-nickel mining (North and Center parts of Albania);
- Chemicals stored inside production lines;
- In 1990 industries based on 1960s technologies (dirty, hazardous, non-competitive);
- 58% GDP industry – 1990 - 11.9% GDP industry.

# Lessons learned, current priorities

- Case-by-case approach and not a strategic one;
- Positive feedback from stakeholders, experts and public when they see results on the ground;
- Clean-up financed only by the international donors (EC, The Netherlands, World Bank, UN) – processes should be longer in terms of implementation;
- National inventory of hotspots and the related database established;
- Remediation plans for 9 hotspots prepared and presented to the Donor Community, May 2010;
- Policy for hotspots, especially related to the remediation of the privately owned hotspots.

# Why regional cooperation?

- Countries in the region are small and have limited resources;
- Share experts, experience and best practice;
- Similar problems with similar possible approach;
- Common approach for financing - donors often prefer to finance large projects;
- Possible areas for future regional cooperation: industrial pollution control and nature protection.