

<i>Project Description</i>	<i>Results of the project</i>	<i>Year</i>	<i>Site</i>	<i>Client/Investor</i>
Remediation of the facility Transgas a.s. - PZP Tvrdonice				
Excavation and transport of the contaminated soil and rubbles Bioremediation of residual contamination by method in-situ, excavation pits backfilling, hard surface reconstruction	Remediation method: excavtion and elimination of contaminated soil and rubbles; bioremediation "off site"; installation of collecting objects and infiltration systems for biopreparation application.	2005	Tvrdonice	Ekosystem s.r.o.
Remediation of the facility Transgas a.s. - PZP Dolní Dunajovice				
Excavation and transport of the contaminated soil and rubbles Bioremediation of residual contamination by method in-situ, excavation pits backfilling by inert material including compaction	Remediation method: excavtion and elimination of contaminated soil and rubbles; bioremediation "off site"; one-shot soaking of biopreparation for elimination of residual contamination.	2005	Tvrdonice	Ekosystem s.r.o.
Remediation of the facility Transgas a.s. - KS Strážovice				
Excavation and transport of the contaminated soil and rubbles Bioremediation of residual contamination by method in-situ, excavation pits backfilling, hard surface reconstruction	Remediation method: excavtion and elimination of contaminated soil and rubbles; bioremediation "off site"; installation of collecting objects and infiltration systems for biopreparation application.	2005	Strážovice u Nepomuku	Ekosystem s.r.o.
Remediation of the facility Transgas a.s. - SU Rozvadov				
Excavation and transport of contaminated soil and rubbles; bioremediation of residual by method in-situ excavation pits backfilling including compaction hard surface reconstruction	Remediation method: excavtion and elimination of contaminated soil and rubbles; bioremediation "off site"; installation of collecting objects and infiltration systems for biopreparation application, bioremediation of resudual contamination in situ	2005	Rozvadov	Ekosystem s.r.o.
Remediation of oil wells Gbely - Slovakia				
Remediation of 48 oil wells of the company Nafta Gbely, a.s.	Remediation work management, excavation of soil above and bellow the groundwater level, soil and water sampling, bioremediation	2005	Gbely	Slovenská vrtná spoločnosť, a.s.
Remediation of underground fuel tanks surrounding aeroport Prague 9 - Kbely				

Underground fuel tanks withdrawal, elimination of contaminated parts of the non-saturated zone of the underground object, excavation pits backfilling by inert material	Remediation method: underground fuel tanks withdrawal, excavation of contaminated soil, bioremediation off-site, creation of drainage system for remediation of groundwater and remediation monitoring	2004	Praha - Kbely	Ministry of Defence of the Czech Republic
Emergency response and the subsequent remediation on the site in Ústí nad Labem, Czech Republic - petroleum release within the area of track car depot of Czech Railways				
Emergency response on the site contaminated by 20 000 l of petroleum released from the track car depot of Czech Railways. The release was caused by corrosion of subterranean pipeline leading from the overground tank into the booster pump station. affected area: depot with the surface of 1000 m ² ecological risk: high - vicinity of the river Bilina, contamination of bedrock	Bottleneck probing, monitoring wells, soil and groundwater sampling, excavation of contaminated rubbles and soil, transport of samples into the authorised laboratory, construction of emergency remediation station, establishing of remediation station with stripping unit, emergency pumping of groundwater, monitoring of the quality of water, chemical analysis of water, transport of contaminated material into the incinerator in Trmice	2003 -ongoing project	Ústí nad Labem	České dráhy a.s. (Czech Railways)
Remediation of former logistic sites in Pozdišovce and Ružomberok, Slovakia- unsaturated zone, groundwater - TPHs, CHs				
Complex clean up of two former Slovnaft logistic sites – fuel distribution storages. Remediation of approx. 30 000 tons of contaminated soil by on-site treatment (Pozdišovce and Ružomberok) and approx. 18 000 tons of contaminated soil by bioremediation in-situ. The treatment of groundwater is also provided. Target limits (TPHs): - unsaturated zone: 1 200 mg/kg - groundwater: 3 (resp.5) mg/l	Applied remedial techniques: - excavation of highly contaminated soil - bioremediation „on-site“ (30 000 tons of cont. soil) - bioremediation „in-site“ (18 000 tons of cont. soil) - venting and bioventing of unsaturated zone - pumping-and-treatment of contaminated groundwater	2004 - ongoing project	Two former Slovnaft logistic sites – Pozdišovce, Ružomberok, Slovakia	Slovnaft, a.s. Slovakia
Remediation of an environmental burden at CPP Transgas site in Prague / Mecholupy - unsaturated zone, groundwater - PAHs, TPHs				
Remediation of the former gas tank foundations, its surroundings and the former filling station, site polluted by PAHs and TPHs. Target limits for unsaturated zone: - TPHs: 1000 mg/kg, PAHs 640 mg/ kg	Applied remedial techniques: - demolition of a gas tank and disposal of generated waste - excavation of contaminated underlying soil and subsequent off-site disposal (biodegradation) - pumping-and-treatment of contaminated groundwater / storm water from excavations - backfilling of excavations	2004 - ongoing project	ČPP Transgas, Prague – Mecholupy, Czech Republic	ČPP Transgas s.p.

Remediation of contaminated underground refuelling station within the area of Government Office, Prague, Czech Republic				
<p>Realisation of technical investigation and investigation of pollution within and out of the tank. On the basis of the investigation results filling-up of the tank and ground shaping of its surroundings was carried out. During the last stage of remediation works vending machine as well as the filling shaft for car tanks were removed. Affected area: surrounding of the underground tank within th area of the Governemet Office Ecological risk: the area is situated about 100 m far from the river Vltava.</p>	<p>1. stage:water sampling within shafts by rustles bailer, measuring of the water level within the tank, measuring of concentration of flammable gases and vapours within the tank, water pumping from the shafts, probing carried out by means of the probe kit Eijkelkamp, soil sampling and analysis, atmogeochemical investigation by analysator Ecoprobe 5 2. stage: dismantling of the container cover and connected technology, backfilling of the shafts by inert material, compacting within the tank, flammable gas and vapours detection 3. stage: Dismantling of the vending machine and cover of the shaft, blanking, the shaft suffused by beton</p>	2004	Area of the Governemet Office Prague 1 – Malá Strana Czech Republic	Government Office of the Czech Republic
Remediation of four military camps, Bosnia and Herzegovina - unsaturated zone, groundwater – TPHs				
<p>Remediation of four military SFOR camps in Bosnia and Herzegovina; clean up approx. 5 000 tons of contaminated soil Target limits (based on Canada-wide Standards for Petroleum Hydrocarbons): - C₆ - C₁₀ : 310 mg/kg - C₁₀ - C₁₆ : 760 mg/kg - C₁₆ - C₃₄ : 1 700 mg/kg - C₃₄ - C₅₀ : 3 300 mg/kg</p>	<p>Applied remedial techniques: - excavation of contaminated soil and demolition debris - bioremediation „off-site“ backfilling of excavations - pumping-and-treatment of contaminated groundwater /monitoring</p>	2003 - 2004	Four military camps: Velika Kladusa, Drvar, Zgon and Glamoc in Bosnia and Herzegovina	Polje bb Velika Kladusa, Bosna i Herzegovina
Remediation of the PetroHemija site in Pancevo, Yugoslavia - groundwater - DCA				
<p>Design and installation of a remediation system; remediation of groundwater with massive contamination of DCA (dichloroethane) in consequence of bombing of the petrochemical company premises in Yugoslavia; DCA presents in groundwater as DNAPL Target limits: removal of free phase of DCA from saturated zone</p>	<p>Applied remedial techniques: - installation of a remediation systém - pumping-and-treatment of contaminated groundwater - remedial monitoring</p>	2002 - ongoing project	Premises of the PetroHemija company in Pancevo, Yugoslavia	Ministry of Industry of the Czech Republic UNEP / UNOPS

Remediation and recultivation of highly contaminated areas of Usinsky rajon in Komi republic, Russian federation – unsaturated zone - TPHs					
Pilot tests of clean up the unsaturated zone contaminated by petroleum hydrocarbons in a consequence of spillage of crude-oil and secondary petroleum products in Usinsky rajon	Applied remedial techniques: - pilot bioremediation tests performed in the polar area of Usinsky rajon - data evaluation and detailed clean up technology design	2002 - 2004	Usinsky rajon, Komi republic, Russian federation		LUKOIL
Remediation of the former military airport site in Zatec - unsaturated zone, groundwater - TPHs					
Remediation of the former military airport in terms of development the largest industrial zone in the Central Europe; clean up of approx. 341 000 tons of contaminated soil and treatment of groundwater on the area of 300 000 m ² Target limits (TPHs): unsaturated zone: 2 000 mg/kg - groundwater in the center of contamination: 4 mg/l	Applied remedial techniques: - excavation of contaminated soil and demolition debris - bioremediation „off-site“ (184 000 tons of contaminated soil) - bioremediation „in-situ“ (157 000 tons of contaminated soil) - backfilling of excavations - pumping-and-treatment of contaminated groundwater /monitoring	2003 - ongoing project	former military airport in Zatec, Czech Republic	Region	Usti nad Labem
Remediation of the filling petrol station Benzina in Ostrově nad Ohří - unsaturated zone, groundwater - TPHs					
Remediation of the filling petrol station Benzina, where during the last 20 years approx. 10 t of fuels have released Target limits (TPHs): unsaturated zone: 2 000 mg/kg - groundwater: 3 mg/l	The remediation has been running since 2003 by means of the method “Pump and Treat”. The remediation has been lead by the biotechnological remediation “in situ” as well as bioventing	2003 - 2005	Ostrov, Karlovarský district, Czech Republic		Czech Property Fund
Remediation of the site contaminated by the ethylbenzene in Miletice - unsaturated zone, ethylbenzene					
Excavation and remediation of soils highly contaminated by the ethylbenzene released from the pipeline. Affected area: 500 x 100 m Environmental risk: endangering of groundwater – risk of the wells in the neighborhoods being contaminated	Excavation of contaminated soils, bioremediation, installation of remediation lateral drains, bioventing, 3500 t of contaminated soils excavated, drilling works – 136 boreholes	2003 - ongoing project	Miletice, Czech Republic		Czech Property Fund
Remediation of Buzovna-Mashtaga locality, Azerbaijan - unsaturated zone - TPHs					
Pilot tests of clean up the unsaturated zone contaminated by petroleum hydrocarbons in consequence of crude-oil production	Applied remedial techniques: - pilot bioremediation tests performed on the sample of 1800 m ³ of contaminated soils and sludges - data evaluation and detailed clean up technology design	2003 - 2002	Locality Buzovna-Mashtaga, Azerbaijan		SOCAR/ KAP
Remediation of former fuel storage in Bogutovac, Serbia and Montenegro - unsaturated zone, groundwater - TPHs					

Remediation of a site polluted in a consequence of spillage of fuels; remediation of groundwater and soil contaminated with TPHs Target limits (TPHs): - unsaturated zone: 1,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - pumping-and-treatment of contaminated groundwater - remedial monitoring	2002 - ongoing project	Beopetrol PJ Kraljevo in Bogutovac, Serbie and Monte Negro	Ministry of the Environment, Czech Republ
Remediation of "Cepro" petrol station sites - unsaturated zone, groundwater - TPHs				
Remediation carried out within reconstruction of refuelling stations of the Cepro distribution company on 80 sites in the area of the Czech Republic; contamination of unsaturated zone and groundwater in consequence of spillages of fuels	Applied remedial techniques: - excavation of polluted soil and demolition debris and subsequent off-site bioremediation - backfilling of excavations - pumping-and-treatment of contaminated groundwater / monitoring	2002 - ongoing project	Premises of individual refuelling stations within whole area of the Czech Republic	Cepro s.p.
Remediation of a former fuel distribution centre site in Sumperk - unsaturated zone - TPHs				
Demolition of contaminated building constructions and remediation of unsaturated zone of a former fuel distribution centre site polluted by TPHs in consequence of spillages of fuels Target limits: clean-up of a contamination focus in unsaturated zone	Applied remedial techniques: - excavation of polluted soil and demolition debris and subsequent off-site bioremediation - backfilling of excavations Project duration: 2 months	2002	Premises of a former fuel distribution centre of the Benzina, a.s. company in Sumperk, Czech Republic	Merced, a.s./ Benzina a.s.
Remediation of a former fuel distribution centre site in Olomouc / Repcin - unsaturated zone - TPHs				
Demolition of contaminated building constructions and remediation of unsaturated zone of a former fuel distribution centre site contaminated by spillages of fuels Target limits (THPs): - soil: 1,000 mg/kg	Applied remedial techniques: - excavation of polluted soil / demolition debris and off-site bioremediation - backfilling of excavations Project duration: 3 months	2002	Premises of a former fuel distribution centre of the Benzina, a.s. company in Olomouc – Repcin, Czech Republic	Merced, a.s./ Benzina a.s.
Remediation of a former fuel distribution centre site in Melnik - unsaturated zone - TPHs				
Remediation of unsaturated zone of a former fuel distribution centre site contaminated by spillages of fuels Target limits: - clean-up of a contamination focus in unsaturated zone	Applied remedial techniques: - excavation of polluted soil / demolition debris and off-site bioremediation - backfilling of excavations Project duration: 3 months	2002	Premises of a former fuel distribution centre of the Benzina, a.s. company in Melnik, Czech Republic	Merced, a.s./ Benzina a.s.
Remediation of a "CPP Transgas" FGP site in Prague / Mecholupy - unsaturated zone, groundwater - PAU, TPHs				

<p>Removal of a former gas tank and its foundations, remediation of the former gas plant site polluted by PAHs and TPHs Target limits: - clean-up of a contamination focus in unsaturated zone</p>	<p>Applied remedial techniques: - demolition of a gas tank and disposal of generated waste excavation of contaminated foundations and underlying soil and subsequent off-site disposal (biodegradation, incinerator) - pumping-and-treatment of contaminated groundwater / storm water from excavations - backfilling of excavations Project duration: 7 months</p>	<p>2002</p>	<p>Area of a former 'dry' gas tank in premises of the CPP Transgas company in Prague-Mecholupy, Czech Republic</p>	<p>CPP Transgas, s.p.</p>
<p>Remediation of a military airport site in Caslav - unsaturated zone, groundwater - TPHs</p>				
<p>Remediation of a site polluted in consequence of an accidental spill of a jet fuel from a damaged underground tank Target limits (TPHs): unsaturated zone: 2,000 mg/kg - groundwater: 10 mg/l</p>	<p>Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation (280 t) - lifting of 4 underground tanks and their disposal - pumping of contaminated groundwater from an excavated ditch</p>	<p>2002</p>	<p>Airport site in Caslav, Czech Republic</p>	<p>Czech Army - Military troop No. 4105</p>
<p>Remediation of contaminated soil within the area of the former military facility in Boží Dar - unsaturated zone - TPH, CHc</p>				
<p>Remediation of soil contaminated by TPH and CHs within the are of the former military facility of Soviet army; target limits - unsaturated zone - 1 000 mg/kg TPH - 1 mg/m3 of CHs in soil gas</p>	<p>Remediation methods: - taking out the contaminated soil and their remediation „on-site“ by combination of venting and bioremediation - backfilling of excavated pits</p>	<p>2001 - 2002</p>	<p>Facility of the former chemical cleaning plant within the area of the aeroport in Boží Dar</p>	<p>Ministry of Environment of the Czech Republic 10 Ing. Mucala Vršovická 65 tel. +420 267 121 111 100 10 Praha</p>
<p>Remediation of a fuel distribution centre site in Trutnov - unsaturated zone - TPHs</p>				
<p>Remediation of unsaturated zone of a former fuel distribution centre site contaminated by spillages of fuels Target limits (TPHs): - unsaturated zone: 1,000 mg/kg</p>	<p>Applied remedial techniques: - demolition of contaminated structures - excavation of polluted soil and demolition debris and subsequent off-site bioremediation - backfilling of excavations - in situ biodegradation Project duration: 9 months</p>	<p>2001 - 2002</p>	<p>Premises of a former fuel distribution station of the Benzina, a.s. company in Trutnov, Czech Republic</p>	<p>Ekosystem s.r.o. / National Property Fund of the Czech Republic</p>
<p>Remediation of the Lovochemie site in Lovosice - unsaturated zone, groundwater - TPHs</p>				

Remediation of unsaturated zone and groundwater in the leading Czech fertilizer plant polluted by TPHs (petroleum spirit) Target limits (TPHs): unsaturated zone: 1,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off site bioremediation - soil vapour extraction - in situ bioremediation - groundwater pumping-and-treatment Project duration: 4 years	1998 - 2002	Premises of the Lovochemie company in Lovosice, Czech Republic	Lovochemie a.s. / National Property Fund of the Czech Republic
Remediation of the Polepy site - unsaturated zone, groundwater - TPHs				
Remediation of a site polluted in consequence of and accidental spillage of Natural petrol released from a petroleum pipeline Target limits (TPHs): - unsaturated zone: 200 mg/m ³ in soil gas - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - soil vapor extraction pumping-and-treatment of contaminated groundwater	2001 - ongoing project	Accident area near a village called Polepy, Czech Republic	Cepro, a.s.
Remediation of the Hradcany military airport site – former landfill and contaminated soils - TPHs				
Remediation of the former Soviet military airport site Target limits (TPHs): - not established	Applied remedial techniques: - excavation of waste from an uncontrolled landfill site and subsequent disposal on a hazardous waste landfill - excavation of polluted soil and subsequent off site bioremediation Project duration: 2 months	2001	Premises of a former army airport of the Soviet Army in Hradcany, Czech Republic	Ekora s.r.o./ Privum s.p.
Remediation of the AG Chem company site – deposited waste, unsaturated zone - TPHs				
Disposal of waste from premises of a former chemical company and remediation of unsaturated zone polluted by petroleum substances Target limits (TPHs): - not established	Applied remedial techniques: - waste excavation and subsequent disposal off site excavation of polluted soil and subsequent off site bioremediation	2001	Premises of the AG Chem company in Korozluky near Most, Czech Republic	AG Chem
Remediation of the Pilana Hulin site - unsaturated zone - PAHs				
Clean-up of unsaturated zone polluted by PAHs, BTEX, TPHs and CHs at a machinery plant site; initial level of PAHs contamination: 3,500 mg/kg	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - in situ bioremediation	1997 - 2001	Pilana site in Hulin, Czech Republic	BIJO TC a.s. / Pilana Hulin
Remediation of the Kmetineves site - unsaturated zone, groundwater - TPHs				

Remediation of a site polluted in consequence of an accidental spillage of 1,200,000 litres of Natural petrol Target limits (TPHs): - unsaturated zone: 1,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - venting - in-situ biodegradation - hydraulic barrier installation and groundwater pumping-and-treatment	1996 - 2000	Kmetineves, Czech Republic	Cepro, a.s.
Remediation of a site along the Velvary / Nove Uhy route - unsaturated zone, groundwater - TPHs				
Remediation of a site polluted by 15,000 litres of jet fuel in consequence of an accidental spillage Target limits (TPHs): - unsaturated zone: 1,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - in-situ bioremediation - hydraulic barrier installation and groundwater pumping-and-treatment	1999	Velvary - Nove Uhy route, Czech Republic	Czech Army - Kbely Base
Remediation of the Polerady site - unsaturated zone, groundwater - TPHs				
Remediation of a site polluted in consequence of an accidental spillage of 100,000 litres of Natural petrol and Diesel oil mixture Target limits (TPHs): - unsaturated zone: 1,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - groundwater pumping-and-treatment Project duration: 15 months	1998 - 1999	Polerady, Czech Republic	Cepro, a.s.
Remediation of the Rana site - unsaturated zone, groundwater - TPHs				
Remediation of a site polluted in consequence of an accidental spillage of 100,000 litres of Natural petrol and Diesel oil mixture Target limits (TPHs): - unsaturated zone: 1,500 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - groundwater pumping-and-treatment Project duration: 5 months	1998 - 1999	Rana, Czech Republic	Cepro, a.s.
Remediation of the Bilence site - unsaturated zone, groundwater - TPHs				
Remediation of a site polluted in consequence of an accidental spillage of 60,000 litres of Diesel oil Target limits (TPHs): - unsaturated zone: 2,000 mg/kg - groundwater: 1 mg/l	Applied remedial techniques: - excavation of polluted soil and subsequent off-site bioremediation - groundwater monitoring Project duration: 2 months	1997	Bilence, Czech Republic	Cepro, a.s.