



UNEP



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of the United Nations**

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**Rotterdam Convention on the Prior Informed  
Consent Procedure for Certain Hazardous  
Chemicals and Pesticides in International Trade  
Chemical Review Committee**

Fourth meeting

Geneva, 10–13 March 2008

Item 5 (b) (v) of the provisional agenda\*

**Inclusion of chemicals in Annex III of the Rotterdam  
Convention: review of notifications of final regulatory  
action to ban or severely restricted a chemical: mirex**

## Mirex

### Note by the Secretariat

1. Article 5 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade provides that when the Secretariat has received at least one notification from each of two prior informed consent (PIC) regions regarding a particular chemical that it has verified meet the requirements of Annex I to the Convention it shall forward them to the Chemical Review Committee. The Committee shall review the information provided in such notifications and, in accordance with the criteria set out in Annex II, recommend to the Conference of the Parties whether the chemical in question should be included in Annex III and a decision guidance document drafted.
2. At its second meeting, the Chemical Review Committee reviewed one notification of final regulatory action related to mirex from North America (Canada). The Committee concluded that the notification met the requirements of the Rotterdam Convention. The rationale for the Committee's conclusion is set out in document UNEP/FAO/RC/CRC 4/7/Add.1.
3. The Secretariat has subsequently received one additional notification relating to mirex that meets the information requirements of Annex I from one PIC region (Latin America and Caribbean (Guyana)). A summary of that notification was included in PIC Circular XXVI of December 2007. The two notifications, as received from the notifying countries, are contained in the annex to the present note.

\* UNEP/FAO/RC/CRC.4/1

4. Where available, the supporting documentation provided by Guyana is set out in document UNEP/FAO/RC/CRC 4/7/Add.2.
5. A list of other notifications previously considered by the Chemical Review Committee is set out in document UNEP/FAO/RC/CRC.4/INF/5.

**Annex**

**Notification of final regulatory action for mirex from Canada**

**Notification of final regulatory action for mirex from Guyana**



**FORM  
FOR NOTIFICATION OF FINAL REGULATORY ACTION  
TO BAN OR SEVERELY RESTRICT A CHEMICAL**

**IMPORTANT:** See instructions before filling in the form

**COUNTRY:** Canada

**PART I: PROPERTIES, IDENTIFICATION AND USES**

<b>1. IDENTITY OF CHEMICAL</b>		
1.1	Common name	Mirex
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	Dodecachloropentacyclo [5.3.0.0 <sup>2,6</sup> .0 <sup>3,9</sup> .0 <sup>4,8</sup> ] decane
1.3	Trade names and names of preparations	GC-1283; ENT 25719; Dechlorane; Dechlorane 4070; Dechlorane Plus; C <sub>10</sub> Cl <sub>12</sub> ; Ferriamicide; HRS 1276; Bichlorendo
1.4	Code numbers	
1.4.1	CAS number	2385-85-5
1.4.2	Harmonized System customs code	
1.4.3	Other numbers (specify the numbering system)	RTECS PC8225000

**PLEASE RETURN THE COMPLETED FORM TO:**

Interim Secretariat for the Rotterdam Convention Plant Protection Service Plant Production and Protection Division, FAO Viale delle Terme di Caracalla 00100 Rome, Italy  Tel: (+39 06) 5705 3441 Fax: (+39 06) 5705 6347 E-mail: pic@fao.org	OR	Interim Secretariat for the Rotterdam Convention UNEP Chemicals  11-13, Chemin des Anémones CH - 1219 Châtelaine, Geneva, Switzerland  Tel: (+41 22) 917 8183 Fax: (+41 22) 797 3460 E-mail: pic@unep.ch
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<b>1.5 Indication regarding previous notification on this chemical, if any</b>	
1.5.1	<input checked="" type="checkbox"/> This is a first time notification of final regulatory action on this chemical.
1.5.2	<input type="checkbox"/> This is a modification of a previous notification of final regulatory action on this chemical. The sections modified are: _____
	<input type="checkbox"/> This notification replaces all previously submitted notifications on this chemical.
	Date of issue of the previous notification:

<b>1.6 Information on hazard classification where the chemical is subject to classification requirements</b>	
<b>International classification systems</b>	<b>Hazard class</b>
IARC	Group 2B: possible human carcinogen
<b>Other classification systems</b>	<b>Hazard class</b>

<b>1.7 Use or uses of the chemical</b>	
1.7.1	<input type="checkbox"/> <b>Pesticide</b> <b>Describe the uses of the chemical as a pesticide in your country:</b>
1.7.2	<input checked="" type="checkbox"/> <b>Industrial</b> <b>Describe the industrial uses of the chemical in your country:</b>
	Technical mirex contains approximately 95% mirex and 2.5% chlordecone. It has been used worldwide against fire ants, termites and other insect pests. However, mirex was never registered for use as an agricultural pesticide in Canada. It has mainly been used as a fire retardant agent in plastics, rubber, paint paper and electrical goods. It has also been used as a pyrotechnic for generating white smoke.

**1.8 Properties****1.8.1 Description of physico-chemical properties of the chemical**

Mirex occurs as white, odorless crystals.  
 Melting point: 485 °C  
 Vapour pressure:  $3 \times 10^{-7}$  mm Hg at 25 °C  
 Practically insoluble in water.  
 Soluble in dioxane, xylene, benzene, carbon tetrachloride, and methyl ethyl ketone.

**1.8.2 Description of toxicological properties of the chemical**

Data on the human health effects are not available. The primary organs affected by mirex in experimental animals are the liver, kidney, eyes, and thyroid.

**Acute Effects:**

- Diarrhea due to hemorrhagic intestines.
- Increase in hematocrit.
- Hepatic effects (adaptive and toxic effects).
- Dermal/ocular effects (hair loss, production of cataracts in very young, mild epidermal proliferation; in mice).
- Toxic effects to the thyroid.
- Adrenal gland hypertrophies and releases increased levels of corticosterone.
- Decreases in serum glucose levels.
- Decreases in body weight or body weight gain greater than 10 percent.
- Abnormal behaviour (lethargy, weakness, hyper-excitability, tremors, convulsions).

**Chronic Effects (Noncancer):**

- Renal effects.
- Decreases in body weight or body weight gain greater than 10 percent.
- Non-precancerous lesions of the liver

**Reproductive/Developmental Effects:**

- Reproductive and developmental effects in female and male rats.

**Genotoxicity:**

- No information available.

**Carcinogenicity:**

- An increased incidence of hepatocellular adenomas have been noted, but only in animals having hepatotoxicity.
- IARC has classified mirex as possibly carcinogenic to humans, based on sufficient evidence in animals, but inadequate evidence of carcinogenicity in humans.

**Data:**

LD<sub>50</sub> (rabbit, dermal): 800 mg/kg  
 LD<sub>50</sub> (male & female rat, dermal): > 2,000 mg/kg  
 LD<sub>50</sub> (rat, intraperitoneal): 365 mg/kg  
 LD<sub>50</sub> (rat, intraperitoneal (corn oil)): 700 ppm  
 LD<sub>50</sub> (mouse, intraperitoneal (corn oil)): 330 ppm  
 LD<sub>50</sub> (female rat, oral): 365 mg/kg to 600 ± 102 mg/kg

1.8.2	<p><b>Description of toxicological properties of the chemical (cont'd)</b></p> <p>LD<sub>50</sub> (female rat, oral (corn oil)): 600 mg/kg  LD<sub>50</sub> (male rat, oral (corn oil)): 740 mg/kg  LD<sub>50</sub> (male rat, oral): 306 ± 71 mg/kg  LD<sub>50</sub> (male &amp; female rat, oral (peanut oil)): &gt; 3,000 mg/kg  LD<sub>50</sub> (mouse, oral): 15 - 30 ppm (90 days)  LD<sub>50</sub> (female rat, oral): 6 mg/kg (90 days)  LD<sub>50</sub> (rat, oral): 100 ppm  LC<sub>50</sub> (female rat, oral): 275 ppm (30 days)  LC<sub>50</sub> (male rat, oral): 607 ppm (30 days)</p> <p><b>References:</b></p> <p>Contaminant Profiles, Mirex, Health Canada  (<a href="http://www.hc-sc.gc.ca/ehp/ehd/catalogue/bch_pubs/98ehd211/con_profiles.pdf">http://www.hc-sc.gc.ca/ehp/ehd/catalogue/bch_pubs/98ehd211/con_profiles.pdf</a>)</p> <p>Mirex, Environmental Health Criteria Document, Health and Welfare Canada, Health Protection Branch, 77-EHD-12, September 1977, 168 p.</p>
1.8.3	<p><b>Description of ecotoxicological properties of the chemical</b></p> <p><b>Acute Effects:</b></p> <ul style="list-style-type: none"> <li>• Data available suggest that mirex can be toxic to plants and unicellular organisms but probably at relatively high concentrations.</li> <li>• Avian species as a group appear to be relatively insensitive to the toxic effects of mirex.</li> <li>• Several marine species are extremely sensitive to mirex, particularly crayfish, crabs and shrimps. At concentrations of mirex as low as 0.1 µg/L toxic effects were noted in crayfish, shrimp and crab juveniles exposed for 3 weeks experimentally.</li> </ul> <p><b>Data:</b></p> <p>LD<sub>50</sub> (mallard duck, oral): 2,400 mg/kg  LD<sub>50</sub> (coturnix quail, oral): 10,000 ppm  LD<sub>50</sub> (pheasant, oral): 1,400 - 1,600 ppm  LD<sub>50</sub> (young male grackle, oral): 750 ppm (12 days)  LD<sub>50</sub> (adult male cowbird, oral): 750 ppm (12 days)  LD<sub>50</sub> (adult female red-winged blackbird, oral): 750 ppm (11 days)  LD<sub>50</sub> (young female starling, oral): 750 ppm (9 days)  LD<sub>50</sub> (quail, intraperitoneal): 300 mg/kg</p> <p><b>References:</b></p> <p>Mirex, Environmental Health Criteria Document, Health and Welfare Canada, Health Protection Branch, 77-EHD-12, September 1977, 168 p.</p>

**PART II: FINAL REGULATORY ACTION**

<b>2. FINAL REGULATORY ACTION</b>	
<b>2.1</b>	The chemical is: <input checked="" type="checkbox"/> banned OR <input type="checkbox"/> severely restricted
<b>2.2</b>	<b>Information specific to the final regulatory action</b>
<b>2.2.1</b>	<b>Summary of the final regulatory action</b> <p>These Regulations prohibit the manufacture, use, processing, sale, offering for sale and import of certain toxic substances, such as mirex, that appear on the list of toxic substances in Schedule I to the <i>Canadian Environmental Protection Act</i> (CEPA). These Regulations do not apply in respect of the manufacture, use, processing, sale, offering for sale or import of a prohibited substance for use in a laboratory for scientific research purposes or as a laboratory analytical standard.</p>
<b>2.2.2</b>	<b>Reference to the regulatory document</b> <p><i>Prohibition of Certain Toxic Substances Regulations (SOR/96-237) and Regulations Amending The Prohibition of Certain Toxic Substances Regulations (SOR/98-435) under the Canadian Environmental Protection Act.</i></p>
<b>2.2.3</b>	<b>Date of entry into force of the final regulatory action</b> <p>SOR/96-237: 30/4/1996  SOR/98-435: 26/8/1998</p>

<b>2.3</b>	<b>Was the final regulatory action based on a risk or hazard evaluation?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>If yes, give information on such evaluation</b> <p><u>Background</u></p> <p><u>Canada</u></p> <p>Mirex is specified on the List of Toxic Substances in Schedule I to the <i>Canadian Environmental Protection Act</i> (CEPA). The assessment of substances to determine if they are "toxic" under the CEPA is a shared responsibility of Environment Canada and Health Canada. Environment Canada assesses the environmental risks, and Health Canada assesses the human health risks. An assessment is conducted to determine if a substance is likely to harm the environment or the health of humans, taking into account the likelihood and magnitude of releases at levels occurring in the Canadian environment. Thus "toxic" in the context of CEPA is a function of both the inherent properties of a substance and the amounts, concentrations, or nature of entry of the substance in the Canadian environment.</p> <p>The assessment process thus provides a framework for making science-based decisions on the effective management of toxic substances that are of concern. The determination of whether or not a substance is "toxic" must be based on sound, scientifically reliable data. Under CEPA, a substance is toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that</p> <p>(a) have or may have an immediate or long-term harmful effect on the environment or its biological diversity;</p> <p>(b) constitute or may constitute a danger to the environment on which life depends; or</p> <p>(c) constitute or may constitute a danger in Canada to human life or health.</p>



**If yes, give information on such evaluation (cont'd)**

For substances determined to be "toxic", management options are identified and implemented, in consultation with stakeholders to reduce or eliminate the risks the substances pose to human health or the environment. Management strategies, which integrate socio-economic considerations, may include voluntary controls, process changes, substitutions, economic measures, regulations, guidelines, codes of practice, or a combination of these measures. It should be noted that the designation of a substance as "toxic" does not necessarily mean that controls will be imposed. Such decisions are made in a risk management phase that includes a judicious balancing of the risks and benefits associated with continued use of the substance.

International

In response to the increasing international awareness concerning the environmental and human health risks associated with certain persistent organic pollutants (POPs) mirex was identified as one of the priority substances for consideration in the negotiation of a Protocol for POPs under the United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution.

Due to increasing concern about the risks to human health and the environment posed by persistent organic pollutants, the United Nation Environment Programme (UNEP) has initiated a process to evaluate the need to develop a global legally-binding instrument for managing these substances. At the invitation of the UNEP Governing Council the Intergovernmental Forum for Chemical Safety (IFCS) submitted a report to the Governing Council for consideration in 1997. The report concluded that there was sufficient scientific knowledge to warrant immediate international action to protect human health and the environment and to develop a global legally binding instrument to that effect. Mirex was one of the initial 12 substances to be considered under this initiative.

Summary of Risk Assessment

The main sources of mirex in Canada are located in New York State (U.S.) in the Niagara River and the Oswego River where chemical manufacturing and fire retardant production plants were located. This transboundary movement of mirex into Canadian waters has resulted in contamination of fish and fish-feeding birds with the results that mirex contaminates several ecosystems in Canada. Mirex is biologically active, accumulates in food chains, is extremely persistent and dispersed in the environment.

Canadian human exposure to mirex is generally minimal except in the group partially or wholly dependent on a diet of fish or fish-eating birds from Lake Ontario and the St. Lawrence River. A second, very small, group at risk are those hunters that occasionally eat meals of game birds.

Sufficient data were not available to enable a meaningful calculation of either an acceptable or tolerable level of mirex in the Canadian environment with respect to wildlife and aquatic life. It should be noted that the U.S. EPA has set the maximum concentration of mirex permissible in water for fresh water and marine aquatic life at 0.001 µg/L. This value was obtained through the use of an application factor of 0.01 times the lowest concentration at which effects have been noted in crayfish, the most sensitive species tested.

**Reference to the relevant documentation**

Mirex, Environmental Health Criteria Document, Health and Welfare Canada, Health Protection Branch, 77-EHD-12, September 1977, 168 p.

Mirex in Canada, A report of the task force on mirex, April 1 1977 to the Environmental Contaminants Committee of Fisheries & Environment Canada and Health & Welfare Canada, Technical Report 77-1, 153 p.

<b>2.4</b>	<b>Reasons for the final regulatory action</b>	
<b>2.4.1</b>	<b>Is the reason for the final regulatory action relevant to the human health?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers</b>	
	In humans, mirex is stored mainly in fat tissue, where it is not broken down. Mirex has been demonstrated to cause cancer in experimental animals and possibly carcinogenic to humans.	
	<b>Reference to the relevant documentation</b>	
	Mirex, Environmental Health Criteria Document, Health and Welfare Canada, Health Protection Branch, 77-EHD-12, September 1977, 168 p.	
	<b>Expected effect of the final regulatory action</b>	

<b>2.4.2</b>	<b>Is the reason for the final regulatory action relevant to the environment?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>If yes, give summary of the known hazards and risks to the environment</b>	
	<p>Quantitative information describing the persistence of mirex is limited. However, the available information consistently indicates that the substance is persistent in the environment. For example, 12 years after its application to a clay soil, 50% of the mirex originally applied was recovered as mirex and mirex-related compounds with mirex representing between 65-70% of the total residues. Mirex decomposition in the environment takes place chiefly by photolysis. Anaerobic decomposition by microorganisms can occur, but it is not extensive. Mirex is also recognized to be subject to long-range transport and has been demonstrated to persist in sediment. On the basis of the available information, it was concluded that mirex is persistent in the environment.</p> <p>Mirex can accumulate in living tissues. In experimental work with aquatic organisms, all species at all trophic levels have been found to accumulate this substance. Bioaccumulation factors of 15,000 and 51,000 have been observed in lake trout captured in Lake Ontario and fathead minnows. A comparison of concentrations of mirex in lake trout, a predator species, with those in smelt, a prey species, gives a ratio of 1.26, indicating that biomagnification is occurring. A biomagnification factor of <math>10^8</math> for mirex between its concentration in water of Lake Ontario and the St. Lawrence River and in beluga whale oil has been reported.</p> <p>In experimental studies with birds mirex has been shown to accumulate particularly in fatty tissues. A study showed that mirex fed to roosters accumulated to about 100 times the concentration in the feed in thirty-two weeks. When the roosters were given clean food the mirex residues slowly decreased. Similar studies were conducted on mammals with similar findings. On the basis of the available information, it was concluded that mirex is a bioaccumulative substance.</p>	
	<b>Reference to the relevant documentation</b>	
	Mirex, Environmental Health Criteria Document, Health and Welfare Canada, Health Protection Branch, 77-EHD-12, September 1977, 168 p.	
	Mirex in Canada, A report of the task force on mirex, April 1 1977 to the Environmental Contaminants Committee of Fisheries & Environment Canada and Health & Welfare Canada, Technical Report 77-1, 153 p.	
	<b>Expected effect of the final regulatory action</b>	

<b>2.5 Category or categories where the final regulatory action has been taken</b>	
<b>2.5.1</b>	<b>Final regulatory action has been taken for the chemical category</b> <input checked="" type="checkbox"/> <b>Industrial</b>
	<b>Use or uses prohibited by the final regulatory action</b> All uses other than those specified below are prohibited.
	<b>Use or uses that remain allowed</b> For use in a laboratory for scientific research purposes or as a laboratory analytical standard.

<b>2.5.2</b>	<b>Final regulatory action has been taken for the chemical category</b> <input type="checkbox"/> <b>Pesticide</b>
	<b>Formulation(s) and use or uses prohibited by the final regulatory action</b>
	<b>Formulation(s) and use or uses that remain allowed</b>

<b>2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.</b>		
	<b>Quantity per year (MT)</b>	<b>Year</b>
<b>Produced</b>	never manufactured in Canada	
<b>Imported</b>	146 metric tonnes	1963-1976
<b>Exported</b>		
<b>Used</b>		

<b>2.6</b>	<b>Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions</b>

<b>2.7</b>	<b>Other relevant information that may cover:</b>
<b>2.7.1</b>	<p data-bbox="228 195 1206 233"><b>Assessment of socio-economic effects of the final regulatory action</b></p> <p data-bbox="228 258 1471 453">The Task Force on mirex recommended formal control for the importation and use of mirex. The Task Force considered there were no uses for which mirex was indispensable in Canada. There were substitute materials for the main uses of mirex. In fact, at the time of the investigation, mirex was probably no longer marketed in Canada nor stockpiled. Therefore its use could be prohibited, as a preventative measure, without major economic or social disruption and without increasing the risk of fire hazard to the public from products that require fire retardant additives.</p>
<b>2.7.2</b>	<p data-bbox="228 485 1206 522"><b>Information on alternatives and their relative risks</b></p> <p data-bbox="228 548 1471 705">Fire retardancy in compositions formerly including mirex has been achieved through the use of substitutes or through the use of alternative plastics technology. The Task Force on mirex recognized however that there was a need to assess the hazard of substitute materials particularly the other organochlorine Dechloranes and their transformation products. No information on such assessment was found since the publication of the Task Force's report (April 1977).</p>
<b>2.7.3</b>	<p data-bbox="228 741 1206 779"><b>Relevant additional information</b></p> <p data-bbox="228 804 1471 905">The federal <i>Toxic Substances Management Policy</i> was released in June 1995. The policy guides federal regulatory and non-regulatory programs by defining the ultimate management objective for a substance. The key management objectives in the policy are:</p> <ul data-bbox="228 930 1471 1150" style="list-style-type: none"> <li>• virtual elimination from the environment of toxic substances that result predominantly from human activity and that are persistent and bioaccumulative (referred to in the policy as Track 1 substances). Virtual elimination is defined as the reduction of releases of a substance to below a concentration that can be accurately measured ("level of quantification"); and</li> <li>• management of other toxic substances and substances of concern, throughout their entire life cycles, to prevent or minimize their release into the environment (referred to in the policy as Track 2 substances).</li> </ul> <p data-bbox="228 1176 1471 1276">Mirex was found to be a Track 1 substance and as such is to be virtually eliminated from the environment. However, no new action was taken as it was considered to be already adequately managed with the Regulations.</p>

**PART III : GOVERNMENT AUTHORITIES**

<b>Ministry/Department and authority responsible for issuing/enforcing the final regulatory action</b>	
<b>Institution</b>	Environment Canada Environmental Protection Service Commercial Chemicals Evaluation Branch Chemicals Control Division
<b>Address</b>	Place Vincent Massey Ottawa, Ontario K1A 0H3
<b>Telephone</b>	(819) 994-3648
<b>Telefax</b>	(819) 994-0007
<b>E-mail address</b>	Bernard.Made@ec.gc.ca
<b>Designated National Authority</b>	
<b>Institution</b>	Environment Canada Environmental Protection Service Commercial Chemicals Evaluation Branch
<b>Address</b>	Place Vincent Massey Ottawa, Ontario K1A 0H3
<b>Name of person in charge</b>	John Buccini
<b>Position of person in charge</b>	Director
<b>Telephone</b>	(819) 997-1499
<b>Telefax</b>	(819) 953-4396
<b>E-mail address</b>	John.Buccini@ec.gc.ca

Date, signature of DNA and official seal: John Buccini 17/05/2000



# ROTTERDAM CONVENTION

SECRETARIAT FOR THE ROTTERDAM CONVENTION  
ON THE PRIOR INFORMED CONSENT PROCEDURE  
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES  
IN INTERNATIONAL TRADE



## FORM FOR NOTIFICATION OF FINAL REGULATORY ACTION TO BAN OR SEVERELY RESTRICT A CHEMICAL

Country:

Guyana

### SECTION 1

### IDENTITY OF CHEMICAL SUBJECT TO THE FINAL REGULATORY ACTION

1.1 Common name

Mirex

1.2 Chemical name according to  
an internationally  
recognized nomenclature  
(e.g. IUPAC), where such  
nomenclature exists

1,1a,2,2,3,3a,4,5,5a,5b,6 dodecachloroacta  
hydro 1,3,4 metheno 1H  
cyclobuta[cd]pentalene

1.3 Trade names and names of  
preparations

1.4 Code numbers

1.4.1 CAS number

2385-85-5

1.4.2 Harmonized System  
customs code

3808.50

1.4.3 Other numbers  
(specify the numbering  
system)

Not Applicable

**1.5 Indication regarding previous notification on this chemical, if any**

1.5.1  This is a first time notification of final regulatory action on this chemical.

1.5.2  This notification replaces all previously submitted notifications on this chemical.

Date of issue of the previous notification: \_\_\_\_\_

**SECTION 2**

**FINAL REGULATORY ACTION**

2.1 The chemical is:  banned OR  severely restricted

**2.2 Information specific to the final regulatory action**

2.2.1 Summary of the final regulatory action

Pesticides and Toxic Chemicals Control (Prohibited Pesticides) Order No. 22 of 2006 made under the Pesticides and Toxic Chemicals Control Act 2000 (No 13 of 2000) prohibits the importation, sale and use of Mirex or any substance in any form containing Mirex.

2.2.2 Reference to the regulatory document, e.g. where decision is recorded or published

The Official Gazette (Legal Supplement) - B dated 18<sup>th</sup> November 2006.

2.2.3 Date of entry into force of the final regulatory action

10<sup>th</sup> day of October 2006

2.3 Category or categories where the final regulatory action has been taken

2.3.1 All use or uses of the chemical in your country prior to the final regulatory action

No known use of the chemical in Guyana prior to the final regulatory action.

2.3.2 Final regulatory action has been taken for the category

Industrial

Use or uses prohibited by the final regulatory action

Use or uses that remain allowed (only in case of a severe restriction)

2.3.3 Final regulatory action has been taken for the category

Pesticide

Formulation(s) and use or uses prohibited by the final regulatory action

All formulation or preparation and all use prohibited by the final regulatory action.

Formulation(s) and use or uses that remain allowed  
(only in case of a severe restriction)



2.4 Was the final regulatory action based on a risk or hazard evaluation?  Yes

No (If no, you may also complete section 2.5.3.3)

2.4.1 If yes, reference to the relevant documentation, which describes the hazard or risk evaluation

Mirex is anticipated to be a human carcinogen and is persistent in the environment.

2.4.2 Summary description of the risk or hazard evaluation upon which the ban or severe restriction was based.

2.4.2.1 Is the reason for the final regulatory action relevant to human health?  Yes

No

If yes, give summary of the hazard or risk evaluation related to human health, including the health of consumers and workers

IARC has shown that mirex exhibits carcinogenicity in experimental animals.

Expected effect of the final regulatory action

Reduce or no exposure to mirex by humans and animals.

2.4.2.2 Is the reason for the final regulatory action relevant to the environment?  Yes

No

If yes, give summary of the hazard or risk evaluation related to the environment

Expected effect of the final regulatory action

**2.5 Other relevant information regarding the final regulatory action**

**2.5.1 Estimated quantity of the chemical produced, imported, exported and used**

	Quantity per year (MT)	Year
produced	Nil	-
imported	Nil	-
exported	Nil	-
used	Nil	-

**2.5.2 Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions**

Not applicable

**2.5.3 Other relevant information that may cover:**

**2.5.3.1 Assessment of socio-economic effects of the final regulatory action**

None expected since this product has not been used in the country for at least twenty years.

**2.5.3.2 Information on alternatives and their relative risks, e.g. IPM, chemical and non-chemical alternatives**

None

**2.5.3.3 Basis for the final regulatory action if other than hazard or risk evaluation**

None

2.5.3.4 Additional information related to the chemical or the final regulatory action, if any

None

### SECTION 3 PROPERTIES

3.1 Information on hazard classification where the chemical is subject to classification requirements

International classification systems  
e.g. WHO, IARC, etc.

Hazard class

WHO	0

Other classification systems  
e.g. EU, USEPA

Hazard class


3.2 Further information on the properties of the chemical

3.2.1 Description of physico-chemical properties of the chemical

Mirex is a white, odourless, nonflammable crystalline solid; insoluble in water but soluble in some organic solvents.

Reference

The Pesticide Manual 12<sup>th</sup> Edition - Edited by CDS Tomlin.

3.2.2 Description of toxicological properties of the chemical

Product listed under the Stockholm Convention as persistent.

Reference

Stockholm Convention

3.2.3 Description of ecotoxicological properties of the chemical

Product listed under the Stockholm Convention as Persistent organic pollutants.

Reference

Stockholm Convention

**SECTION 4**

**DESIGNATED NATIONAL AUTHORITY**

Institution

Pesticides and Toxic Chemicals Control Board

Address

2<sup>nd</sup> Flat, 18 Brickdam, Stabroek, Georgetown, Guyana.

Name of person in charge

Basudeo Dwarka

Position of person in charge

Registrar, Pesticides and Toxic Chemicals

Telephone

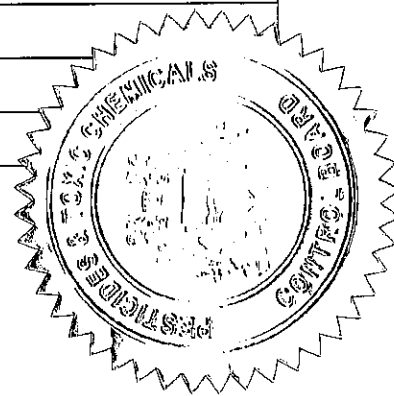
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AUG 20 2007

Date, signature of DNA and official seal: