



ENVIRONMENTAL COMPANY OF SAO PAULO STATE – CETESB

REGIONAL CENTRE OF STOCKHOLM CONVENTION ON POPs FOR LATIN AMERICA AND THE CARIBBEAN REGION

V INTERNATIONAL TRAINING PROGRAM ON ENVIRONMENTAL SOUND MANAGEMENT ON CHEMICALS AND WASTES, ESPECIALLY ON PERSISTENT ORGANIC POLLUTANTS (POPs) AND MERCURY (Hg)

Disposal of banned pesticides: São Paulo State experience

2016

Sao Paulo – SP – Brazil



JBPP
PROGRAMA DE PARCERIA BRASIL-JAPÃO



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1. Stakeholders

Previous experience:

POPs disposed of by CDA /SAA (government) – 1998 to 2010

Compound	Quantity (KG)
Aldrina CAS 309-00-2	2
Dieldrina CAS 60-57-1	10
Endrina CAS 72-20-8	692
DDT CAS 50-29-3	320
Heptacloro CAS 76-44-8	370
Hexaclorociclohexano CAS 58-89-9	61.430
Não identificados	41.305
TOTAL	104.129

Source: CDA/SAA

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1. Institutionalization

Institutionalization: creation of a interdisciplinary working group

Formalização do GT: 28 de maio de 2009, por meio da Resolução Conjunta SMA/SAA – 2

União de esforços: representantes do poder público, indústrias, distribuidores, entidades de classe e usuários finais.

Objetivo: Elaborar Projeto Piloto, identificando seu custo, recomendações técnicas de acondicionamento, devolução, armazenamento temporário, ~~transporte e destinação~~ final a fim de dar a destinação adequada aos agrotóxicos obsoletos remanescentes no Estado de São Paulo.

* Only banned pesticides

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2. Stakeholders

Stakeholder	Sector
Secretaria da Agricultura/ CDA e CATI	Government (Agriculture) – public sector
Secretaria do Meio Ambiente/ CETESB	Government (Environment) – public sector
Associação Nacional das Distribuidoras de Insumos Agrícolas e Veterinários – ANDAV	Distributors (private sector)
Federação da Agricultura do Estado de São Paulo – FAESP	Farmers (private sector)
Instituto Nacional de Processamento de Embalagens Vazias – inpEV	Manufacturing industry (private sector)
Organização das Cooperativas do Estado de São Paulo – OCESP	Cooperatives (private sector)
Centro Regional da Convenção de Estocolmo sobre POPs para a região da América Latina e Caribe/ CETESB (<i>Guest member</i>)	Government (Environment) – public sector

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3. Working group methodology

- Multidisciplinary Approach;
- Team work;
- Shared responsibilities in the management of the project;
- Planning.

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4. Diagnosis/ inventory planning

Agrotoxicos Obsoletos x

www.agrotoxicosobsoletos.org.br/index.aspx

Primeiro

Campanha de Levantamento de Agrotóxicos Obsoletos no Estado de São Paulo

HOME HISTÓRICO SOBRE A CAMPANHA GRUPO DE TRABALHO INTERDISCIPLINAR MATERIAIS PARA CONSULTA PERGUNTAS E RESPOSTAS FALE CONOSCO IMPRENSA

PRODUTOR RURAL, NÓS PRECISAMOS DE VOCÊ.

Novo!
Etapa de destinação

SOBRE A CAMPANHA DE LEVANTAMENTO
A campanha teve como objetivo a realização de um levantamento da quantidade de agrotóxicos obsoletos proibidos por lei existentes nas propriedades rurais do Estado de São Paulo. Entre 30 de setembro de 2011 a 24 de julho de 2012, os agricultores

SOBRE A ETAPA DE DESTINAÇÃO
Durante a Campanha de Levantamento, foram entregues 327 declarações em 149 municípios, totalizando cerca de 270 toneladas de produtos armazenados em propriedades rurais de diversas regiões do estado. Para dar destino adequado a esses produtos, reduzindo riscos à

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4. Diagnosis/ inventory planning

Problem identification:

HISTORIC

- POP most commonly used in Brazil:
- gamma-HCH (gamma-Hexachlorocyclohexane) or lindane, particularly in the coffee and cotton crops.

- Manufacturing and use in Brazil:
- From the 40s, with HCH and DDT factories
- 70s, intensification of manufacture and use

- In Brazil, the HCH was commercially known as BHC

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4. Diagnosis/ inventory planning

Problem identification: when have these products been banned?

Was prohibited in the entire national territory, by Ordinance of the Ministry of Agriculture No. 329 of September 2, 1985, the manufacture, sale, distribution and use of organochlorine pesticides products, intended for farming

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4. Diagnosis/ inventory planning

Problem identification: what were the main consequences of the ban?

After the ban, lacked steps and procedures to provide appropriate destination for these products. So still are obsolete pesticide stocks in many farms, causing damage to public health and the environment.

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4. Diagnosis/ inventory planning

Problem identification: who is responsible for disposing of banned pesticides?

Because this is a matter of public health and environmental protection, proper disposal of these products in the interest of society as a whole;

The Convention of Stockholm recommends that the solution of this problem is shared between the government, industries, distributors, trade associations and end users.

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4. Diagnosis/ inventory



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4. Diagnosis/ inventory



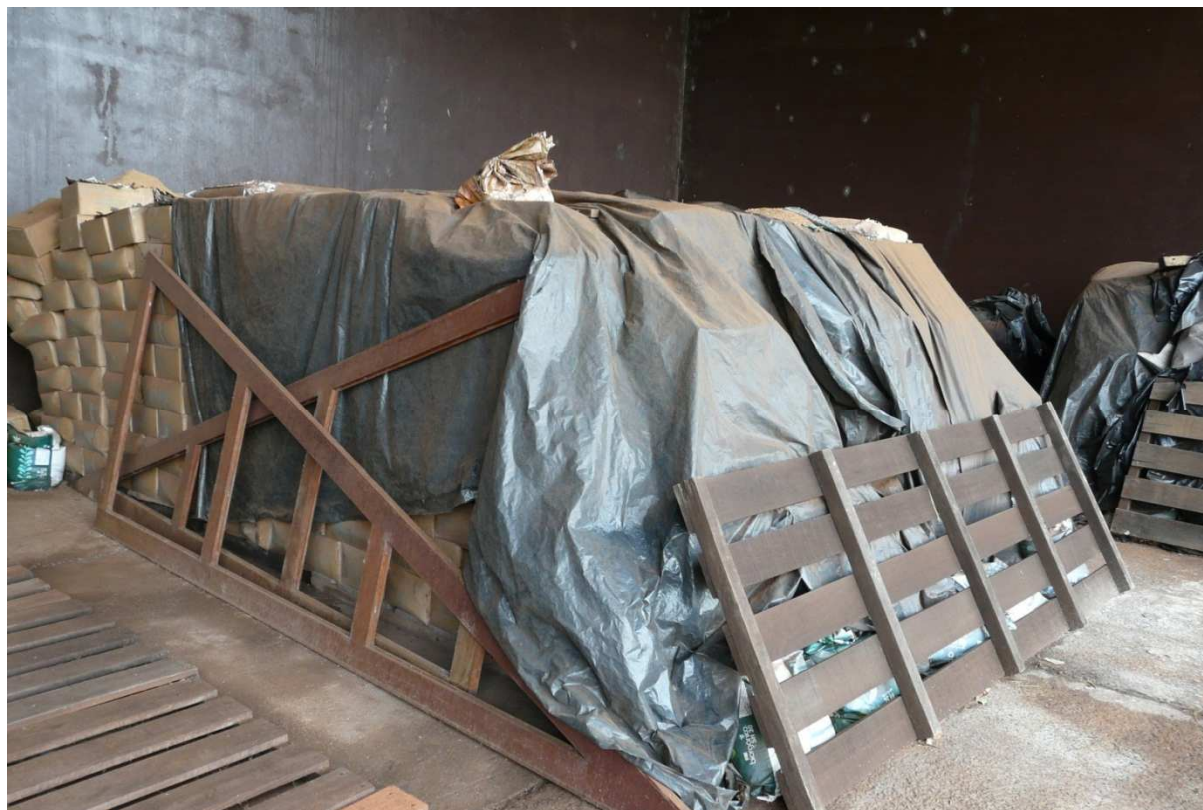
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4. Diagnosis/ inventory



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4. Diagnosis/ inventory



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4. Diagnosis/ inventory results

318 forms were declared about 270 tons of obsolete pesticides.

The statements contained amounts of information ranging from 0.5 kg to 60,000 kg, distributed in 123 municipalities in the state of São Paulo.

The quantities estimated to have been declared, it was necessary to make a check in the 52 largest claimants, which found a shift to more on the order of 50%, totaling approximately 420 tonnes to be designed properly.

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5. The final destination planning stage: criteria

- Minimize the handling of obsolete pesticides by farmers, covering the analysis of the cost of providing PPE and training;
- Optimizing transport routes, aiming at the reduction of transport accidents;
- Examine the need for use of temporary warehouses, the transport of products the properties to these warehouses and care for possible contamination;
- Reduce the risks inherent to the various activities of this alizando approximately 420 tonnes to be designed properly.etapa;

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5. The final destination planning stage: Scenarios

- Scenario 1 / Ideal - without manipulation of obsolete pesticides by farmers: all declared products would be removed from the property by independent experts;

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5. The final destination planning stage: Scenarios

- Scenario 2 - with handling small amounts of obsolete pesticides by farmers: 10 temporary warehouses in the state where the declarants with quantities less than 60 kg acondicionariam and lead products to these sites and larger amounts would be removed from the property by independent experts;

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5. The final destination planning stage: Scenarios

- Scenario 3 - with handling medium quantities of obsolete pesticides by farmers: 09 temporary warehouses where reporting less than 333 kg manipulate and lead products to these sites and the largest quantities would be removed from the property by a specialized company.

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5. Definition of scenario and division of responsibilities

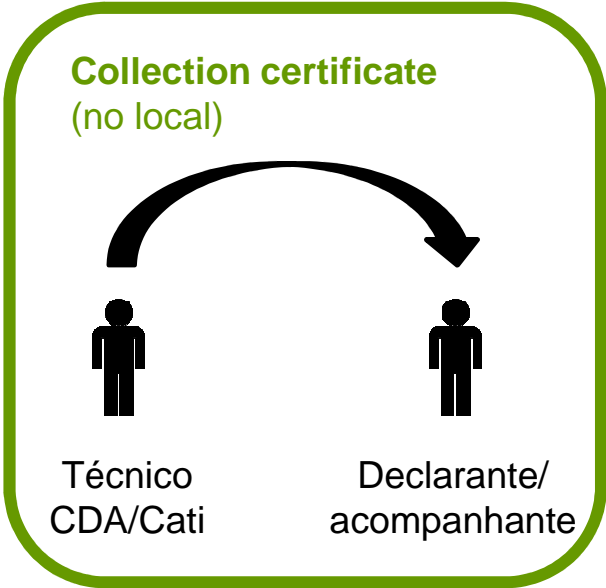
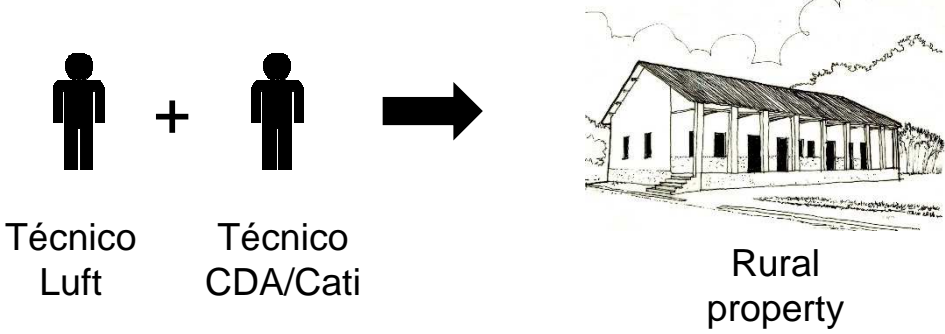
The scenarios were constructed and analyzed by the set of given criteria, and Scenario 1 / Ideal showed the greatest environmental benefit and cost appropriate to the resources available. That was the scenario adopted for the proper disposal of declared pesticides.

The members of the Working Group entities, aiming the importance of finalizing the project, shared the following responsibilities and their costs. The final cost of disposal of this project is of the same order of magnitude as the international similar project costs (about US \$ 4 / kg).

Process flow: collecting, packing, transportation and incineration

1) Scheduling

(técnico CDA/Cati agenda com o declarante)



2) Collecting, packing, transportation and incineration

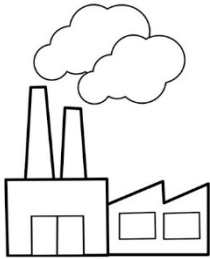
(acondicionamento com acompanhamento do técnico da CDA/Cati e do declarante/acompanhante)



Collect/ pack/ weigh



Transportation



Incineration

3-way Collection certificate

- 1ª Declarante
- 2ª CDA/Cati
- 3ª Luft

ATESTADO DE RETIRADA

BHC e outros agrotóxicos obsoletos proibidos por lei

Resolução Conjunta SMA/SAA Nº 002, 28/05/2009

Atestamos a retirada da propriedade rural _____

 de _____ kg, _____ kg
(quantidade por extenso)
 de agrotóxicos obsoletos proibidos por lei referentes às quantidades estimadas no(s) Formulário(s) de Declaração nº(s) _____ recebido(s) durante a Campanha de Levantamento, realizada entre 27/set/2011 e 24/jul/2012.

Nome	R.G.	Entidade/empresa	Assinatura
		Coord. de Assistência Técnica Integral - CATI	
		Coord. de Defesa Agropecuária - CDA	
		Propriedade rural	
		Transporte Luft Ltda.	

Local e data _____, _____ de _____ de 201_____.



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6. Summary of Critical Success Factors

- Choose the appropriate stakeholders.
- Institutionalize the work.
- Adopt a working methodology that is multidisciplinary, with the team working together and sharing the difficulties and successes, including the holders farmers of obsolete pesticides. Throughout the project the focus in planning must be a constant.

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6. Summary of Critical Success Factors

- In the diagnostic step, make a careful identification of the problem, design an appropriate collection instrument and establish reliable channels for the dissemination of project objectives.
- As for logistics, and meet all specifications for the collection, packaging, transport and incineration, pay special attention to the health of rural workers - who handle these products, public health and increasing the quality of the environment.

Thanks!

Grupo de Trabalho Interdisciplinar de Destinação Final de Agrotóxicos Obsoletos do Estado de São Paulo

São Paulo, January 18th, 2016.



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