

# GOOD PRACTICES IN THE SAFE HANDLING AND PROPER FINAL DISPOSAL OF PRECURSORS

# UNDERSECRETARIAT OF ADMINISTRATION AND CONTROL OF SCHEDULED SUBSTANCES SUBJECT TO SUPERVISION

DIRECTORATE OF ADMINISTRATION OF SCHEDULED  
SUBSTANCES SUBJECT TO SUPERVISION

**Organic Law for Comprehensive Prevention of the Socio-Economic Phenomenon of Drugs and Regulation and Control of the Use of Scheduled Substances Subject to Supervision**  
Official Gazette No. 615, October 26, 2015.



Whose object is, among others, regulation and control of scheduled substances subject to supervision.

**Art. 23.- Powers of the Technical Secretariat.-** The Technical Secretariat shall have the following powers:

<https://sistemas.ministeriodelinterior.gob.ec:8443/Sisalem/Reportes?accion=ReporteDocumentos&id=2>

## Powers

8.- To receive and **store** scheduled substances subject to supervision, upon judicial or competent authority's order, and to participate in their **destruction** in accordance with the Law

9.- To **donate** precursor chemicals or specific substances which are stored or confiscated in the Technical Secretariat for Drugs to public institutions, solely for scientific, research, training, medical and industrial purposes, for regulation and control effects.

## Regulations for the destruction of controlled substances subject to supervision

### **General Regulations to the Organic Law for Comprehensive Prevention of the Socio-Economic Phenomenon of Drugs and Regulation and Control of the Use of Scheduled Substances Subject to Supervision**

Official Gazette, Number 717, March 22, 2016. Last amendment: May 22, 2020

Status: Amended

---

### **The Regulation for the Control and Administration of Scheduled Substances Subject to Supervision**

Official Gazette, Number 157

Last amendment: March 9, 2020

---

### **Manual for the institutional use or donation, alienation and destruction of chemical precursors and specific chemical substances**

07/07/2020

## Regulations for the destruction of scheduled substances subject to supervision

### Comprehensive Organic Criminal Code (COIP, for its Spanish language acronym)

Official Gazette, Number 180 from Feb 10, 2014

Last amendment: March 29, 2023

Status: Amended

---

#### Art. 474

3. Within fifteen days of the start of the proceedings, the judge will order the destruction of the controlled substances subject to supervision that have been seized and are in storage, **unless they are raw materials, precursor chemicals, or other specific chemical products. In such cases, the competent authority in matters of controlled substances subject to supervision may, within sixty days of receipt, authorize their use or donation to a public sector entity, their alienation for lawful purposes, or their destruction. The donation or alienation shall be carried out in the manner determined by this authority and in favor of pre-qualified individuals or legal entities.**

# MISSION

The Ministry of Interior, through the Undersecretariat of Administration and Control of Scheduled Substances Subject To Supervision, the Directorate of Administration, with its 8 zonal coordination offices and 4 national technical offices, is responsible for the proper administration of scheduled substances subject to supervision.

- **Precursor chemicals and specific chemicals:** deposit, storage, **donation, alienation, destruction.**
- **Narcotics and Psychotropic substances (drugs):** deposit, storage, destruction





# Good practices in the handling and disposal of scheduled substances subject to supervision in Ecuador



# DEPOSIT - DESTRUCTION

SCHEDULED SUBSTANCES SUBJECT TO SUPERVISION

# DONATION

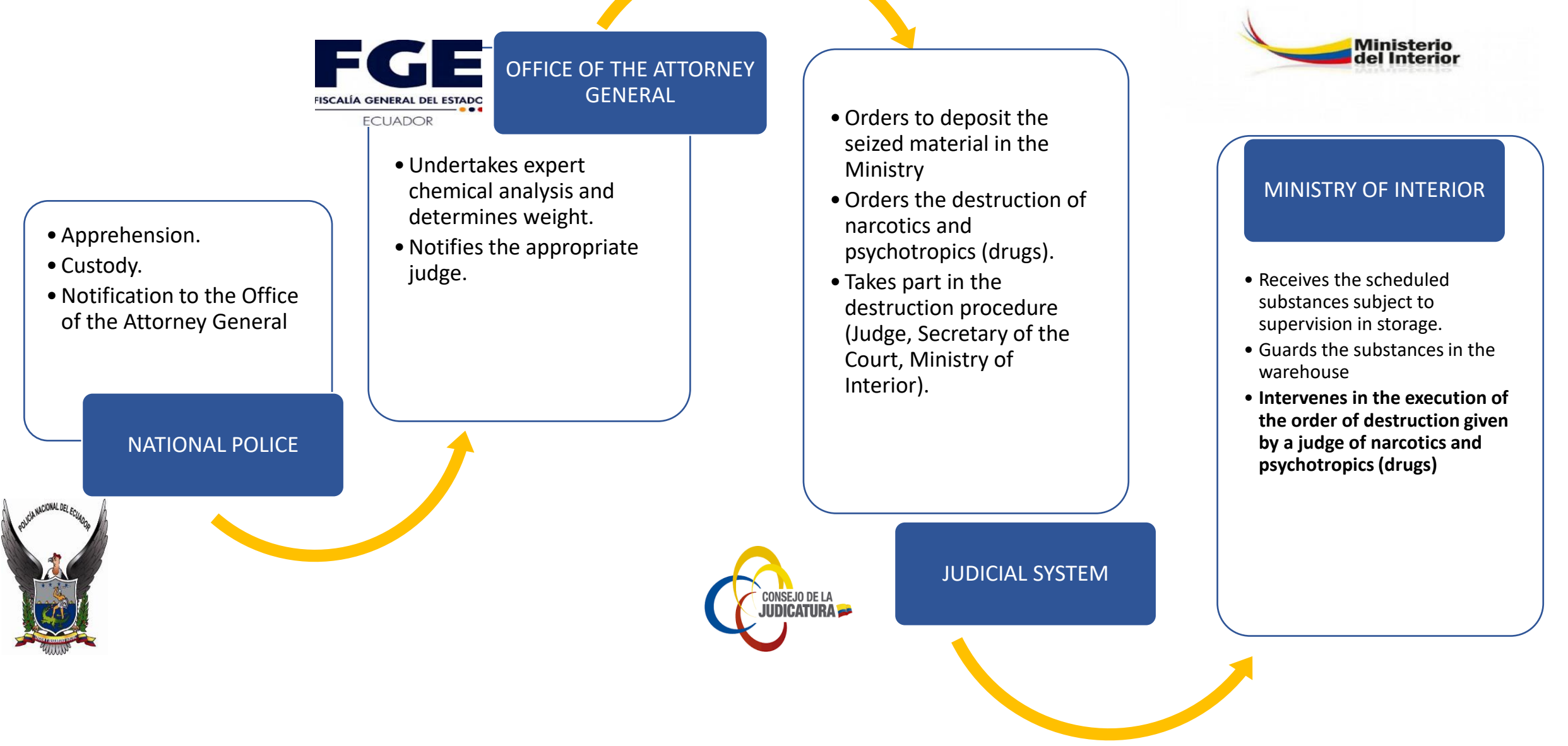
PRECURSOR CHEMICALS AND SPECIFIC CHEMICALS

# ALIENATION

PRECURSOR CHEMICALS AND SPECIFIC CHEMICALS



# PROCEDURE FOR THE DEPOSIT AND DESTRUCTION OF NARCOTICS AND PSYCHOTROPIC SUBSTANCES



# PROCEDURE FOR THE DEPOSIT AND DESTRUCTION OF PRECURSOR CHEMICALS AND SPECIFIC CHEMICALS



OFFICE OF THE ATTORNEY GENERAL

- Apprehension.
- Custody.
- Notification to the Office of the Attorney General

NATIONAL POLICE

- Undertakes expert chemical analysis and determines weight.
- Notifies the appropriate judge.

- Orders to deposit the seized material in the Ministry of Interior

JUDICIAL SYSTEM

MINISTRY OF INTERIOR

- Receives the scheduled substances subject to supervision in storage. Guards the substances in the warehouse
- **High-Level authority authorizes the donation, alienation and destruction of precursor chemicals and specific chemicals**



## DEPOSIT OF NARCOTICS AND PSYCHOTROPIC SUBSTANCES (DRUGS) 2022

- **212,288.16 kilograms, corresponding to 6,194 cases**

## DEPOSITS OF PRECURSOR CHEMICALS AND SPECIFIC CHEMICALS 2022

- **97,990.57 kilograms and 3,082.18 liters**

## DESTRUCTION OF NARCOTICS AND PSYCHOTROPIC SUBSTANCES (DRUGS) 2022

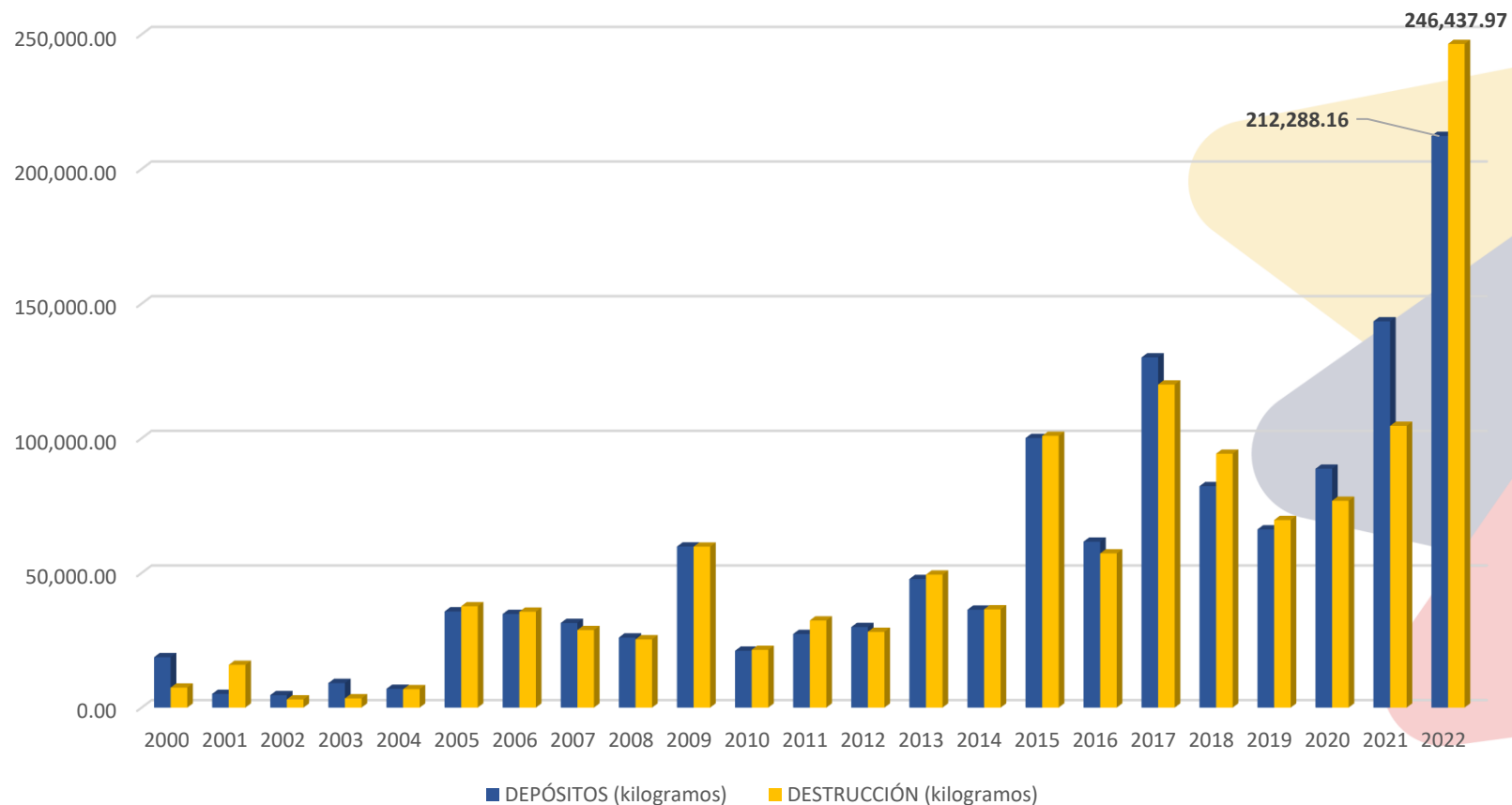
- **246,437.97 kilograms, corresponding to 5,594 cases**

## DESTRUCTION OF CHEMICAL PRECURSORS AND SPECIFIC CHEMICALS, 2022

- **58,245.02 kilograms, corresponding to 25 cases**

# AMOUNT OF NARCOTICS AND PSYCHOTROPIC SUBSTANCES STORED VS. DESTROYED 2000 AL 2022

Summary per year		
AÑO	DEPOSITS (kilograms)	DESTRUCTION (kilograms)
2000	18.722,58	7.437,08
2001	5.095,14	15.857,55
2002	4.604,85	3.031,49
2003	9.119,95	3.436,06
2004	6.963,42	6.826,70
2005	35.707,40	37.612,38
2006	34.762,22	35.588,82
2007	31.435,72	28.793,08
2008	26.006,90	25.339,96
2009	59.798,30	59.751,98
2010	21.117,00	21.429,72
2011	27.334,66	32.337,55
2012	29.911,04	28.136,93
2013	47.733,20	49.377,80
2014	36.355,63	36.482,26
2015	100.099,27	100.892,63
2016	61.620,95	57.244,31
2017	130.033,79	119.979,71
2018	82.212,58	94.266,43
2019	66.151,93	69.645,22
2020	88.679,23	76.772,47
2021	143.424,53	104.610,26
2022	212.288,16	246.437,97



**DEPOSIT**  
**SCHEDULED ACTIVITIES SUBJECT TO SUPERVISION**  
**FROM JANUARY TO 5/15/2023**

**NARCOTICS AND PSYCHOTROPIC SUBSTANCES**  
64,356.13 kilograms, corresponding to 2,041 cases

**CHEMICAL SUBSTANCES**  
40,203.19 kilograms, corresponding to 6 cases

# DESTRUCTION

**SCHEDULED SUBSTANCES SUBJECT TO SUPERVISION  
FROM JANUARY TO 5/15/2023**

## **NARCOTICS AND PSYCHOTROPIC SUBSTANCES**

69,426.23 kilograms, corresponding to 1,777 cases

## **CHEMICAL SUBSTANCES**

106,886.81 kilograms, corresponding to 25 cases





Ministerio  
del Interior

# DONATION



GUILLERMO LASSO  
PRESIDENTE

# DONATION PROCESS



Report the availability for the institutional use or donation of precursor chemicals and specific chemical substances.



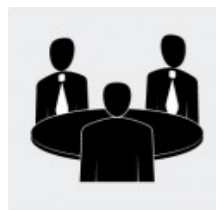
Request to publish the precursor chemicals and specific chemical substances available for institutional use or donation, on the institutional website.



Receive the request for institutional use or donation.



Verify the requirements of the request for institutional use or donation of chemical precursors and specific chemical substances.



Analysis of the availability and authorization for the handling of precursor chemicals and specific chemical substances, the requesting entity is informed of the result.



The requesting body is notified of the authorization or rejection of the institutional use or donation.







Ministerio  
del Interior

# ALIENATION



GUILLERMO LASSO  
PRESIDENTE

# alienation PROCESS



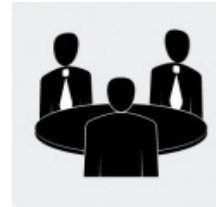
Report the list of precursor chemicals and specific chemical substances published on the institution's website for more than 60 days that have not been donated.



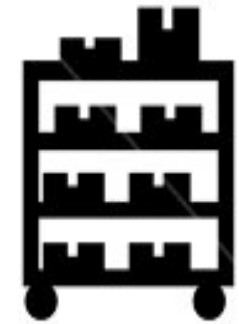
Prepare the preliminary analysis, request authorization, and authorize the alienation



Begin the alienation process



The commission will determine if the alienation is completed by public auction in a sealed envelope or direct alienation, per the provisions of the manual.



If there is a successful bidder, the delivery of precursor chemicals and specific chemical substances will be arranged.



Arrangement of the delivery of the substances and preparation of the delivery-receipt certificate, along with other supporting documents that certify the alienation of the precursor chemicals and chemical specific substances.

In case there are no bidders, the chemicals will be destroyed

Illustrated guide for the  
**Disposal of  
Chemicals used  
in the Illicit  
Manufacture  
of Drugs**



LABORATORY AND SCIENTIFIC SERVICES

© United Nations, July 2020. All rights reserved worldwide



# Personal Protective Equipments (PPE)

PPE is used to protect the worker from accidents and diseases. If controlling the identified hazard in its origin is not possible and the worker is exposed, the accurate and timely use of PPE is key for security and protection in case of an accident.



# Safe handling and transportation of chemical substances

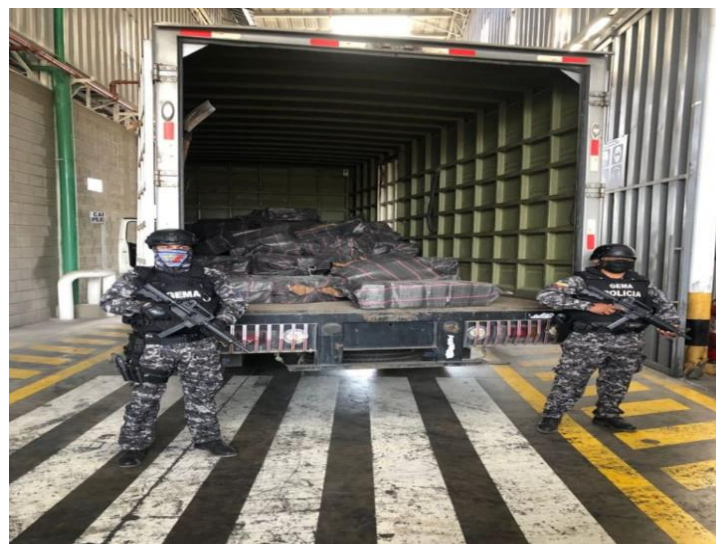
## ECUADORIAN TECHNICAL STANDARD - NTE INEN 2266:2013 TRANSPORTATION, STORAGE AND HANDLING OF DANGEROUS MATERIALS (REQUIREMENTS)

- 1.- Definitions
- 2.- Classification of dangerous substances
- 3.- Classification of containers
- 4.-Requirements





# SCHEDULED SUBSTANCES SUBJECT TO SUPERVISION STORAGE AND TRANSPORTATION





# THERMAL DEGASIFICATION INCINERATION

CAPACITY








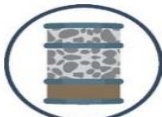




70 to 100  
kilograms / hour



# MEANS OF DESTRUCTION

- 1.- OPEN-AIR BURNING
- 2.- EVAPORATION
- 3.- COMPOSTING
- 4.- BURIAL
- 5.- INFILTRATION OF HARMLESS OR BIODEGRADABLE LIQUIDS
- 6.- ENCAPSULATION
- 7.- INERTIZATION
- 8.- NEUTRALIZATION

## Annex I. Summary of disposal symbols

Disposal method	Disposal symbol	Disposal method	Disposal symbol
Open-air burning of volatile solvents		Burial in landfill	
Open-air burning of combustible and semi-combustible liquids		Infiltration (soaking into soils) of non-hazardous liquids	
Open-air burning using a pit		Encapsulation (casing in cement)	
Evaporation		Rendering a substance inert	
Composting or bioremediation		Neutralization of acids	
Remote burial		Neutralization of bases	

## ANNEX

### C. CHEMICAL PRECURSORS AND SPECIFIC CHEMICAL SUBSTANCES



#### ● PRECURSOR CHEMICALS

EPHEDRINE  
PSEUDO EPHEDRINE  
ERGOT ALCALOIDS  
ERGOMETRIN  
ERGOMETRIN  
ERGOTAMINE  
LYSERGIC ACID  
0- AMINOBENZOIC ACID. (n-Anthranilic)  
1-PHENYL-2PROPANONE  
PHENYLACETIC ACID  
PIPERIDINE  
BENZYL CYANIDE  
BENZYL CHLORIDE  
3,4 METHYLENEDIOXY PHENYL-2-PROPANONE  
PHENYLPROPANOLAMINE  
n-ACETYL ANTHRANILIC ACID  
PIPERONAL  
SAFROL  
ISOSAFROL  
ALPHA-PHENYLACETOACETONITRILE (APAAN)

#### ● SPECIFIC CHEMICALS

ETHYL ACETATE  
ACETONE  
ACETIC ACID  
HYDROCHLORIC ACID  
SULFURIC ACID  
ISOBUTYL ALCOHOL  
ISOPROPYL ALCOHOL  
ACETIC ANHYDRIDE  
BENZENE  
**SODIUM BICARBONATE**  
POTASSIUM BICARBONATE  
POTASSIUM CARBONATE  
SODIUM CARBONATE  
**CALCIUM CHLORIDE**  
DICHLORO METHANE  
CARBON DISULFIDE

PETROLEUM ETHER\*  
ETHERETHYL/DIETHYL  
POTASSIUM HYDROXIDE  
LIQUID SODIUM HYDROXIDE  
SODIUM HYDROXIDE  
METHYL ETHYL KETONE  
METHYL ISOBUTYL KETONE  
n-HEXANE  
POTASSIUM PERMANGANATE  
SODIUM SULFATE  
TOLUENE  
TRICHOETHYLENE  
XYLENE

## Burial in landfill

Dstrucción de cloruro de calcio y bicarbonato de sodio en rellenos sanitarios



“The burial of chemical substances, especially innocuous solids, does not pose an environmental risk; therefore, it is a suitable method for its removal. According to the UNODC Illustrated Guide for the Disposal of Chemical Substances Used in the Illicit Manufacture of Drugs, for the burial of chemical substances it is recommended to unpack them and mix them with the soil to avoid their recovery.”



# BURIAL IN LANDFILL





# BURIAL IN LANDFILL

**Capacity:  
26,887.79 kilograms/hour**







Ministerio  
del Interior

# BURIAL



GUILLERMO LASSO  
PRESIDENTE



# IDENTIFICATION





# TRITURATION





## INERTIZATION

Inertization is the process of rendering a chemical substance inert or inactive so that it cannot be used again. This procedure renders the chemical substances or controlled substances unusable.



# ENCAPSULATION



**Capacity:**  
**700 a 1400**  
**kilograms/hour**



**Encapsulation is a type of waste immobilization that allows for the inertization of the disposed material, preventing its release into the environment and contamination.**

- **Drum encapsulation:** a relatively simple method for small and medium scale disposal.
- **Pit Encapsulation** – Also called “containment cell”, it is used for large-scale disposal



## CONTAINMENT CELL

The safety cell is composed of a plastic lining to prevent leachate and a technical coating for the construction of facilities. After each cell is filled, a layer of concrete is applied to form the floor and prevent waste manipulation within the cell.

In this way, the cell is utilized by constructing future storage warehouses.







Ministerio  
del Interior

# ENCAPSULATION INERTIZATION



GUILLERMO LASSO  
PRESIDENTE



# Thank you

Chemist Ernesto Cabezas Fiallo.  
Specialist 2  
Directorate of Administration of Scheduled Substances Subject to Supervision,  
[ernesto.cabezas@ministeriodelinterior.gob.ec](mailto:ernesto.cabezas@ministeriodelinterior.gob.ec)