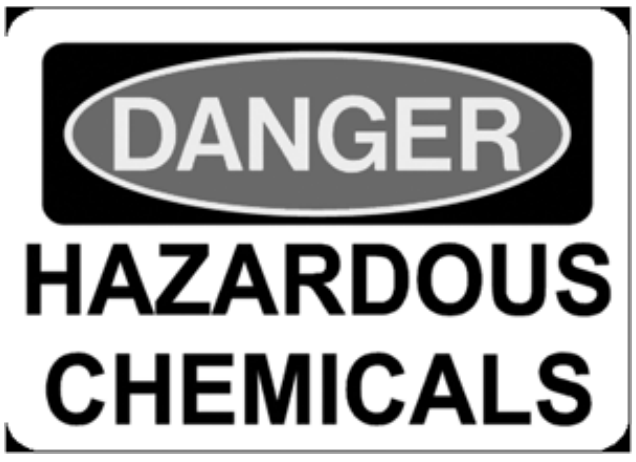
# OUR ENVIRONMENT OUR HERITAGE

# CHEMICALS AND HAZARDOUS WASTE MANAGEMENT

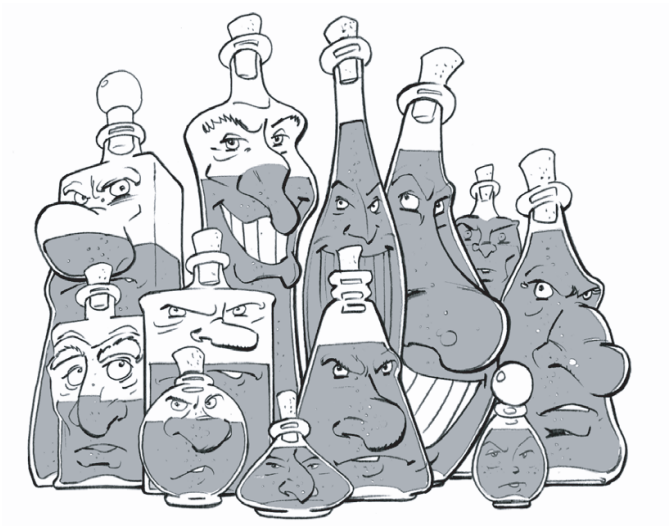


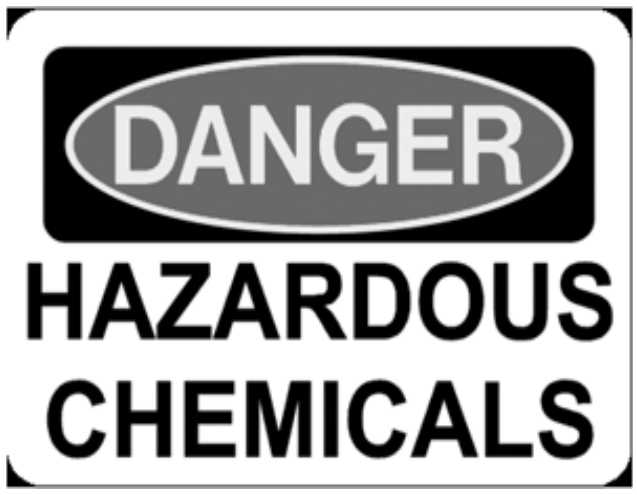

***DEVELOPMENTS:***

**a) POPS NATIONAL IMPLEMENTATION PLANS (NIPS)**

**Objective** - *"To eliminate or reduce the releases from production, uses, stockpiles ans wastes of the twelve (12) POPs identified as persistent"*

- 1.***Aldrin*** - A pesticide applied to soils to kill termites, grasshoppers, corn rootworm, and other insect pests.
- 2.***Chlordane*** - Used extensively to control termites and as a broad-spectrum insecticide on a range of agricultural crops.
- 3.***DDT*** - Perhaps the best known of the POPs, DDT was widely used during World War II to protect soldiers and civilians from malaria, typhus, and other diseases spread by insects. It continues to be applied against mosquitoes in several countries to control malaria.
- 4.***Dieldrin*** - Used principally to control termites and textile pests, dieldrin has also been used to control insect-borne diseases and insects living in agricultural soils.
- 5.***Dioxins*** - These chemicals are produced unintentionally due to incomplete combustion, as well as during the manufacture of certain pesticides and other chemicals. In addition,certain kinds of metal recycling and pulp and paper bleaching can release dioxins. Dioxins have also been found in automobile exhaust, tobacco smoke and wood and coal smoke.
- 6.***Endrin*** - This insecticide is sprayed on the leaves of crops such as cotton and grains. It is used to control mice, voles and other rodents.
- 7.***Furans*** - These compounds are produced unintentionally from the same processes that release dioxins, and they are also found in commercial mixtures of PCBs.
- 8.***Heptachlor*** - Primarily employed to kill soil insects and termites, heptachlor has also been used more widely to kill cotton insects, grasshoppers, other crop pests, and malaria carrying mosquitoes.
- 9.***Hexachlorobenzene (HCB)*** - HCB kills fungi that affect food crops. It is also released as a byproduct during the manufacture of certain chemicals and as a result of the processes that give rise to dioxins and furans. Its use as a solvent and industrial intermediary is not targeted by the Convention.
- 10.***Mirex*** - This insecticide is applied mainly to combat fire ants and other types of ants and termites. It has also been used as a fire retardant in plastics, rubber, and electrical goods.
- 11.***Polychlorinated Biphenyls (PCBs)*** - These compounds are employed in industry as heat exchange fluids, in electric transformers and capacitors, and as additives in paint, carbonless copy paper, sealants and plastics.
- 12.***Toxaphene*** - This insecticide, also called camphechlor, is applied to cotton, cereal grains, fruits, nuts, and vegetables. It has also been used to control ticks and mites in livestock.



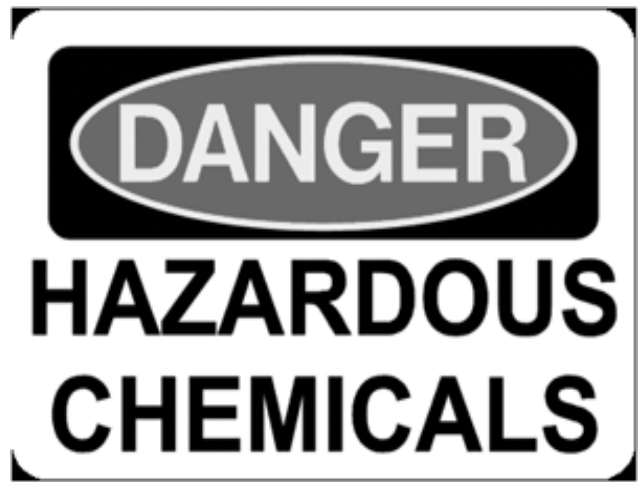



**Strategies of the NIP**

*1. Safeguarding against illegal Importation*

*2. Cleaning up on conataminated sites*

*3. Disposal of existing stockpiles*




*4. Reduction od Unintentional releases*

*5. Monitoring of other suspected sites*

*6. Public Awareness and Education*

*7. Building local capacity*

**SOURCES OF UNINTENTIONAL POPs**

-Dioxins and Furans

- Incomplete Combustion processes of vehicles and incinerators, industrial processes with no AIR POLLUTION CONTROL SYTEMS (APCS) and open burning (e.g. cooking).
- Waste Incinerators i.e. from fly ash
- Uncontrolled combustion
- Open and uncontrolled burning
- Power generation and heating
- Domestic heating and cooking
- Transportation: mainly from vehicle and 2 stroke engine emissions
- Miscellanaeous: dry cleaing and tobacco smoking
- Waste disposal, comsumer goods and metallurgical processes e.g. steel making, aluminium smelting and etc)


For more information contact our Environment & Conservation division - POPs section - DBS building - Level 5 - telephone 23800

# OUR ENVIRONMENT OUR HERITAGE

# CHILDREN'S CORNER

Children aged 9-14 are invited to answer the following corner. The name of 3 students with top scores at the end of every month will be posted under the "Children's Corner" for special prizes. *"Children's Environmentalist Star Award 2010"* will be given to 10 students with top total scores at the end of the year.

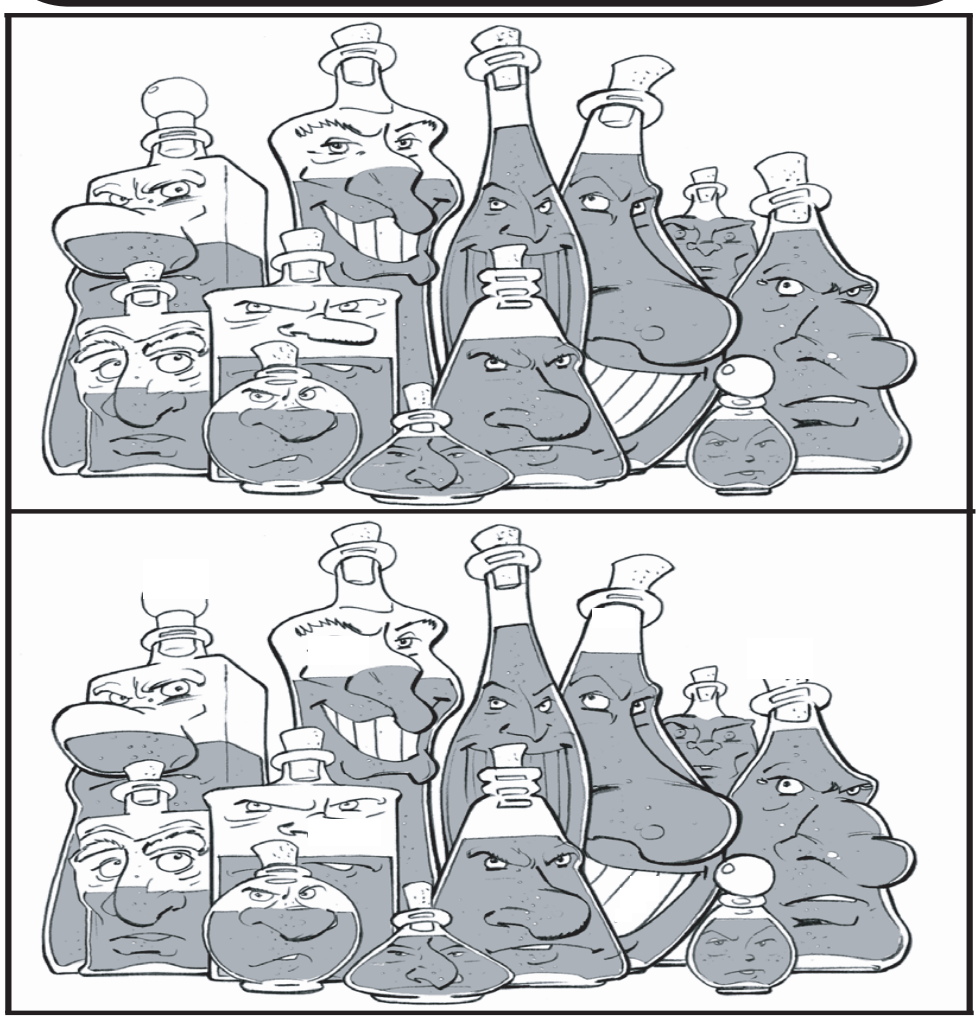
## FILL-IN-GAPS

Fill in the blank spaces with an approriate word

This _____ is sprayed on the leaves of crops such as cotton and grains. It is used to control ___, voles and other rodents. Primarily employed to kill soil insects and _____, heptachlor has also been used more widely to kill cotton insects, _____, other crop pests, and malaria carrying mosquitoes. These _____ are employed in industry as heat exchange fluids, in electric _____and capacitors, and as additives in paint, carbonless copy paper, seaplants and _____.

## FIND-THE-DIFFERENCES

Can you find the six differences???



## MATCH DEFINITIONS

Match the right POPs with its right definition

| | |
|---|---|
| Chlordane | A pesticide applied to soils to kill termites, grasshoppers, corn rootworm, and other insect pests. |
| Mirex | Used extensively to control termites and as a broad-spectrum insecticide on a range of agricultural crops. |
| Toxaphene | This insecticide is sprayed on the leaves of crops such as cotton and grains. It is used to control mice, voles and other rodents. |
| Aldrin | These compounds are produced unintentionally from the same processes that release dioxins, and they are also found in commercial mixtures of PCBs |
| Endrin | This insecticide is applied mainly to combat fire ants and other types of ants and termites. It has also been used as a fire retardant in plastics, rubber, and electrical goods. |
| Furans | This insecticide, also called camphechlor, is applied to cotton, cereal grains, fruits, nuts, and vegetables. It has also been used to control ticks and mites in livestock. |

HAPPY FATHER'S DAY
TO ALL
THE FATHER'S OF SAMOA!

From: CEO and Management

## CONGRATULATIONS

To our July winners - please uplift your prizes at our office next week - DBS Building - Level 3

- ★ Allenor Levi
- ★ Fogalele Hereme
- ★ Tyra Arp


## ACKNOWLEDGEMENTS

*We wish to acknowledge and thank the following companies for sponsoring prizes for our children's corner*

- → SAMOA STATIONERIES LTD
- → McDONALD'S RESTAURANT
- → AH LIKI'S WHOLESALE



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Government of Samoa