

Pesticide waste in Albania

- Situation and new developments -

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Introduction and objectives

Pesticides situation in Albania

Before 1990, Albania has been importing a variety of pesticides from the former socialist countries through different sources of financing (grant, credit or barter trade). Structural and economic changes that took place during the 90s were associated with a reduction in the use of these pesticides, causing an accumulation of a significant stock of pesticides whose quality has deteriorated with time. Part of the pesticides imported from former East Germany was already sent back to Germany. Nevertheless, there are still 250 tonnes of expired and/or unusable pesticides stored in 18 different sites throughout Albania.

Considering the present storage conditions, and in particular the health and pollution problems which might result from a pesticide release to population and the environment, their safe disposal has become a major environmental concern. The obsolete pesticides are well identified and are stored in designated storage facilities with restricted access except for the district agricultural manager. However, all the storage facilities have been ceased/sold in the meantime to private parties.

Since Albania has no facilities for the environmentally sound disposal of obsolete pesticides, a project financed by the EU has just started. This project envisages shipping the obsolete pesticides to an EU member state, as previously agreed between the Albanian Ministry of Agriculture and Food (MoAF), the PHARE/PMU (Program Management Unit) and the EU Delegation in Tirana.

Another serious environmental problem, not further discussed within the contents of this project, but which needs urgent attention is the surrounding area of the former HCH-producing plant at Durres. Around this plant, which is at present totally abandoned and out of functioning, more than 700 tonnes of different toxic wastes like HCH and by-products of the HCH synthesis, intermediates for pesticides production and different active ingredients are creating a very grave and dangerous environmental situation!

Objectives

The objective of the project is to perform an operation in compliance with all UN, Basel Convention and EU regulations, especially 94/774/EC and 259/93 for:

- the safe repackaging of obsolete pesticides and pesticides wastes stored in 18 sites in Albania - the estimated quantity is 250 tonnes, of which 27 tonnes are liquid;
- the transboundary shipment of the waste in compliance with the relevant UN regulations such as the Basel Convention and EU regulations;
- the disposal of the waste in a government licensed facility in an EU member state.

Organisational structure of the project

PMU of the PHARE Program in Tirana will perform the project management on behalf of the contracting authority. The owner/generator of the waste is the Albanian Ministry of Agriculture and Food, Plant Protection Service Directorate (PPS). The Plant Protection Service will provide three experts who will assist the contractor in identifying the wastes stored at the sites and will render local support. An external expert, as supervisor, who will be contracted by the PMU especially for this project, will supervise all operations related with this project. The contractor shall designate the necessary key personnel to be recruited from his staff.

Description of the operation

General information

The pesticides wastes are stored in a total of 18 designated storage facilities.

The total amount of wastes stored is estimated to be 250 tonnes, of which 27 tonnes are liquid.

A list containing an inventory of the pesticides stored including their total amount is attached.

An inventory of type and amount of pesticides stored per site is available from the Plant Protection Service Directorate at the MoAF. The inventory of pesticides was established by the PPS and is provided for information only.

Repackaging of the pesticides waste

The original packaging of the pesticides existing at the storage sites has deteriorated with time so that the total quantity of pesticides will require a repackaging before shipment.

Clean up of storage sites

All the storage sites, floors, walls and surroundings are contaminated. All spilled liquid pesticides need to be collected using suitable absorbents.

Transboundary shipment

At present, two alternatives seem to be feasible for shipment of the pesticides wastes to their final destination:

1. Transport on chartered ship to Italy and further road transport through EU member states to final destination.
2. Sea transport to a harbour of the EU import state and road transport within that country to the disposal facility.

The Tenderer shall select the most suitable alternative, based on objective criteria, in particular security, required time and economical aspects.

Pesticides waste disposal

The disposal of the pesticide wastes will be executed in a facility located in an EU member state. The organic waste will be disposed of by high temperature incineration in a special hazardous waste incinerator, which is licensed for such work by the relevant national authorities.

Health and Safety plan

The complete action of collection and transportation out of Albania will be performed under a Health and Safety Plan, which includes the following information:

General information in relation to:

- Objectives of the project
- Duration
- Number of workers involved
- Description of the activities
- Identification of the specific risks based on the toxic effects of the pesticides wastes handled

Organisational Structure identifying:

- The participants
- General organisation of the activities
- Responsibilities
- Health and Safety Supervision
- Medical checks of the workers involved
- Registration of incidents
- First aid equipment on site
- Emergency plan, stating addresses and phone numbers of the nearest medical centre and fire brigade for each storage site

Protection against risks related with the general activities such as:

- Access restriction and signing of working areas
- Supply of electrical power
- Illumination (if considered necessary)
- Water supply and wastewater disposal
- Public service lines affected
- Sanitary Installations and black/white cabin
- Fire fighting equipment on site
- Prevention of specific risks, describing
- Rules and preventive measures
- Frequent risks
- General prevention measures
- Personal protection
- Prevention risk related with the use of the machinery and auxiliary tools, for each of the specific tasks: packing and loading, road transport, temporary storage and shipment.

Annex - Directory of plant protection pesticide inventory March 1999. Quality/Quantity evaluation

No	Items	Active ingredient	Quantity (kg)	Comment
1	AGROFOS	Parathion-etil	306	
2	ALAKLOR	Alachlor	764	
3	ANTHIO	Formothion	542	
4	ATRAZINE	Atrazine	75	
5	BACIL	Bac.turingensis	210	
6	BAYCOR	Bitertanol	25	
7	BENFORMALINE	Aldeyde formic	4	
8	BORAX	Boro	118	
9	BORDEAUX MIX.	Bordeaux-mix.	3,490	
10	BUMINAL	Proteine hidroliz.	512	
11	BUTOX	Deltamethrine	3	
12	Ca ARSENAT	Ca arsenate	77	
13	C. SULPHURE	Carbon.sulph.	1,230	
14	CHLORTOLURO	Chlorotoluron	480	
15	CIKOCEL	C.C.C	717	
16	CONSTANDINEL	-	400	
17	COPPER OXICH.	Copper oxichloride	1,630	
18	2.4-D	2.4-D	3,028	
19	DACTAL	Chlorthal dimethyl	460	
20	DALAPON	Dalapon	100	
21	DANITOL	Fenpropathrine	25	

22	DECIS	Decamethrine	55	
23	DEVRIKOL	Nepropamide	551	
24	DIAZIKON	Diazinon	275	
25	DIBUTOX	Dinoseb	50	
26	DICURAN	Chlorotoluron	5,039	
27	DIFENAMID	Difenamide	250	
28	DIKOTEX	MCPA	200	
29	DIMEKRON	Fosfamidone	78	
30	DINOSEB	Dinoseb	330	
31	DIPTEREX	Trichlorfon	3,722	
32	DODENE	Dodine	40	
33	DURIT	-	190	
34	DYREJT	-	110	
35	ENOVIT	Thiophanate methyl	45	
36	EPTAN	EPTC	5,050	
37	ETAZINE	Secbumeton	1,100	
38	FALIZAN	Phenil mecur acetat	331	
39	FASTAK	Alpha cypermethrin	11	
40	Fe SULPHATE	Fe sulphide	200	
41	FEKAMA	Adjuvant	80	
42	FILITOX	Methamidophos	400	
43	FLIBOL	Trichlorfon	150	
44	FOGARD	Atrazine	4,459	
45	FRUMIDOR	Thiofanate -Maneb	349	
46	FUNDAZOL	Benomyl	5	
47	GRANOZAN	N-ethylmercur...	2,000	
48	HOSTAQUICK	Heptenphos	27	
49	ILLOKSAN	Diclofop-methyl	314	
50	KAPTOPRIT	-	10	
51	KELTON	Dicofol	24	
52	KERB	Propysamide	10	
53	LASSO	Alachlor	1,685	
54	LEBAYCID	Fenthion	6	
55	LILSINE	-	4	
56	LINDANE	Lindane	160	
57	MAIZINE	Atrazine	150	
58	MALATHION	Malathion	366	
59	MELASE	-	286	
60	MELIPAKS	Camphechlor	3,722	

61	METHYL BROMI	Methyl bromide	200	
62	MITAK	Amitraze	50	
63	MIXTURE	-	53,673	
64	Na . ARSENATE	Na arsenate	2,950	
65	NEMASOL	Metam	50	
66	NOGOS	Dichlorvos	364	
67	NOVACRON	Monochrotofos	227	
68	OLIOVOFATOX	Parathion methyl	408	
69	OXAMYL	Oxamyl	20	
70	PATORAN	Metobromuron	40	
71	PIRECID	Piretrine natural	98	
72	PIRIMOR	Pirimicarb	29	
73	K .PERMANGAN	Kalium permang.	8,705	KMnO ₄
74	PROMETRINE	Prometrine	60	
75	RATITOX	Murfarine	44	
76	ROGOR	Dimethoate	15	
77	SELINON	DNOC	1,352	
78	SENKOR	Metribuzine	45	
79	SEVIN 50	Carbaryl	3	
80	SUFFIX	Flamprop isopropyl	200	
81	SULFAZOL	Sulphur	18,693	
82	SULPHUR	Sulphur	6,730	
83	SUMI-ALPHA	Sumicidine	25	
84	SUMICIDINE	Sumocidine	20	
85	SUMITHION	Fenithrothion	54	
86	SUPRACID	Methidathion	5	
87	T.M.T.D	TMTD	470	
88	TIODAN	Endosulfane	572	
89	TREFLAN	Trifluraline	734	
90	TRIBUNIL	Metabenzthiazuron	1,198	
91	VAPAM	Metam sodium	4,070	
92	VOFATOKS	Parathin methyl	84	
93	ZINEB	Zineb	2,105	
94	ZINOKSEVIN	Zineb+Carbaryl	325	
95	Simazine + Atrazine	Simazine + Atrazine	50,000	
96	Contaminated soil/other materials		50,000	
	TOTAL		249,648	