



Document title	Information by Greenpeace Russia about alarming situation at Krasny Bor hazardous waste landfill in Leningrad Oblast, Russia
Code	7-1
Category	CMNT
Agenda Item	7 – Any other business
Submission date	15.2.2016
Submitted by	Coalition Clean Baltic
Reference	

Background

Based on information received from Greenpeace Russia (see attached), CCB would like to raise attention of HELCOM Contracting Parties and Observer Organizations to the alarming situation with Krasny Bor hazardous waste landfill in Leningrad Oblast, nearby St.Petersburg.

Krasny Bor has been listed in early 1990-s as HELCOM Hot Spot # 23 for inadequate handling of hazardous wastes and associated environmental risks of toxic chemicals leaching into the Baltic Sea. Since then the situation has not dramatically improved, but rather opposite – has led to an edge of environmental disaster. The landfill collects hazardous wastes from all over the North-West Federal District of the Russian Federation (10 provinces and the city of St.Petersburg, covering 10% of Russia's population and over 12% of industrial production). It is operated by a municipal enterprise, owned by the Government of St.Petersburg.

Full description of the facility was provided in HELCOM BASE Report on the status of HELCOM hot spots in Russia (published in [2014](#), but used as a [background material](#) for 2013 HELCOM Ministerial Meeting). The Report concluded that:

- The landfill has a significant negative impact on the environment as it continues to use obsolete technologies for handling toxic wastes.
- A comparative analysis of the hot spot shows that despite the reduction of waste reception volumes and the closure of some of storage pits, the negative impact level has continued to rise.
- Of special concern are the increasingly frequent emergency situations at the facility.
- The safe operation of the landfill is not possible without the construction of the plant for hazardous wastes treatment, which should have been completed in 2005.
- A processing plant with a capacity of 40,000 tonnes of waste per year was planned to be constructed by 2015 with funding provided by the federal and regional budgets.

Currently, according to the media reports, the situation is aggravated by weak financial state of the landfill operator and mismanagement of the site by the city authorities. Unpredictable extreme weather conditions (severe snow- or rainfall) have already caused emergency flooding of open storages of the landfill and may cause toxic leakage from the site.

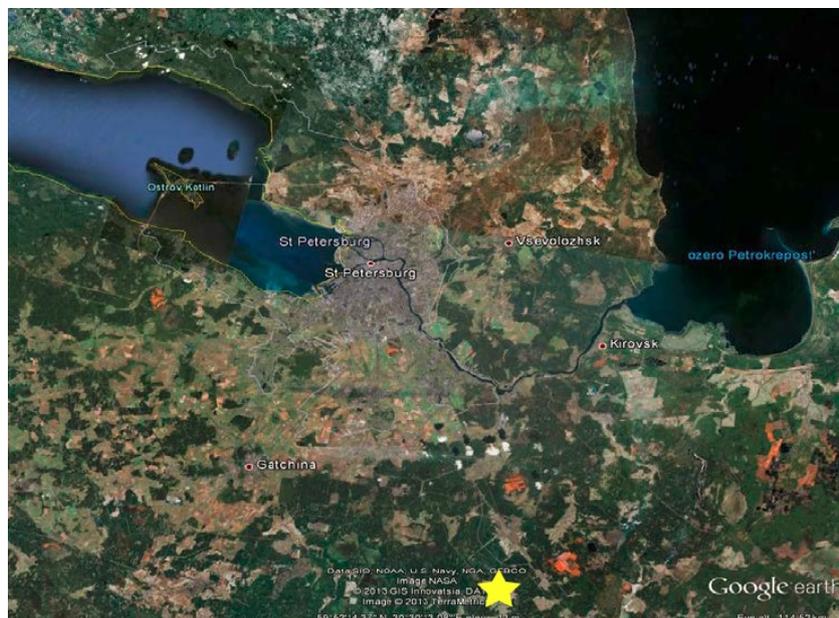
Action requested

The Meeting is invited to

- take note of the presented information
- urge the Government of the Russian Federation to undertake all necessary measures to comply with the requirements of Helsinki Convention with regards to Krasny Bor hazardous waste landfill;
- remind the Governments of the Contracting Parties of the HELCOM Ministerial commitment from [2013](#) to aim at elimination of remaining municipal (23) and industrial (20) hot spots by 2016.



Brief Description of the Current Situation with “Krasny Bor” Toxic Wastes Dump



“Krasny Bor” toxic wastes dump is located in the Leningrad Oblast. It was established in 1970 as a temporary storage for toxic wastes of different origin produced by industrial entities of St. Petersburg and Leningrad Oblast. Its current owner is the Government of Saint-Petersburg which controls the landfill through the state owned unitary enterprise.

Liquid toxic chemical wastes, being accumulated since the beginning of dump’s activity, are stored in open pits, made in Cambrian clay.

The same pits are used for dumping solid hazardous wastes. As these pits are open (uncovered), they also absorb rainwater on the surface. Upon completion of a pit, its content is covered with soil for further reclamation.

The dump accepts industrial wastes containing mercury, trivalent chromium, cyanide, organo-halogenated compounds and many other hazardous substances.

Open pits receive, accumulate and contaminate rainwaters, which then overflow pits’ dikes into the drain system of the landfill. By drainage system contaminated waters are discharged to Neva River (via its tributary, Bolshoy Izhorets River), upstream of drinking water intake of St. Petersburg.

Annual increase of toxic wastes volume just by accumulating rainwaters accounts up to 20,000 tons even if the dump has (formally) discontinued landfilling of new wastes.

According to Vedeneev’s National Scientific and Research Institute of Hydrotechnic, during 40 years of landfill’s operation the mistakes in its construction have led to discharge of about 14 million cubic meters of contaminated wastes into surface and ground waters.

Screenings conducted by Greenpeace Russia in 2010 and 2015 have shown presence of mercury, cadmium, antimony, PCBs, tetrachloride, phenols and other hazardous substances in dump wastewaters in much higher concentrations than the maximum permissible levels set up in the Russian Federation.

“Krasny Bor” toxic wastes dump is located in the center of tectonic faults that leads to intensive destruction of Cambrian clays, to creation of massive contamination front towards depth, which, in its turn pollutes the Lomonosov aquifer used for drinking water supply in the region.

In the present time, the new management of the “Krasny Bor” landfill undertakes measures to stop toxic discharges out of the dump territory. But dump pits are constantly filled with rainwaters and snow masses. At this point, the level of contaminated waters accumulated in the pits grows up and exceeds the critical level. Due to this contaminated waters are quickly flooding the landfill territory through the leakages in the pits’ dikes.

Currently, all systems of the landfill are out of service and cannot ensure its functionality. None of the claimed deficiencies identified by the authorities were rectified during years.

A permanent ban on accepting new wastes being imposed on the dump’s operations due to the bad technical and environmental situation, has led to the landfill’s financial collapse. The accounts were suspended, and part of the property has been arrested. As a result the drainage system is now inoperational, video surveillance is broken, fire alarm system is not functioning, pit bunding is partly destroyed.

The Saint-Petersburg City authorities do not undertake any measures to prevent the upcoming environmental emergency situation. All the alerting letters being sent by the landfill management to the city administration were simply ignored.

Water samples from the wells of villages located nearby showed manganese, iron and phenols in concentrations that highly exceed maximum permissible levels established in the Russian Federation.

The Court of Tosno District of Leningrad Oblast (where the dumpsite is located) in its ruling which permanently bans the acceptance of new hazardous wastes onto the landfill has specifically noted that “... the use of the landfill caused damage to soil and ground waters by contamination of such specific pollutants as phenols and formaldehyde in concentrations exceeding maximum permissible levels in 11 111 (eleven thousand) and 139 times accordingly. Heavy metals, such as cadmium and nickel were identified in concentrations that are 3.6 times higher than the safe levels. Carcinogen substance of benz(a)pyrene was found in concentrations 9 times higher than the maximum permissible levels. That leads to the conclusion that landfill pits are not sealed and all hazardous substances enter the environment through waters reaching level of sand. “

According to the Director General of the Krasny Bor landfill company, the level of hazardous wastes stored in the pits exceeded the safe capacity level by more than by 50 centimetres.

Flooding of the landfill territory has started intensively by the end of December 2015 and there is a high probability that all hazardous substances will reach the Neva River when warm temperatures will cause melting and runoff.

On the 27 November 2015, the North-West branch on the Federal Service for Technological, Environmental and Nuclear Supervision made the conclusion that the state of hydro-technical equipment of the landfill is in emergency condition and its safety level is dangerous.

Based on the information mentioned above, it is possible to conclude that there is high probability of an accident involving possible destruction of the pits’ dikes and further contamination of the Neva River and the Gulf of Finland by hazardous substances stored presently at “Krasny Bor” toxic wastes landfill.