



International POPs Elimination Project

*Fostering Active and Efficient Civil Society Participation in
Preparation for Implementation of the Stockholm Convention*

Hotspot: Sharra Dumpsite in Tirana, Albania

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April 2006



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About the International POPs Elimination Project

On May 1, 2004, the International POPs Elimination Network (IPEN <http://www.ipen.org>) began a global Non Governmental Organisation (NGO) project called the International POPs Elimination Project (IPEP) in partnership with the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Program (UNEP). The Global Environment Facility (GEF) provided core funding for the project.

IPEP has three principal objectives:

- Encourage and enable NGOs in 40 developing and transitional countries to engage in activities that provide concrete and immediate contributions to each country's efforts in preparing for the implementation of the Stockholm Convention;
- Enhance the skills and knowledge of NGOs to help build their capacity as effective stakeholders in the Convention implementation process;
- Help establish regional and national NGO coordination and capacity in all regions of the world in support of longer term efforts to achieve chemical safety.

IPEP will support the preparation of reports on a country's situation, hotspots, policy briefs, and regional activities. Three principal types of activities will be supported by IPEP: participation in the National Implementation Plan, training and awareness workshops, and public information and awareness campaigns.

For more information, please see <http://www.ipen.org>

IPEN gratefully acknowledges the financial support of the Global Environment Facility, Swiss Agency for Development and Cooperation, Swiss Agency for the Environment Forests and Landscape, the Canada POPs Fund, the Dutch Ministry of Housing, Spatial Planning and the Environment (VROM), Mitchell Kapor Foundation, Sigrid Rausing Trust, New York Community Trust and others.

The views expressed in this report are those of the authors and not necessarily the views of the institutions providing management and/or financial support.

This report is available in the following languages: English



Environmental Center for Development, Education and Networking

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HOTSPOT: SHARRA DUMPSITE IN TIRANA



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**EDEN CENTER
ALBANIA, JANUARY 2006**

International POPs Elimination Project – IPEP
Website- www.ipen.org

HAZARDOUS SUBSTANCES, POPs

A hazardous substance is a material that may pose a danger to living organisms, materials or the environment. Any substance discarded, neglected that might cause such effects is a hazardous waste. We are all exposed to hazardous chemicals, including persistent organic pollutants (POPs). They are in the air we breathe, the water we drink and the consumer products we buy. POPs are nicknamed "poisons without passports", because they ride around on air and sea currents without breaking down. POPs are invisible poisons. The most notorious by-product POPs released into the environment are polychlorinated dibenzo-p-dioxins and dibenzofurans, commonly referred as dioxins. These species have a high environmental and toxicological significance. POPs need to be carefully stored and disposed of, because they can leak and pollute the soil. If POPs are burned they generate other POPs. This is one reason why there are a lot of polluted hotspots worldwide.

HEALTH EFFECT

People who live or work near sources of POPs such as incinerators and various industries are heavily exposed. Those who live nowhere near sources are exposed too, because POPs travel the globe. Scientific investigations of different animals carried out at the South and North poles, have shown high levels of persistent organochlorines in their body tissue. POPs have been linked to a range of different health effects, including: heart disease, respiratory problems, birth defects, immune system defects, learning disorders and skin disorders. They have the ability to concentrate up the food chain. This is the reason that they are found at considerable proportion in sea food and other food products, consequently in humans. Having the ability to bio-accumulate by fatty tissues, high percentage especially of DDT and dioxins is noticed at the mother's breast-milk.

DIOXINS SOURCES

POPs enter the air from numerous sources, including chemical industry, waste incinerators and/or metal production industry. A particular important source may be

municipal solid waste burning as well. There is evidence that dioxins are formed during combustion of solid waste because of the presence of both chlorine (from polyvinylchloride plastic and other chlorinated materials in waste) and catalytic metals.

STOCKHOLM CONVENTION

The Stockholm Convention pointed out three categories of POPs:

- Chemicals intentionally produced, whose production, use and import-export have to be eliminated. They are organochlorine pesticides and industrial PCBs.
- Chemicals whose production and use is allowed but restricted (like DDT).
- Chemicals which are formed and released unintentionally from anthropogenic sources (dioxins and furans).

There are twelve particularly dangerous POPs the global community wants reduced and eliminated if possible. Some of these cancer-causing POPs are still released every day.

ALBANIAN HOT SPOTS

In 2000, UNEP performed an assessment of Albania's environment. Nine potential "hot spots" sites had been investigated, five of which were considered as posing imminent risk to public health and the environment. Some of them due to POPs releases. Although, in the UNEP report recommended emergency assistance, still no significant intervention has been observed. One of the mentioned hot spots is the Sharra solid waste dump, located near Tirana. This hot spot was identified as one that causes unacceptable human health risk due to:

- toxic smoke and dust being emitted from the dump's burning rubbish to the inhabitants of the area
- Water pollution as a result of leaching of the landfill.

The fires have a bad influence on the air quality near the landfill, and can sometimes be smelled in Tirana. From the UNEP report it is pointed out that for PM 10 the average concentration is almost ten times higher than the WHO standard.

POLLUTION SOURCES IN ALBANIA

We believe that in Albania, the most dangerous and the main sources of pollution in urban area are burning of the solid waste and products released from combustion of car fuel. Currently, there are no waste incinerators in the country therefore solid waste without any classification is transported to the dump sites. It is the high time to reform the waste management system in Albania. Actually, very little is done concerning recycling of paper, glass, metals and plastics. The creation of the recycling material market is in the early stage. As Albania is in the process of EU approximation legislation, it should fulfill the requirement of EU directives regarding waste and landfill management. However, we should point out that some positive experiences for the recycling of waste in some cities in which environmental NGOs are involved do exist. In few cases private initiatives have shown their interest for recycling of paper, metals and recently an international company seems to show an interest in plastic recycling. We believe that waste management should be seriously taken into the consideration by the decision makers and by the education system. It seems that many environmental problems in Albania exist due to the lack of education than to the lack of financial resources.

There is no doubt as well that in the dump sites hazardous waste are discarded. In it might be found batteries, household or industrial chemical waste and even old used capacitors and transformers. The Sharra dump site is almost permanently burning which releases dioxins and furans. According to the Institute of Public Health in Tirana, the quantity of highly toxic chemicals (dioxins and furans estimated indirectly by empiric factors) emitted to the environment from the burning of Sharra landfill is comparable to the total emissions of these pollutants from the rest of Albania. The potential negative health effects in part come from the free access to the uncovered landfill.



This problem appears growing worse due to the increasing number of unauthorized people living and collecting waste at the landfill.

The contaminants from the dump site can spread to the environment in two main ways, either by air or by surface and groundwater. Due to the burning of waste at the landfill and the local geology and hydrology, the airborne spreading of contaminants is considered to be the most serious threat to the environment posing an acceptable threat to the health of local residents. Some studies have shown that clouds of air pollution, including extremely harmful toxic substances, like dioxins and furans, will not only effect the immediate vicinity of the dump, but will have a long term effect on inhabitants living around the Sharra dumpsite and the western part of Tirana. It depends on the direction of the wind.



Frequently clouds of smog coming from Sharra to Tirana City can be easily observed from a dominant point in Tirana (example from Dajti Mountain).

In addition, in the cities, especially in the summer time, the open burning of domestic solid waste is observed in the containers at the collection sites some meters away from the buildings where the people live. The fire is put in the bins by the people attempting to avoid the bad smells of waste. Unfortunately it appears that the awareness of people concerning releases of highly toxic substances is very low. They have no idea about the toxic environment created

by burning of wastes near their houses. Especially for the children, old people and pregnant women the risk is rather high.

WHAT HAS BEEN DONE SO FAR?

Considering the deplorable situation inherited from the past, the municipality of Tirana in cooperation with partners and donors has made considerable efforts in improving urban waste management.

The improvements in technical conditions at the Sharra dumpsite are considered to be examples. In 2005, the Municipality of Tirana undertook for the first time the initiative of drafting its first environmental strategy. EDEN center was the facilitator of this process. Management of urban waste is one of the five priorities of the Municipality's work for the coming three years.

Campaigns for reduce, reuse and recycling of paper waste have been developed in the meantime by EDEN in close cooperation with the municipality.

An awareness-raising campaign is run by young volunteers in 18 pilot streets of the city (business area) to dispose the waste in a well-specified time and separate the waste boxes (cartoons) in a separate place.

Also the separation and recycling of paper waste in more than one quarter of elementary schools has started by EDEN center, while the municipality and the recycling company have introduced it in the municipality, Parliament, Ministry of Defense, and some private banks.

As stated in the action plan, pilot project will be introduced also for the collection of plastic and glass.

RECOMMENDATIONS ABOUT SHARRA DUMP SITE

- Education system and all NGOs involved in environmental issues should make strong efforts to increase public awareness about the solid waste issue. This issue should especially, be widely discussed in the schools and by media.
- The burning of waste at either the Sharra dump site or nearby the resident houses must be stopped in order to reduce the source and spread of harmful substances.

- The entrance of the people and animals into the Sharra dump site should be prohibited.
- A monitoring programme of the air emissions at the dump site should be developed
- Waste recycling capacities should be increased and types of waste should be identified in order to limit the contamination of soil and groundwater
- Special taxes should be introduced for subjects whose activities produce waste considered as hazardous.
- Pilot projects should be started either by the municipality or by interested actors, (NGO can be the main actor) in:
 - Composting
 - Recycling of used car oil
 - Minimizing wastes
 - Reusing of glass bottles
 - Recycling of plastics
 - Separation and collection of batteries
 - Separation and collection of electronic means etc.

Annex 1. Levels of 17 dioxins (PCDD/Fs) congeners in a soil sample taken by UNEP from Sharra Landfill - September 18 – 2000. Source: UNEP Chemicals (2000b): Balkans Technical report – Analytical Results of UNEP Field Samples from Industrial Hot Spots in Albania; the report is available at:
http://enrin.grida.no/htmls/albania/reports/tech/docs/tec_anal.pdf
 Note: (* n.d.=not determined)

PCDD/F congener	WHO-TEF	Absolute	WHO-TEQ
		in pg/g dry matter	
2,3,7,8 TeCDD	1	0	0
1,2,3,7,8 PeCDD	1	0	0
1,2,3,4,7,8 HxCDD	0.1	1.2	0.12
1,2,3,6,7,8 HxCDD	0.1	2	0.2
1,2,3,7,8,9 HxCDD	0.1	1.1	0.11
1,2,3,4,6,7,8 HpCDD	0.01	12.9	0.129
OCDD	0.0001	26.1	0.00261
2,3,7,8 TeCDF	0.1	2	0.2
1,2,3,7,8 PeCDF	0.05	1.6	0.08
2,3,4,7,8 PeCDF	0.5	1.3	0.65
1,2,3,4,7,8 HxCDF	0.1	2.5	0.25
1,2,3,6,7,8 HxCDF	0.1	2.9	0.29
1,2,3,7,8,9 HxCDF	0.1	0	0
2,3,4,6,7,8 HxCDF	0.1	2.2	0.22
1,2,3,4,6,7,8 HpCDF	0.01	8.9	0.089
1,2,3,4,7,8,9 HpCDF	0.01	0	0
OCDF	0.0001	4.5	0.00045
PCDD/F		69.2	2.34106