Pilot Study On International Information Exchange On Dioxins and Related Compounds



Inventory of Regulations/Statutes
Concerning Dioxins and Related Compounds

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North Atlantic Treaty Organization
Committee on the Challenges of Modern Society

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INVENTORY OF REGULATIONS/STATUTES CONCERNING DIOXINS AND RELATED COMPOUNDS

1. INTRODUCTION

This report contains a compilation and analysis of regulations and statutes in participating nations that may be used to control dioxins and related compounds. Many participating countries have national regulations and statutes, as well as some regulatory mechanisms at lesser political jurisdictions, to control the release of or exposure to these compounds. This inventory contains numerous regulations, which vary in scope from specific concentration limits to general guidelines for the control of these compounds in the environment. A series of graphical representations that illustrate and summarize the information on the regulations/statutes is included. An index summarizing the descriptions of the regulations in each nation is also presented at the end of the report to facilitate the identification of specific regulations/statutes.

The objective of compiling and analyzing regulations is to demonstrate the importance that has been placed on these chemicals in the participating nations and to promote the exchange of information regarding their regulation. In numerous instances, several nations have promulgated very similar laws, regulations, or statutes pertaining to dioxins and related compounds through specific exposure routes. Some of the objectives of this inventory were to demonstrate how different nations approach the regulatory process for the control of these compounds and to facilitate the examination of the science-policy decisions which lead to regulatory action. One step that has been taken to provide consistency in regulation throughout the nations was the development of the International Toxicity Equivalency Factor (I-TEF). The I-TEF provides a common ground upon which risk assessments and regulations concerning complex mixtures of dioxins and furans can be based. A more detailed description of the I-TEF can be found in CCMS Report Number 176.

The international exchange of information on regulations also served to highlight future areas of concern and future research activities. For example, many regulations require the development or use of specific

analytical methods for enforcement purposes. Additionally, research activities relating to the risk of these compounds and their control through various technologies are stimulated in areas associated with the regulations. As a result, the identification of regulatory activities planned for the future may provide insight into future resource allocations for research.

1.1 Background

This Pilot Study on International Information Exchange on Dioxins and Related Compounds coordinated an international effort to address issues associated with polychlorinated dibenzo-p-dioxins (PCDDs), dibenzofurans (PCDFs), and related compounds. The 3-year project was conducted under the auspices of the Committee on the Challenges of Modern Society (CCMS) of the North Atlantic Treaty Organization (NATO). The nations that participated included Canada, Denmark, Federal Republic of Germany, Italy, Netherlands, Norway, United Kingdom, and the United States. In addition to the major information exchange objective, secondary goals included the reduction of research program duplication and the identification of knowledge voids during the planning process. As a result, better informed decisions can be made concerning future research activities and resource allocations. When the project was initiated in 1985, it was divided into three areas of study: exposure and hazard assessment, technology assessment, and management of accidents.

The Exposure and Hazard Assessment Working Group, chaired by the United States, was charged with several tasks concerning research and risk assessment. Numerous information exchange activities were undertaken to promote interaction and to identify duplicative efforts and knowledge voids. Some of these activities included the compilation, analysis, and distribution of information on research projects, laboratories with analytical capabilities for dioxins and related compounds, and methods of risk and exposure assessment in the participating nations. In addition, the working group decided to develop an inventory of regulations and statutes in the participating nations that are used to control dioxins and related compounds.

METHOD OF COMPILATION

During the Plenary meeting in Bayreuth in 1985, it was decided that a survey of the existing regulations and statutes in the participating nations that address dioxins would be a valuable exercise and would contribute to the international information exchange objectives of the project. To compile the inventory, requests for information were sent to the lead delegates of the participating nations. At the time at which the Committee on the Challenges of Modern Society adopted this pilot study, each NATO-member nation interested in participating appointed a lead delegate to coordinate and administer the project for his or her country. The following NATO-member nations appointed lead delegates: Canada, Denmark, Federal Republic of Germany, Italy, Netherlands, Norway, United Kingdom, and United States.

The requests asked for information on regulations or statutes that may involve the control of dioxins, furans, and related compounds. Each lead delegate was asked to complete the regulatory formats provided. In addition, an instruction sheet was included to facilitate the accurate and complete transfer of information on the laws, regulations, and statutes addressing dioxins and related compounds. Examples of the blank regulatory formats and the accompanying instruction sheet are included as Figures 1 and 2. The information requested included: (1) title of regulation, (2) the citation to record, (3) the effective date or status, (4) a brief summary of the scope, and (5) the contact person or lead agency responsible for the regulation or statute. Generally, the lead delegates from each nation were responsible for completing the regulatory formats on the federal regulations/statutes as well as those on smaller political jurisdictions.

In the United States, an intense solicitation was carried out to contact federal agencies and state governments regarding the regulation of these compounds. To identify all of the federal regulations that address dioxins and related compounds, a comprehensive survey of the major federal agencies and departments was undertaken. Although the U.S. Environmental

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

	COUNTRY:
TITLE OF REGULATION:	
CITATION TO RECORD:	
Status:	
BRIEF SUMMARY OF SCOPE:	
CONTACT PERSON AND AGENCY:	

INSTRUCTIONS

CCMS/NATO PROJECT ON INTERNATIONAL INFORMATION EXCHANGE ON DIOXINS AND RELATED CHEMICALS

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Indicate the name of the

responding country. Please indicate the level of regulatory governing body (i.e. state, county, etc.)

TITLE OF REGULATION:

List the title of the regulation or statute exactly as it appears in the statutory records. Use a separate form for each regulation.

CITATION TO RECORD:

List the name of statutory record and the location in each record where the regulation description can be found.

STATUS: Please include only those regulations that have been promulgated or are in the final stages of promulgation. List the effective date of the

promulgated regulations or the proposed effective date for these inprocess regulations.

BRIEF SUMMARY OF SCOPE:

Give a brief summary of the scope of the regulation including a brief description and indicate if the regulation relates to all dioxin and furans or to specific isomers such as 2,3,7,8-TCDD or 2,3,7,8-TCDF.

CONTACT PERSON AND AGENCY:

List the name of the responsive person(s) at the agency and include a mailing address and a phone number where they can be reached.

Protection Agency (EPA) has primary responsibility for the control of many chemicals in the environment, numerous other federal agencies have mandates to address these substances in a variety of ways. With the aid of several key figures in the regulatory arena, a list of the federal agencies that may be directly involved with promulgating regulations and setting standards was developed. As a result, the following agencies and groups were contacted.

- Department of Defense
- Department of Energy
- Department of Transportation
- Department of Agriculture
- Department of Health and Human Services
 - Food and Drug Administration
 - Centers for Disease Control
 - National Institute of Environmental Health Sciences
 - National Institute for Occupational Safety and Health
- Veterans Administration
- Environmental Protection Agency
- Department of Labor
 - Occupational Safety and Health Administration
- Consumer Product Safety and Health Administration
- Consumer Product Safety Commission
- Office of Science and Technology Policy
- Office of Management and Budget
- Office of Technology Assessment
- Interstate Commerce Commission
- Postal Service

These organizations were asked to complete the regulatory formats for regulations and statutes that specifically or generally address dioxins and related compounds. Also, a literature search was conducted to identify any other compilations of this type that may have been performed previously.

In addition to the survey of federal agencies, all of the 50 states were contacted to inquire about regulations and statutes that are used to control dioxins and related compounds on the state or local level. These contacts were made with the assistance of EPA's regional offices. Other efforts to identify state regulations and statutes concerning dioxins included the review of the Environment Reporter.

3. DESCRIPTIONS OF REGULATIONS AND STATUTES REPORTED

This section provides a summary of the types of regulations and statutes on dioxin and related compounds for which regulatory formats were completed. The summary also includes a brief description of the scope of the regulation. The number of regulations and statutes reported by geographic location is presented in Table 1. Table 2 presents an index of the reported regulations and statutes in the participating nations. Figure 3 presents the number of regulatory formats received from each country, subdivided on national, state/provincial, and county jurisdictional levels. Figure 4 displays a matrix which presents the scope of the regulations reported in each of the nations.

Some of the trends identified from the regulatory formats submitted from several of the NATO nations that are also members of the Commission of European Communities, reveal that many regulations were enacted on the national level as a result of EEC Directives. Specifically, the Federal Republic of Germany, United Kingdom, and Italy have promulgated national regulations on such topics the marketing of PCBs, emergency management planning, and air quality, directly as a result of the Directives. Perhaps the most well known Directive pertaining to dioxins was the EEC "Seveso" Directive 82/501, June 1982, to be adopted by manufactures to prevent and/or contain the effects of accidents involving toxic chemicals.

3.1 <u>Canada</u>

Ten regulatory formats were received from Canada. These formats included five national regulations addressing the presence of these compounds in foods, fish, and pesticides and five provincial regulations and guidelines on drinking water, ambient air quality, fish, and hazardous waste. The national regulations set maximum levels for dioxins in food products, fish, and pesticides (2,4-D, 2,4,5-T,—fenoprop, pentachlorophenol, and tetrachlorophenol).

3.2 <u>Denmark</u>

The Danish Environment Ministry and EPA have a comprehensive guidance manual for the operation of municipal waste incinerators to minimize the formation and emissions of dioxins. The guideline specifies operational and control procedures, but will not set limits for 2,3,7,8-TCDD (equivalents by Eadon method) until June 1991.

3.3 Federal Republic of Germany

Regulatory formats describing fifteen regulations and ordinances were submitted from the Federal Republic of Germany. These formats presented a variety of regulations and ordinances addressing the presence of dioxins in the water, air emissions, and marketable products, and the potential for exposure as a result of the transport, occupational use, or disposal of hazardous wastes containing these compounds. Several regulations address the permitting of facilities that may handle dioxins and provisions for emergency response.

3.4 Italy

Four regulatory formats were completed by Italy that describe three national regulations and one regional guideline. The national regulations address drinking water standards, hazardous waste management, and emergency response measures for accidents; the regional guidance addresses air emissions from incinerators. All of the regulations specified acceptable concentration limits.

3.5 Netherlands

Three regulatory formats were received from the Netherlands. These regulations and guidelines are used to limit the dioxin contamination and use of pentachlorphenol, fuels, and used oil containing PCBs or halogenated hydrocarbons. The Netherlands also has several general guidelines which have not been promulgated as regulations. These guidelines address air emissions, pesticides, food, and hazardous waste.

3.6 Norway

One regulatory format was received on the establishment of an air emission standard for municipal waste incinerators.

3.7 United Kingdom

Five regulatory formats from the United Kingdom were submitted. These regulations primarily address the prevention of accidents through notification requirements for permitting of facilities that handle hazardous substances. In addition, a waste oil is defined in part by the PCB content and is prohibited from trade.

3.8 United States

Regulatory formats were collected from the United States representing regulations on the national, state, and county jurisdictional levels. Thirty five of the regulatory formats were completed for national regulations administered by 10 Federal Agencies. The majority of the regulations for which formats were received were promulgated by the Environmental Protection Agency (EPA), although other agencies have general or specific laws and regulations controlling the presence of dioxins in foods, products, or other articles. For example, the Department of Defense has occupational health standards for dioxins for reentry into workplaces following fires in electrical equipment containing PCBs.

The EPA is mandated, through several laws, to develop regulations which address the threat of chemicals to human health and the environment. The EPA has established numerous regulations to control the release of dioxins. Under authority of the Clean Water Act, the Agency has established ambient water quality criteria. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the presence of dioxins in certain pesticides has resulted in the cancellation of the registration of several pesticides including, 2,4,5-T, silvex, and some pentachlorophenol products. Hazardous wastes are listed and restricted from land disposal by regulations promulgated under the Resource Conversation and Recovery Act (RCRA). The use and destruction of PCBs are regulated under the Toxic

Substances Control Act (TSCA) in part because of the formation of dioxins and furans in fire related incidents. The cleanup of contaminated hazardous waste sites is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). Several sites contaminated with dioxins including Love Canal, Hyde Park, Vertac, and the Denny Farm have been remediated under Superfund.

Regulatory formats were also received from several state environmental agencies with the authority to establish regulations for their jurisdictions. Typically, these regulations are general in nature and follow the examples of national regulations. Some of the areas covered in these state regulations and statutes include ambient air and water standards; foods; drinking water standards; pesticides; permitting of PCB incinerators; and hazardous waste treatment, storage, and disposal facilities. In some instances, state regulations are specific in the control of these chemicals and set limits for dioxins. For example, Montana has a regulation to control petroleum products because of the potential for presence of hazardous substances such as dioxins. Missouri, which has had several dioxin contaminated sites remediated under CERCLA or Superfund, has a state hazardous waste regulation specifically listing 2,3,7,8-TCDD. The state of New York has set levels for dioxins in ground water and drinking water. One county-level regulation was identified for the control of dioxins. The county of Philadelphia, Pennsylvania has ambient air quality guidelines to limit total TCDDs to concentrations below 35 pg/m³.

TABLE 1. NUMBER OF REGULATIONS/STATUTES REPORTED BY GEOGRAPHIC LOCATION

Country	Number of Regulations/Statutes		
Canada	10		
Denmark	1		
Federal Republic of German	ny 15 4		
Netherlands	3		
Norway	1		
United Kingdom	5		
United States	81		
-	Total 120		

Table 2. Index of Regulations/Statutes Submitted for NATO/CCMS Inventory

		Concentrations	
Country/State, Province	Description	specified*	Page
Canada	Food (exception fish) adulterated with dioxins		20
Canada	Fish adulterated with dioxins (2,3,7,8-TCDD)	20 ppt	21
Canada	2,4-D contaminated with any isomer of dioxin	10 ppb	22
Canada	Limits 2,3,7,8-TCDD in 2,4,5-T and fenoprop	100 ppb	23
Canada	Limits total hexachlorodibenzodioxin in pentachlorophenol or tetrachlorophenol	5 ·ppm	24
Canada, Ontario	Drinking water limits for 2,3,7,8-TCDD and other isomers (TEF)	15 pg/l	25
Canada, Ontario	Ambient air standard for dioxins and furans	(formula provided)	26
Canada, Ontario	Point of impingement for ambient air for dioxins and furans	(formula provided)	27
Canada, Ontario	Definition of hazardous wastes including dioxin content	1 ppm	28
Canada, Ontario	Ban on consumption of fish contaminated with 2,3,7,8-TCDD	20 ppt	29
Denmark	Control of pollution from waste incineration plants (2,3,7,8-TCDD by Eadon)	1 ng/Nm ³ (into effect 1991)	30
Federal Republic of Germany	Provisions for marketing of PCBs, PCT, and VC products		31
Federal Republic of Germany	Protection of humans, flora, fauna, and materials from pollution		32
Federal Republic of Germany	Listing of installations that are likely to affect environment		33
Federal Republic of Germany	Emergency Response provisions for plants generating 1,2,3,7,8,9-HCDD		34
Federal Republic of Germany	Air quality and emissions as basic principles for licensing installations		35
Federal Republic of Germany	Marine pollution of dioxins		36
Federal Republic of Germany	Goods containing 2,3,7,8-TCDD banned from transport	0.002 ppm (2,3,7,8-TCDD)	37
Federal Republic of Germany	Transportation requirements for numerous isomers of dioxins/furans	0.1 ppm (various isomers) 0.01 ppm (2,3,7,8-TCDD)	38
Federal Republic of Germany	Transportation of PCBs by road		39
Federal Republic of Germany	Transportation of PCBs by rail		40
Federal Republic of Germany	Waste disposal regulations		41
Federal Republic of Germany	Ban on marketing substances containing dioxins	0.005 ppm (total) 0.002 ppm (2,3,7,8-TCDD)	42
Federal Republic of Germany	Notification of handling substances and/or disposal	0.1 ppm (total) 0.01 ppm (2,3,7,8-TCDD)	43
Federal Republic of Germany	Occupational protection for dioxins and furans		43
Federal Republic of Germany	Ban on processes that generate dioxins	<pre>5 ppm (total) 1 ppm (2,3,7,8-TCDD)</pre>	43 43

Table 2. (continued)

Country/State, Province	Description	Concentrations specified*	Page
Italy	Drinking water quality limits for organohalogenated compounds	0.003 ppm	44
Italy	Emergency response provisions for plants generating dioxins	100 kg (1,2,3,7,8,9-HCDD) 1 kg (2,3,7,8-TCDD)	45
Italy	Classification and disposal of hazardous wastes	1 ug/kg (specific isomers) 500 ug/kg (total)	46
Italy, Lombardy Region	Air emission limits for waste incineration plants	PCDDs + PCDFs = 0.01 mg/Nm ³ TCDDs + TCDFs = 0.05 mg/Nm ³ PCTs + PCNs = 0.1 mg/Nm ³	47
Netherlands	Prohibition to use, sell, or store fuels containing PCBs, halogenated hydrocarbons	2 ppm (PCBs) 500 ppm (halogenated hydrocarbons)	48
Nether lands	Definition of used oil as hazardous waste	2 ppm (PCBs) 1,000 ppm (others)	49
Netherlands	Contaminants in pentachlorophenol	1.000 (hexachlorobenzene) 10 ppm (HCDDs) 100 ppm (HpCDDs) 1.000 ppm (trichlorophenol) 500 ppm (PCDFs)	50
Nether lands	General Guidelines (non-regulations) Air emissions (2,3,7,8-TCDD equivalents) Pesticides containing 2,3,7,8-TCDD Contaminated soil (2,3,7,8-TCDD equivalents) Human acceptable daily intake (2,3,7,8-TCDD equivalents)	10 ng/Nm ³ 1 ppb 4 pg/kg	
Norway	Emission standard for municipal waste incinerators (by TCDD equivalents)	2 ng/Nm ³ (Eadon)	51
United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom United Kingdom	Regulations controlling permitting of plants, pipelines, and ports Notification requirements of handling of hazardous substances Hazardous substance definition for PCBs, PCTs in oils Hazardous waste (oils and solvents) management and disposal Emergency response notifications and plans for dioxins (2,3,7,8-TCDD)	 0.01% 1 kg	52 53 54 55 56

Table 2. (continued)

Country/State, Province	Description	Concentrations specified*	Page
United States	Department of Agriculture - contaminants in food		57
United States	Department of Commerce - export regulations for dioxins and furans		58
United States	Department of Commerce - export regulations for hazardous substances		59
United States	Consumer Products Safety Commission - general statute to regulate chemicals		60
United States	Consumer Products Safety Commission - general statute to regulate chemicals		61
United States	Department of Defense - occupational re-entry levels for PCBs, PCDFs following fires (2,3,7,8-TCDD equivalents)	10 pg/m ³ (air) 3 ng/m ² (surface <8 ft) 10 ng/m ² (surface >8 ft)	62
Hudhad Chahan	USEPA - Clean Air Act	(501/200 0 10)	63
United States United States	USEPA - Clean Water Act		64
***************************************	Ambient water quality criteria for 2,3,7,8-TCDD	0.013 ppq	65
United States United States	USEPA - CERCLA/Superfund		66
•///	USEPA - Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)		67
United States United States	Cancels non-wood preservative uses of pentachlorophenol and sets limits on HxCDD level	6 ppm (HxCDD in product) 3 ppm (avg. HxCDD for one mo	68
United States	Requires testing of certain pesticides for HDDs and HDFs		69
United States	Cancels 2,4,5-T for all uses		70
United States	Maximum level of HxCDD in pentachlorophenol		71
United States	Cancels pesticidal uses of silvex		72
United States	Cancels certain uses of 2,4,5-T and silvex		73
United States	Cancels all uses of 2,4,5-T and silvex		74
United States	USEPA - Resource Conservation and Recovery Act (RCRA)		75
United States	Lists as hazardous waste containing CDDs, CDFs, chlorinated phenols		76
United States	Prohibits land disposal of dioxin containing wastes	1 ppb	77
United States	USEPA - Toxic Substances Control Act (TSCA)		78
United States	Requirement of analytical testing of chemicals for HDD/HDF		79
United States	Restriction of use of PCBs in electrical transformers		80
United States	Suspends all pesticidal uses of hexachlorophene		81
United States	Federal Emergency Management Agency - emergency response for dioxins		82
United States	Federal Emergency Management Agency - relocation activities		83
United States	Federal Emergency Management Agency - temporary relocation assistance		84
United States	Federal Emergency Management Agency - permanent relocation assistance		85
United States	FDA - regulation of dioxins and related chemicals in food		86
United States	Interstate Commerce Commission - transportation requirements for hazardous wastes		87
United States	U.S. Postal Service - packaging, labelling, and disclosure regulation		88
United States	U.S. Postal Service - unmailable poisons prohibition		89

Table 2. (continued)

Country/State, Province	Description	Concentrations specified*	Page
United States	U.S. Postal Service - definitions of poisonous (unmailable) substances		90
United States	U.S. Veterans Administration - claims of exposure to herbicides		91
United States, California	Cancellation of 2,4,5-T registrations		92
United States, California	Right to know and drinking water regulations for dioxins		93
United States, California	Definition of hazardous wastes	0.001 mg/kg (TCDD)	94
United States, Colorado	Definition and control of hazardous wastes	0.01 mg/kg (total)	95
United States, Connecticut	Definition and control of hazardous wastes including dioxins/furans		96
United States, Delaware	General laws for control of air, water, and hazards waste pollution	**	97
United States,	Definition and control of hazardous wastes		98
District of Columbia			
United States,	General air pollution regulation		99
District of Columbia United States, Florida	Designation of the state of the		
United States, Florida	Drinking water monitoring and analyses for 2,3,7,8-TCDD		100
United States, Georgia	Ground-water protection standards		101
Untied States, Idaho	Definition and control of hazardous wastes and CERCLA sites		102
United States, Kentucky	Air quality permitting for PCB incinerators		103
United States, Kentucky	Control of air emissions of 2,3,7,8-TCDD from existing facilities		104
United States, Kentucky	Control of air emissions of 2,3,7,8-TCDD from newer modified facilities Definition of hazardous wastes		105 106
United States, Kentucky	Hazardous waste management requests		106
United States, Kentucky	Hazardous waste management requests Hazardous waste management requests for interim/closure/post-closure		107
United States, Maine	Land application/disposal of sludges and residuals containing PCDDs and PCDFs		109
United States, Maryland	General air pollution regulations		110
United States, Maryland	General hazardous waste regulations		111
United States, Massachusetts	General environmental quality regulations		111
United States, Mississippi	Hazardous waste (listed wastes under RCRA)		113
United States, Missouri	Listing of hazardous wastes, contaminated soils and debris for 2,3,7,8-TCDD	1 gram	113
United States, Missouri	Water quality standards for PCBs, pesticides, 2,3,7,8-TCDD		115
United States, Montana	Definition and control of hazardous wastes		116
United States, Montana	Regulation of petroleum products and substances		117
United States, New Hampshire	Definition and control of hazardous wastes containing dioxins, furans and phenols		117
United States, New Jersey	Discharge of 2,3,7,8-TCDD into groundwater		119
United States, New Jersey	Hazardous waste definition including TCDD, TCDF, and 2,3,7,8-TCDD		119
United States, New York	Ambient water quality standard (2,3,7,8-TCDD)	$0.000001 \ \mu g/1$	121
United States, New York	Groundwater quality standard (2,3,7,8-TCDD)	0.000001 μg/1	121
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Table 2. (continued)

Country/State, Province	Description	Concentrations specified*	Page
United States, Pennsylvania	Air pollution regulations and permitting requirements (using TEF for 2,3,7,8-TCDD)		123
United States, County of Philadelphia	Ambient air quality guidelines for toxic air contaminants (total TCDD)	35 pg/m ³	124
United States, Rhode Island	Definition and control of hazardous wastes		125
United States, Tennessee	Definition and control of hazardous wastes		126
United States, Vermont	Definition and control of hazardous wastes	~~	127
United States, Vermont	Occupational health		128
United States, Vermont	Air pollution regulations		129
United States, Virginia	General hazardous waste disposal regulation		130
United States, Virginia	General air pollution control regulation		131
United States, Washington	Definition and control of hazardous wastes		132
United States, West Virginia	General hazardous waste disposal regulation		133
United States, West Virginia	General air pollution control		134
United States, Wisconsin	Air emissions from incinerators (total TCDD)	0.0001 lb/yr	135
United States, Wisconsin	Groundwater quality standards (TCDD)	0.00000022 ppb	136
United States, Wyoming	Disposal of hazardous substances		137

^{*} Please consult the regulatory format for the specific requirements regarding regulatory standards or levels.

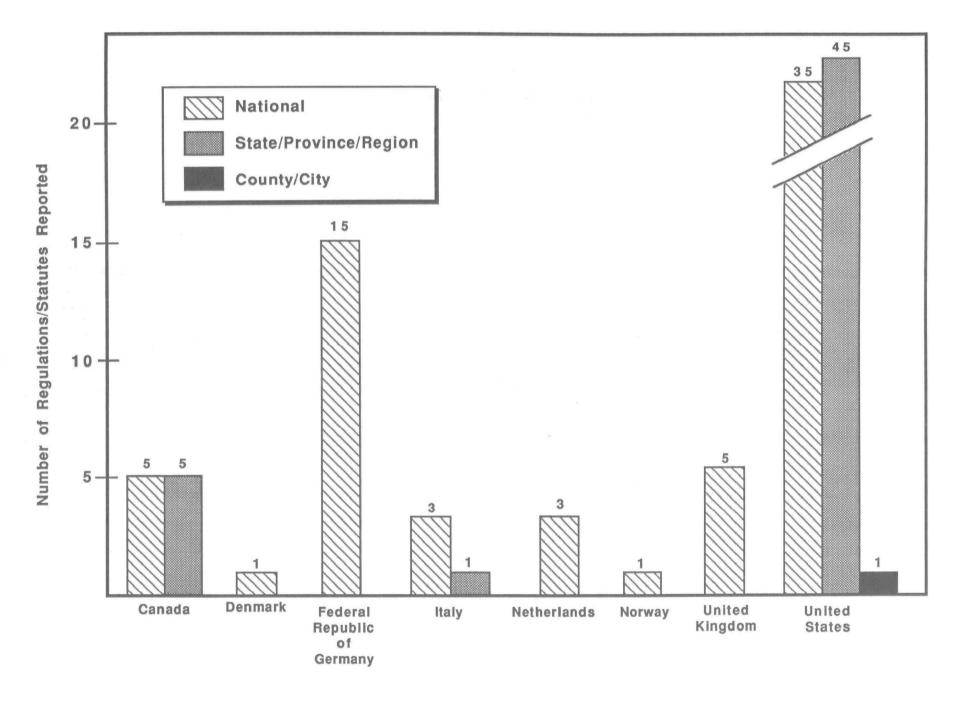


FIGURE 3. NUMBER OF REGULATIONS/STATUTES REPORTED IN PARTICIPATING NATIONS BY POLITICAL JURISDICTION

Topic/Scope of Regulation	Canada	Denmark	Federal Republic of Germany	Italy	Nether- lands	Norway	United Kingdom	United States
Air Quality and Emissions	S	N	N	S	G	N	_	s,c
Food	N,S	-	N	-	G		_	N,S
Transportation	-	_	N	-	-	-	-	N
Export	-		N	-	_	-	-	N
Marketing/Products	-	-	N	-	N	_	-	N
Occupational	-	-	N	_	-	_	N	N,S
Water	S	-	N	N	-	_	_	N,S
Hazardous Waste & Disposal	S		N	N	N,G	-	· N	N,S
Pesticides	N	-	N		N,G	_	-	N,S
Manufacture of Chemicals	-		N		-	-	-	N
Accident and Emergency Management	_		N	N	-	-	N ·	N,S

LEGEND

N = National Regulation or Statute

S = State/Provincial Regulation, or Statute

C = County/Local Regulation or Statute

G = General Guidelines

- = No Regulations or Statutes Reported

FIGURE 4. MATRIX OF REPORTED REGULATIONS AND STATUTES CONCERNING DIOXINS AND RELATED COMPOUNDS

4. REGULATORY FORMATS

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country

CANADA

Title of Regulation:

CANADIAN FOOD AND DRUG REGULATIONS

Citation to Record:

B.01.046 states: "A food is adulterated if any of the following substances or classes of substances are present therein or have been added thereto"...(p) chlorinated dibenzo-p-dioxins

Status:

UNDER REVIEW

Brief Summary of Scope:

This regulation applies to all foods sold in Canada with the exception of fish (see B.01.047 f)

Contact Person and Agency:

Dr. B. Huston, Chief Chemical Evaluation Division

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country CANADA

Title of Regulation:

CANADIAN FOOD AND DRUG REGULATIONS

Citation to Record:

B.01.047 states: Notwithstanding B.01.046(f) fish is not adulterated by reason only that it contains 20 parts per trillion or less of 2,3,7,8-tetrachlorodibenzoparadioxin.

Status:

UNDER REVIEW

Brief Summary of Scope:

This regulations applies to all fish sold in Canada

Contact Person and Agency:

Dr. B. Huston, Chief Chemical Evaluation Divison

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country CANADA

Title of Regulation: PEST CONTROL PRODUCTS ACT

Citation to Record: REGISTRATION REQUIREMENT

Status: IN EFFECT SINCE 1981

Brief Summary of Scope:

LIMITS DIOXIN CONTENT IN 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID) TO 10 PPB OF ANY SPECIFIC DIOXIN ISOMER IN TECHNICAL 2,4-D.

Contact Person and Agency:

J.B. REID DIRECTOR PRODUCT COMPLIANCE PESTICIDE DIRECTORATE

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country CANADA

Title of Regulation: PEST CONTROL PRODUCTS REGULATIONS (PCP REGULATIONS)

Citation to Record: SECTION 47(2) AND (3), PCP REGULATIONS

Status: IN EFFECT SINCE 1979

Brief Summary of Scope: 47(2) LIMITS 2,3,7,8-TCDD IN 2,4,5-T (2,4,5-TRICHLOROPHENOXYACETIC ACID) TO A MAXIMUM OF 100 PPB OF 2,4,5-T

47(3) LIMITS 2,3,7,8-TCDD IN FENOPROP (2,4,5-TRICHLOROPHENOXY PROPIONIC ACID) TO A MAXIMUM OF 100 PPB OF FENOPROP.

Contact Person and Agency:

MR. J.B. REID DIRECTOR PRODUCT COMPLIANCE PESTICIDE DIRECTORATE

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country CANADA

Title of Regulation: PEST CONTROL PRODUCTS ACT

Citation to Record: REGISTRATION REQUIREMENT

Status: IN EFFECT SINCE 1985

Brief Summary of Scope:

LIMITS TOTAL HEXACHLORODIOXIN IN TECHNICAL PENTACHLOROPHENOL OR TETRACHLOROPHENOL TO A MAXIMUM OF 5 ppm (TYPICAL ANALYSIS)

Contact Person and Agency:

MR. C.D. RALPH PRODUCT MANAGEMENT DIVISION PESTICIDE DIRECTORATE

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Province of Ontario, Canada

Title of Regulation: Interim Maximum Acceptable Concentration for PCDDs and PCDFs in Drinking Water (Ontario Drinking Water Objective)

Citation to Record: Ontario Water Resources Act, 1980

Status: Provisional Guideline

Brief Summary of Scope: The guideline for 2,3,7,8-TCDD is 15pg/L. The guideline for dioxins and furans other than 2,3,7,8-T₄CDD is calculated using numerical conversion factors to convert the equivalent concentration of the other less toxic PCDDs and PCDPs to a concentration which would exhibit a toxicity similar to 2,3,7,8-T₄CDD.

Contact Person and Agency:

K. Roberts
Water Resources Branch
Ministry of the Environment
Suite 100
135 St. Clair Avenue West
Toronto, Ontario
MAV 1P5
(416) 323-4881

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country PROVINCE OF OMERRIO, CANADA

Title of Regulation: AMBIENT AIR QUALITY PROVISIONAL CRITERIA FOR DIOXING

AND DIBENZOFURANS

Citation to Record: Ontario Regulation 308, Environmental Protection Act, 1971

Status: Provisional Guideline

Brief Summary of Scope: Annual Ambient air objective for mixtures of dioxins and

dibenzofurans (pg/m³)

30pg + 30pg x 50

where x = conc. of dioxins in air and y = conc. of dibensofurans

in air

Contact Person and Agency:

C. Duncan
Air Resources Branch
Ministry of the Environment
135 St. Clair Avenue West, Suite 100
Toronto, Ontario M4V 1P5
(416) 965-5776

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

COURTY PROVINCE OF ONTARIO, CARADA

Title of Regulation: POINT OF IMPINGEMENT PROVISIONAL GUIDELINE FOR DIOXINE AND DIBENEOFURANS

Citation to Record: Ontario Regulation 308, Environmental Protection Act, 1971

Status: Provisional Guideline

Brief Summary of Scope: hour point of impingement limit for mixtures of dioxins and dibenzofurans (pg/m)

where x = conc. of dioxins in air and y = conc. of dibenzofurans

Contact Person and Agency:

C. Duncan Air Resources Branch Ministry of the Environment 135 St. Clair Avenue West, Suite 100 Toronto, Ontario M4V LP5 (416) 965-5776

Format for inventory of Regulations Concerning Dioxins and Related Chemicals

Country Province of ONTARIO, CANADA

Title of Regulation: HAZARDOUS WASTE DEFINITION (SCHEDULE 3)

Citation to Record: Ontario Regulation 309, Environmental Protection Act, 1980

Status: Regulation

Brief Summary of Scope: A waste is defined as a Hazardous Waste if it contains Severely Toxic contaminants e.g., 2,3,7,8-TCDD, 2,3,7,8-substituted [PentCDDs, HexaCDDs or 2,3,7,8-TCDF at a concentration greater than 1 ppm.

Contact Person and Agency:

R. Dalrymple Waste Management Branch Ministry of the Environment 135 St. Clair Avenue Wost, Suite 100 Toronto, Ontario M4V 1P5 (416) 323-5211

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country PROVINCE OF CHTARIO, CANADA

Title of Regulation: ONTARIO SPORTFISH CONSUMPTION GUIDELINE

Citation to Record: Guide to Eating Ontario Sport Fish, 1987

Status: Guideline

Brief Summary of Scope: Consumption of fish species averaging greater than 20ppt 2,3,7,8-TCDD is restricted to 0.45kg/week or 0.45kg/month depending on the period that fish will be consumed. Children under 15 and women of child-bearing age should not consume

such fish.

Contact Person and Agency:

Sport Fish Contaminants Program
Water Resources Branch
Ministry of the Environment
135 St. Clair Avenue West, Suite 100
Toronto, Ontario M4V 1P5
(416) 323-4994

CCMS/NATO Project on International Information Exchange on Dioxins and Related Chemicals

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Denmark

TITLE OF REGULATION:

Control of Pollution from Waste Incineration

Plants

CITATION TO RECORD:

STATUS:

Danish EPA Guideline No. 3/1986

BRIEF SUMMARY OF SCOPE:

1 ng/Nm³ 2,3,7,8-TCDD equivalents by Eadon (to go into effect 1991)

CONTACT PERSON AND AGENCY:

Danish Environmental Protection Agency

Strandgade 29

1401 Copenhagen K. Denmark

Mrs. Kirsten Warnoe

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Tenth Ordinance on the Implementation of the Federal Immission Control Act/Zehnte Verordnung zur Durchführung des Bundes-Immissions-schutzgesetzes

Citation to Record: Beschränkung von PCB, PCT und VC as of 26.07.1978, Bundesgesetzblatt I, p. 1138

Status: 0. in force since 01.08.1978; amendment intended

Brief Summary of Scope: provisions concerning the marketing of PCB, PCT and VC containing products

Contact Person and Agency:

Umweltbundesamt Bismarckplatz 1 D-1000 Berlin 33

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Prevention of Harmful-Effects on the Environment Caused by Air Pollution, Noise, Vibration and Similar Phenomena Act/Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge

Citation to Record: Bundes-Immissionsschutzgesetz as of 15.03.1974, Bundesgesetzblatt I, p. 721; amended as of 26.11.1986, Bundesgesetzblatt I, p. 2089

Status: In force since 22.03.1974

Brief Summary of Scope: protection of human beings, flora, fauna and materials against harmful effects of pollution and its prevention by area, product and installation measures

Contact Person and Agency:

Umweltbundesamt Bismarckplatz 1 D-1000 Berlin 33

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Fourth Ordinance on the Implementation of the Federal Immission Control Act/Vierte Verordnung zur Durchführung des Bundes-Immissions-schutzgesetz

Citation to Record: Verordnung über genehmigungsbedürftige Anlagen in der Fassung vom 24.07.1985, Bundesgesetzblatt I, S. 1586

Status: O. in force since 1975; amended as of 01.11.1985

Brief Summary of Scope: listing of installations that are especially likely to cause harmful effects on the environment (installations subject to licensing)

Contact Person and Agency:

Umweltbundesamt Bismarckplatz 1 D-1000 Berlin 33

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Twelfth Ordinance on the Implementation of the Federal Immission Control Act/Zwölfte Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes

Citation to Record: Störfall-Verordnung as of 27.06.1980, Bundesgesetzblatt I, p. 772; amended as of 24.07.1985, Bundesgesetzblatt I, p. 1586

Status: 0. in force since 01.09.1980

Brief Summary of Scope: provisions concerning accidents in plants that handle or may generate the substances mentioned in the 12th Ordinance during accidents; requirement of a security test for1,2,3,7,8,9-Hexachlorine-dibenzo-p-dioxin (HCDD), substance No. 94 of annex II, 12th Ordinance

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: First General Administrative Regulation Pertaining the Federal Immission Control Act/Erste Allgemeine Verwaltungsvorschrift zum Bundes-Immissionsschutzgesetz

Citation to Record: Technische Anleitung zur Reinhaltung der Luft as of 27.02.86

Status: G.A.R. in force since 1984; amended as of 27.02.1986

Brief Summary of Scope: provisions for the specification of the provisions of the federal Immission Control Act, inter alia, basic principles for the licensing of installations; regulations concerning air quality (special testing according to No 2.2.1.3) and emissions (as far as possible, cf. No. 3.1.7)

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Convention on the Prevention of Marine Pollution From Ships and Aircraft/Übereinkommen vom 15. Februar 1972 zur Verhütung der Meeresverschmutzung durch das Einbringen durch Schiffe und Luftfahrzeuge

Citation to Record: Art. 2 des Hohe-See-Einbringungsgesetz, Bekanntmachung vom 21.12.1977, Bundesgesetzblatt II, S. 1492

Status: Act in force since 23.12.1977

Brief Summary of Scope: denial of the discharge of dioxins with reference to annex I of the Oslo-London-Marine-Protection-Convention

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Ordinance Concerning Domestic and Transboundary Transport of Hazardous Goods by Road/Verordnung über die innerstaatliche und grenzüberschreitende Beförderung gefährlicher Güter auf Straßen

Citation to Record: Gefahrstoffverordnung Straße (GGVS) as of 22.07.1985; Bundesgesetzblatt I, p. 1550

Status: O. in force since the day of its proclamation; O. based on Article 3 of the Transport of Hazardous Goods Act

Brief Summary of Scope: Goods that contain more than 0.002 mg/kg (0.002 ppm) 2,3,7,8-TCDD are banned for transport (exceptions from the ban for substances that contain up to 0.01 mg/kg (0.01 ppm) 2,3,7,8-TCDD packed with special care)

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Ordinance Concerning Domestic and Transboundary Transport of Hazardous Goods by Rail/Verordnung über die innerstaatliche und grenz-überschreitende Beförderung gefährlicher Güter mit der Eisenbahn

Citation to Record: Gefahrgutverordnung Eisenbahn (GGVE) as of 22.07.1985, Bundesgesetzblatt I, p. 1560, amended by Ordinance of 21.08.1986, Bundesgesetzblatt I, p. 1347

Status: Ordinance in force since the day of its proclamation; O. based on Article 3 of the Transport of Hazardous Goods Act

Brief Summary of Scope: Goods that contain more than 0.002 mg/kg 2,3,7,8-TCDD and/or together more than 0.005 mg/kg of poly-chlorinated Dibenzodioxins and Dibenzofurans 2,3,7,8-Tetra CDD; 1,2,3,7,8-Penta CDD; 1,2,3,6,7,8-Hexa CDD; 1,2,3,7,8,9-Hexa CDD, 1,2,3,4,7,8-Hexa CDD; 2,3,7,8-Tetra CDF; 2,3,4,7,8-Penta CDF; 1,2,3,6,7,8-Hexa CDF are banned for transport. Goods that contain up to 0.1 mg/kg of the above mentioned eight isomeres as well as up to 0.01 mg/kg 2,3,7,8-TCDD may be transported if they are packed with special care.

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Ordinance on Special Cases of Hazardous Goods Transport on the Road/Straßen-Gefahrgutausnahmeverordnung

Citation to Record: Verordnung as of 25.09.1985, Bundesgesetzblatt I, p. 1925; as amended by Verordnung of 30.09.1986, Bundesgesetzblatt I, p. 1612

Status: O. in force since the day of its proclamation; O. based on Article 3 of the Transport of Hazardous Goods Act

Brief Summary of Scope: For the purpose of the transport of polychlorinated biphenyls in transformators and condensators instruction leaflets have to be attached by the sender that contain a reference on the possible generation of highly-toxic dioxins in the case of fire and that the information of the competent authorities and the removal of the contaminated soil is required.

Contact Person and Agency:

Umweltbundesamt Bismarckplatz 1

D-1000 Berlin 33

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation: Ordinance on Special Cases of Hazardous Goods Transport by Rail/Eisenbahn-Gefahrgutausnahme-Verordnung

Citation to Record: Verordnung as of 16.08.1985, Bundesgesetzblatt I, p. 1651; amended by Verordnung of 30.09.1986, Bundesgesetzblatt I, p. 1612

Status: O. in force since the day of its proclamation; O. based on Article 3 of the Transport of Hazardous Goods Act

Brief Summary of Scope: For the purpose of the transport of polychlorinated biphenyls in transformators and condensators instruction leaflets have to be attached by the sender that contain a reference on the possible generation of highly-toxic dioxins in the case of fire and that the information of the competent authorities and the removal of the contaminated soil is required.

Contact Person and Agency:

Umweltbundesamt Bismarckplatz 1

D-1000 Berlin 33

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Tide of Regulation: Avoidance and Disposal of Waste Act/Gesetz über die Vermeidung und Entsorgung von Abfällen

Citation to Record: Abfallgesetz as of 27.08.1986, Bundesgesetzblatt I, p. 1410

Status: Act in force since 01.11.1986

Brief Summary of Scope: waste has to be disposed of in away that does not interfere with the well-being of the general public; general regulations and authorization for further regulations

Contact Person and Agency:

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country Federal Republic of Germany

Title of Regulation:

Ordinance on Hazardous Substances/Verordnung über gefährliche

Citation to Record:

Gefahrstoffverordnung as of 26.08.1986, Bundesgesetzblatt ${\rm I}$,

Status:

O. in force since 01.10.1986; O. based on Art. 3, para 3; Art. 14, para 2; Art 17, para 1; Art. 19 and Art. 25 of the Chemicals Act as of 16.09.1986

Brief Summary of Scope:

see next page

Contact Person and Agency:

Art. 9, para 6: ban on the marketing of substances, preparations or products that contain together more than 0.005 mg/kg (ppm) 2,3,7,8-Tetrachlorinedibenzo-p-dioxin, 1,2,3,7,8-Penta-CDD, 1,2,3,6,7,8-Hexa-CDD, 1,2,3,7,8,9-Hexa-CDD, 1,2,3,4,7,8-Hexa-CDD, 2,3,7,8-Tetrachlorinedibenzofuran, 2,3,4,7,8-Penta-CDF and 1,2,3,6,7,8-Hexa-CDF or that contain more than 0.002 mg/kg (ppm) 2,3,7,8-Tetrachlorinedibenzo-p-dioxin (exceptions for intermediate products, disposal, research, laboratory testing or for comparative substances for analytical purposes)

Annex III No. 3: notification of handling of substances, preparations or products if their production or use including disposal generates more than a total of 0.1 mg/kg (ppm) 2,3,7,8-Tetrachlorinedibenzo-p-dioxin (TCDD), 1,2,3,7,8-Penta-CDD, 1,2,3,6,7,8-Hexa-CDD, 1,2,3,7,8,9-Hexa-CDD, 1,2,3,4,7,8-Hexa-CDD, 2,3,7,8-Tetrachlorinédibénzofuran (TCDF), 2,3,4,7,8-Penta-CDF and 1,2,3,6,7,8-Hexa-CDF or more than 0.01 mg/kg (ppm) 2,3,7,8-Tetrachlorinedibenzo-p-dioxins; establishment of protective measures for workers that may be exposed to PCDD or PCDF; and authorization of the competent authority to ban processes that generate the above mentioned substances in a higher concentration than 5 mg/kg (ppm) or that generate 2,3,7,8-Tetrachlorinedibenzo-dioxin in a higher concentration than 1 mg/kg (ppm); in this case, there are also exceptions for the production or use of substances for research, laboratory testing or for comparative substances for analytical purposes.

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Italy

TITLE OF REGULATION: PRIME MINISTER'S OFFICE DECREE, February 8, 1985, No. 41. Caratteristiche di qualità delle acque destinate al consumo umano

CITATION TO RECORD:

GAZZETTA UFFICIALE No. 108, 9 Maggio 1985.

STATUS: Enacted

BRIEF SUMMARY OF SCOPE: Regulation concerning drinkable water quality standards. Guidance and limits values for different parameters as well as measurement methods are indicated. For organohalogenated compounds the following values are indicated (except for pesticides and assimilable products):

- a) Guidance value: 0.001 mg/1 (all together);
- b) Max. acceptable limit: 0.003 mg/l (all together).

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Italy

TITLE OF REGULATION:
HEALTH MINISTRY INJUNCTION, February 21, 1985.

Effettuazione del censimento delle attività industriali comportanti il rischio di incidenti rilevanti nel campo di applicazione della direttiva CEE 82/501 del 24 giugno 1982.

CITATION TO RECORD:

GAZZETTA UFFICIALE No. 59, 9 Marzo 1985.

STATUS: Provisional measures based on EEC Directive 82/501 (Seveso Directive)

BRIEF SUMMARY OF SCOPE:

Survey (census) on industrial activities which entail risks of relevant accidents and fall within law's applicability (Seveso Directive 82/501/EEC, June 24, 1982). The manufacturer falling into the mentioned Directive must adopt a series of safety measures, inform the authorities, and train personnel. He also must be ready to implement an emergency plan in case of accident. For quantities of 2,3,7,8-T,CDD greater than 1 kg and 1,2,3,7,8,9-H.CDD greater than 100 kg present within the manufacturer's perimeter the Health Ministry must be informed.

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Italy

TITLE OF REGULATION: INTERMINISTERIAL COMMITTEE (see Art.5 of PRESIDENTIAL DECREE, September 10, 1982, No. 915).

Disposizioni per la prima applicazione dell'art.4 del Decreto del Presidente della Repubblica 10 settembre 1982, nº915, concernente lo smaltimento dei rifiuti (Deliberazione 27 luglio 1984).

CITATION TO RECORD:

GAZZEITA UFFICIALE No. 253, 10 Settembre 1984 (Supplemento Ordinario)

STATUS: Enacted

BRIEF SUMMARY OF SCOPE: Regulation containing technological parameters and instructions for a correct waste management safe towards man and the environment. All disposal phases are taken into consideration (temporary storage, collection, transportation, treatment, agricolture use, and landfill). Two regulatory approaches for establishing a classification of toxic and hazardous wastes have been set: the concentration approach and the list approach (by type of wastes). For PCDDs and PCDFs, concentration limit values are as follows:

a) 1 /ug/kg for 1,2,3,6,7,8-H_CDD, 1,2,3,7,8,9-H_CDD, 1,2,3,7,8-P_CDD, 2,3,7,8-T_CDD, and 2,3,7,8-T_CDD (each taken individually).
b) 500 /ug/kg for all remaining PCDDs and PCDFs (taken all together).

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Italy

TITLE OF REGULATION:

LOMBARDY'S REGIONAL GUIDELINES

Linee guida per i requisiti tecnici e i limiti di emissioni degli impianti di incenerimento dei rifiuti solidi urbani e assimilabili e speciali.

CITATION TO RECORD:

Minutes dated March 23, July 2, and July 6, 1982 of the Lombardy's Regional Committee for Environmental Pollution - CRIAL (Comitato Regionale per 1'Inquinamento Atmosferico Lombardia). Meetings with the Environment-Ecology Sector.

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Acceptable emission limit values from waste incineration plants are provided. Such limits will be subject to periodical revision. PCDDs and PCDFs emission limits are as follows:

- a) PCDDs + PCDFs: 0.01 mg/Nm₃; b) T_CDDs + T_CDFs: 0.05 ug/Nm₃;
- c) PCTs + PCNs + PCTs 0.1 mg/Nm.

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country NETHERLANDS

Title of Regulation: Organohalogen content of fuel regulation ex art. 31 section 1 of the

Chemical substances act

Citation to Record: fuel, organohalogens

Status: Published in the official journal of the Dutch Government

Staatscourant 1987, 81 d.d. 28 april 1987

effective on 28 may 1987

Brief Summary of Scope: Prohibition to use, sell, store or work up substances as fuel if:

- detectable concentrations of polychlorobiphenyls are present (detection limit of the dictated method ca. 2 ppm)
- more than 500 ppm of halogenated hydrocarbons are present (analyzed as chloride by a dictated method)

Contact Person and Agency:

exemption: persons who have been licenced

Ministry of Housing, Physical Planning and Environment dr. J. A. van Zorge

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country NETHERLANDS

Title of Regulation:

Differentiation between used oil and hazardous waste ex art. 1

section 1,2 and 3 of the Chemical waste act.

Citation to Record:

used oil, hazardous waste

Status:

Published in the official journal of the Dutch Government

Staatscourant 1987, 81 d.d. 28 april 1987

effective on 28 may 1987

Brief Summary of Scope: Waste mineral lubricant oil and insulating oil will not be considered as used oil but as hazardous waste if:

- detectable concentrations of pcb's are present (detection limit of dictated method 2 ppm)
- .the content of halogenated hydrocarbons exceeds 1000 ppm. (analyzed as chloride by a dictated method)

Contact Person and Agency:

- . the flash poit is lower than 55 $^{\rm O}{\rm C}$ (method given)
- . the oil after original use has been mixed with other substances but furnace oil, gas oil or diesel oil

Ministry of Housing, Physical Planning and Environment dr. J.A. van Zorge

Format for Inventory of Regulations Concerning Dioxins and Related Chemicals

Country NETHERLANDS

Title of Regulation: Contaminants in pentachlorophenol

Pesticide act (C II-ll) annex I

Citation to Record: Pentachlorophenol, PCDD-s, PCDF-s

Status: effective since 7 january 1982

Brief Summary of Scope: In petachlorophenol containing pesticides the concentration of

the following contaminants, based on the active compound pentachlorophenol, are not

allowed to exceed: hexachlorbenzene 1000 ppm

hexachlorodibenzo-p-dioxins 10 ppm heptachlorodibenzo-p-dioxins 100 ppm trichlorophenol 1000 ppm

Contact Person and Agency: chlorinated dibenzofurans 500 ppm

Ministry of Housing, Physical Planning and Environment dr. J.A. van Zorge

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Norway

TITLE OF REGULATION: Emission standard for municipal waste

incinerators, burning more than 20,000 tons per

year.

CITATION TO RECORD:

Stated in the licences, according to the Pollution Control Act, for each incinerator.

TOTAL TOTAL CONTROL TO CHEST THE CHEST CONTROL CONTROL

STATUS: Finally stated July 31, 1987.

BRIEF SUMMARY OF SCOPE: The emission standard is 2ng/nm³ TCDD-equivalents (Eadon).

equivalents (Ludon).

CONTACT PERSON AND AGENCY: Sen eng. S.L. Bjornstad

State Polution Control Authority

Bot 8100 Dep, N-0032 Oslo 1, Norway

Tel. 02/659810

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United Kingdom

TITLE OF REGULATION:

Town & Country Planning Hazardous Substances Regulations 1988

CITATION TO RECORD:

Due to be enacted 1988

STATUS:

Due to be enacted 1988

BRIEF SUMMARY OF SCOPE:

Regulations to control planning permissions on hazardous installations including plant, pipelines and port installations

CONTACT PERSON AND AGENCY:

Department of the Environment HM Inspectorate of Pollution 43 Marsham Street London SW1P 3PY

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United Kingdom

TITLE OF REGULATION:

Notification of Installation, Handling Hazardous Substances Regulations 1988

CITATION TO RECORD:

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Reguire notification to the Health and Safety Executive of the installation, handling etc of specified quantities of hazardous substances

CONTACT PERSON AND AGENCY:

Health and Safety Executive Baynards House 1 Chepstow Place Westbourne Grove London W2 4TF

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United Kingdom

TITLE OF REGULATION:

The Control of Pollution (Supply and Use of Injurious Substances) Regulations 1986

CITATION TO RECORD:

STATUS:

These regulations came into force on the 30th June 1986 and revoke the former Regulations of 1980.

BRIEF SUMMARY OF SCOPE:

For the purposes of the regulations "injurious substance" is defined as a substance which is a PCB, a PCT, a preparation or a waste oil with a PCB or PCT content of more than 0.01% by weight.

These Regulations prohibit the supply, or offer to supply, by way of sale or hire purchase of any such injurious substance or its use in connection with any trade or business or manufacturing process.

CONTACT PERSON AND AGENCY:

Department of the Environment HM Inspectorate of Pollution 43 Marsham Street London SW1P 3PY

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country:
United Kingdom

TITLE OF REGULATION:

Control of Pollution (Waste Collection & Disposal) Regulations 1988

CITATION TO RECORD:

STATUS:

Due to be enacted May 1988

BRIEF SUMMARY OF SCOPE:

Includes contaminated waste oils and solvent under industrial wastes and prescribes the manners of dealing with such controlled wastes

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

TITLE OF REGULATION:

United Kingdom

Control of Industrial Major Accidents Hazards Regulations 1984

CITATION TO RECORD:

These Regulations implement European Directive EC/82/501/EEC

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Sites posing a major hazard are identified under the Notification Regulations of 1982. The 1984 regulations call for the assessment of a hazardous installation, demonstration of its safe operation to the Health and Safety Executive and preparation of contingency plans. These Regulations apply to quantities in excess of 1 kg 2378 TCDD.

CONTACT PERSON AND AGENCY:

Health and Safety Executive Baynards House 1 Chepstow Place Westbourne Grove London W2 4TF

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States

COUNTRY:

TITLE OF REGULATION: Egg Products Inspection Act (1)

Federal Meat Inspection Act (2)

Poultry Products Inspection Act (3)

CITATION TO RECORD:

(1) 21 USC §1031 et seq.

(2) 21 USC §601 et seq.

(3) 21 USC §451 et seq.

STATUS: Statutes have been enacted, implemented by various

regulations and and enforced.

BRIEF SUMMARY OF SCOPE: The Department of Agriculture has broad

general authority under the above statutes to control contaminants in various food products. The Department cooperates with the U. S. Food and Drug Administration and the U. S. Environmental Protection Agency on the application of

tolerances to control residues of pesticides in the United States food supply. The Department additionally has general authority under several statutes to conduct research on pesticides, their contaminants and

residues in soil.

CONTACT PERSON AND AGENCY: Office of the General Counsel

U. S. Department of Agriculture

Washington, D. C. 20250

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States COUNTRY:

TITLE OF REGULATION:

Export Administration Regulations, 15 C.F.R

§368-399 (1986)

CITATION TO RECORD:

15 C.F.R. §399.1 (Supp. 1) ECCN 5799C (1986)

STATUS:

Effective January 1, 1978; same chemicals controlled previously for national security reasons under different numbers. Control imposed for foreign policy reasons in 1984 to Iran and Iraq. Expanded to Syria in 1986.

BRIEF SUMMARY OF SCOPE: ECCN 5799C covers polychlorodibenzodioxins and polychlorodibenzofurans, among other chemicals. The export of such chemicals requires a license to the Communist bloc, Afganistan and the PRC for national security reasons, and to Iran, Iraq and Syria for foreign policy reasons.

CONTACT PERSON AND AGENCY:

General Counsel U. S. Department of Commerce Washington, D. C. 20230

Jeff Tripp

(202) 377-5696

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States

TITLE OF REGULATION: STATUTE

Export Administration Act of 1979

CITATION TO RECORD: 15 U.S.C. §2401 - 2420

STATUS: Amended most recently in 1985, expires 1989.

BRIEF SUMMARY OF SCOPE: The Export Administration Act of 1979 was amended in 1985 by adding §3(13), which states: "It is the policy of the United States to control the export of goods and substances banned or severely restricted for use in the United States in order to foster public health and safety and to prevent injury to the foreign policy of the United States as well as to the credibility of the United States as a responsible trading partner." This policy is also reflected in 2(10) and 6(g). The legislative history states that it is the responsibility of the Secretary of State to recommend to the Secretary of Commerce that export controls be imposed on hazardous substances (H.R. REP. NO. 257, 98th Congress 1st Session 15(Part I, 1983). To this date no recommendation has been made.

CONTACT PERSON AND AGENCY:

General Counsel
U. S. Department of Commerce
Washington, D. C. 20230

Jeff Tripp

(202) 377-5696

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S., Fed.

TITLE OF REGULATION:

Statute: Federal Hazardous Substances Act, 15 U.S.C. §§ 1261-1276

CITATION TO RECORD:

STATUS:

General statute that could regulate chemicals. No regulations for dioxins or furans.

BRIEF SUMMARY OF SCOPE:

CONTACT PERSON AND AGENCY:

Stephen Lemberg Assistant General Counsel Consumer Product Safety Commission Washington, D.C. 20207 (301) 492-6980

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S., Fed.

TITLE OF REGULATION:

Statute: Consumer Product Safety Act, 15 U.S.C. §§ 2051-2083

CITATION TO RECORD:

STATUS:

General statute that could regulate chemicals. No regulations for dioxins or furans.

BRIEF SUMMARY OF SCOPE:

CONTACT PERSON AND AGENCY:

Stephen Lemberg Assistant General Counsel Consumer Product Safety Commission Washington, D.C. 20207 (301) 492-6980

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country: United States

TITLE OF REGULATION: DOD Supplemental Occupational Health

Standard for Reentry into Workplaces
Involving Polychlorinated Biphenyl (PCB)

Fires

CITATION TO RECORD:

29 CFR 1960.8

STATUS:

Supplemental Health Standard promulgated under "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters" by the Department of Defense.

BRIEF SUMMARY OF SCOPE:

This standard establishes levels of PCBs, PCDDs and PCDFs which must be attained before DOD facilities are returned to operational status following fires, boil-offs or arcing of electrical equipment containing PCBs. Standards for PCDDs and PCDFs are expressed in 2,3,7,8-TCDD equivalents.

Air 10 pg/m^3 (8hr time avg)

Surface (<8 ft) $3ng/m^2$ Surface (>8 ft) $10ng/m^2$

CONTACT PERSON AND AGENCY:

Safety and Occupational Health Policy Directorate OASD (FM and P)
U. S. Department of Defense The Pentagon Washington, D. C. 20301-4000

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Clean Air Act.

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

The fundamental objective of the Clean Air Act is the protection of the public health and welfare from harmful effects of air pollution. This law requires that the EPA establish two kinds of National Ambient Air Quality Standards: primary standards are used to protect public health, while secondary standards protect plants, animals and material from the harmful effects of air pollutants. This act also requires that the EPA establish National Emissions Standards for Hazardous Pollutants (NESHAPS) to control the emissions of substances so toxic that even small amounts may adversely affect public health. Although no regulatory action has been taken concerning dioxin under this law, a NESHAPS might be promulgated to control emissions of dioxins.

CONTACT PERSON AND AGENCY:

Assistant Administrator Air and Radiation U.S. Environmental Protection Agency Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Clean Water Act.

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

The major objective of this law is to restore and maintain the chemical, physical and biological integrity of the waters of the U.S. The act seeks to secure the waterways for both fish, shellfish and wildlife production as well as recreational uses. The law requires that states set water quality standards for significant bodies of water within its borders representing allowable levels of pollutants consistent with use. To curb pollution from sewage, the Act requires publicly-owned treatment systems to maintain specific treatment processes. To ensure that industrial effluents and sewage treatment facilities meet required standards, the operators of these processes must obtain a National Pollutant Discharge Elimination System (NPDES) permit which specified the amounts and types of pollutants which may be discharged. This law also has provisions for the control of non-point sources of water pollution. Two other regulatory programs of the Clean Water Act are the dredge and fill permit system and the regulation of ocean dumping. The discharge and disposal of dioxincontaining material in the aquatic and marine environments may be regulated under this law.

CONTACT PERSON AND AGENCY:

Assistant Administrator for Water U.S. Environmental Protection Agency Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Ambient Water Quality Criteria for 2,3,7,8-Tetrachlorodibenzo-p-dioxin

CITATION TO RECORD:

EPA Document 440/5-84-007, February 1984 [Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.]

STATUS:

Final

BRIEF SUMMARY OF SCOPE:

Defines levels of 2,3,7,8-TCDD (0.013ppq)

contamination in water associated with specific levels of increased cancer risk, based on consumption of water and/or aquatic organisms; provides guidance for water-related EPA programs and states.

CONTACT PERSON AND AGENCY:

Edmund Notzon (WH-585C)
Criteria and Standards Division
Office of Water Regulations and Standards
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 755-0100

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Comprehensive Environmental Response, Compensation

and Liability Act (CERCLA or Superfund).

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

This law gives EPA the authority to respond to hazardous substances releases which threaten human health and the environment. The Agency has the authority to take immediate removal actions under common types of accidents including spills of hazardous materials when a truck or train is involved, discharges of hazardous materials into the air or water during a fire, and improper handling or disposal of hazardous materials at landfills or industrial areas. The law also gives the EPA authority to take long-term remedial clean-up actions. The law also establishes a trust fund financed by a tax on chemical manufacturers. If the responsible parties can not assume financial responsibility for these remedial actions, then EPA can issue punitive orders to repay the cost of remedial actions. A number of sites identified for clean-up under this law contain material contaminated with dioxins.

CONTACT PERSON AND AGENCY:

Assistant Administrator Solid Waste and Emergency Response U.S. Environmental Protection Agency Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

Act, as amende

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

Under this law the EPA is responsible for the regulation of new and existing chemicals classified as pesticides. The processes used to evaluate new pesticides before marketing and to periodically assess existing pesticides currently in commerce and use is designed to ensure that these products, when used according to label directions, will not present unreasonable risks to human health or the environment. The law requires that the Agency take into account the economic, social, and environmental risks and benefits when making such decisions. Other provisions of the law include monitoring the distribution and use of pesticides, issuing civil and criminal penalties for violations, cooperative enforcement agreements with states and a certification program for pesticide applicators qualifying them to use publicly-restricted chemicals. Dioxins occur as trace contaminants in certain pesticides and some have been regulated as such.

CONTACT PERSON AND AGENCY:

Assistant Administrator
Pesticides and Toxic Substances
U.S. Environmental Protection Agency
Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Final Determination and Intent to Cancel and Deny Applications for Registrations of Pesticide Products Containing Pentachlorophenol (Including but not Limited to Its Salts and Esters) for Non-Wood Uses

CITATION TO RECORD:

52 Federal Register 2282 (January 21, 1987) [Federal Insecticide,

Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final (Administrative challenge pending)

BRIEF SUMMARY OF SCOPE: Cancels most non-wood preservative registrations of pentachlorophenol, in part because of HxCDD contamination; establishes maximum level of HxCDD for technical grade pentachlorophenol used in remaining non-wood pesticide products; requires regular monitoring for 2,3,7,8-TCDD and other CDDs and CDFs.

Phase 1 - 1/2/86-1/2/87 <15 ppm HxCDD (in any product)

Phase 2 - 1/2/87-1/2/89 <6 ppm HxCDD (in any product)

<3 ppm HxCDD (average over 1 month)</pre>

Phase 3 - 1/2/89 Final <4 ppm HxCDD (in any product)

<2 ppm HxCDD (average over 1 month)</pre>

CONTACT PERSON AND AGENCY:

Richard Mountfort and/or Jeffrey Kempter (TS-767C)
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(703) 557-1650

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION:

3(c)(2)(B) Data Call-in Notices

CITATION TO RECORD:

[Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Proposed; to be sent to registrants in near future.

BRIEF SUMMARY OF SCOPE:

Requires analytical testing of certain pesticides for HDD/HDF contamination, submission of existing test data on HDD/HDF contamination, and submission of information on manufacturing processes in order to determine likelihood of HDD/HDF contamination.

CONTACT PERSON AND AGENCY:

Michael Firestone (TS-767C)
Hazard Evaluation Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(703) 557-7356

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Notice of Intent to Cancel the Forestry, Rights-of-Way, and Pasture Registrations of Pesticide Products Containing 2,4,5-T.

CITATION TO RECORD:

44 Federal Register 15893 (March 15, 1979) [Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final; (Administrative Order cancelling last registrations - January 30, 1985, FIFRA Docket Nos. 415, et al.)

BRIEF SUMMARY OF SCOPE: Cancels all registrations for pesticide products containing 2,4,5-T for forestry, rights-of-way, and pasture uses, in part because of 2,3,7.8-TDDD contamination.

CONTACT PERSON AND AGENCY:

Patricia Roberts (LE-132P)
Office of General Counsel
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 382-7505

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Pentachlorophenol; Amendment of Notice of Intent to Cancel Registrations

CITATION TO RECORD:

52 Federal Register 140 (January 2, 1987) [Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final; effective 30 days after publication or receipt by registratnt

BRIEF SUMMARY OF SCOPE:

Establishes maximum level of

HxCDD for technical grade pentachlorophenol used in pentachlorophenol wood preservative products; requires regular monitoring

for 2,3,7,8-TCDD and other CDDs and CDFs.

CONTACT PERSON AND AGENCY:

Lois Rossi (TS-767C)
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(703) 557-1900

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country: U.S.A. - Federal

TITLE OF REGULATION: Notice of Intent to Cancel Certain
Registrations of Pesticide Products Containing Silvex

CITATION TO RECORD:

44 Federal Register 15917 (March 15, 1979) [Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final; (Administrative Order cancelling last registrations - January 30, 1985, FIFRA Docket Nos. 415, et al.)

BRIEF SUMMARY OF SCOPE:

Cancels all registrations for pesticide products containing silvex for forestry, rights-of-way, pasture, commercial/ornamental turf, home and garden, and aquatic weed control/ditch bank uses, in part because of 2,3,7,8-TCDD contamination.

CONTACT PERSON AND AGENCY:

Patricia Roberts (LE-132P)
Office of General Counsel
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 382-7505

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Intent to Cancel Registrations of

Pesticide Products Containing 2,4,5-Trichlorophenol or Its Salts;

Notice of Final Determination

CITATION TO RECORD:

52 Federal Register 15549 (April 29, 1987) [Federal Insecticide,

Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final; effective 30 days after publication or receipt by registrant

BRIEF SUMMARY OF SCOPE: Cancels all registrations for pesticide products containing 2,4,5-trichlorophenol for all uses, in part because of 2,3,7,8-TCDD contamination.

CONTACT PERSON AND AGENCY:

Paul Parsons (TS-767C)
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(703) 557-1900

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country: U.S.A. - Federal

TITLE OF REGULATION: 2,4,5-T and Silvex Products; Intent to Cancel Registrations of Pesticide Products Containing 2,4,5-T and Silvex; Revocation of Notices of Intent to Hold Hearing to Determine Whether Certain Uses of 2,4,5-T or Silvex Should be Cancelled

CITATION TO RECORD:

48 Federal Register 48434 (October 18, 1983) [Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq.]

STATUS:

Final; (Administrative Order cancelling last registrations - February 11, 1985, FIFRA Docket Nos. 522, et al.)

BRIEF SUMMARY OF SCOPE: Cancels all remaining registrations for pesticide products containing 2,4,5-T and silvex that were not subject to cancellation notices issued in 1979, in part because of 2,3,7,8-TCDD contamination.

CONTACT PERSON AND AGENCY:

Patricia Roberts (LE-132P)
Office of General Counsel
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 382-7505

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Resource Conservation and Recovery Act (RCRA).

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

This law authorizes the EPA to regulate current and future waste management and disposal practices with particular emphasis on the management of hazardous wastes. This law provides provisions for (1) identifying the characteristics of hazardous wastes in general and identifying specific hazardous wastes, (2) enforcing compliance, by the regulated community and requiring corrective actions at operating facilities and (3) developing standards applicable to generators and transporters of hazardous wastes, and to operators of hazardous waste treatment, storage and disposal facilities. Another major goal of this law is to encourage states to develop comprehensive programs for managing non-hazardous solid waste. This law also requires the EPA to develop and implement a regulatory program for underground storage tanks. Under this law, wastes containing dioxins are regulated as to their treatment, storage and disposal.

CONTACT PERSON AND AGENCY:

Assistant Administrator Solid Waste and Emergency Response U.S. Environmental Protection Agency Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

U.S.A. - Federal

TITLE OF REGULATION: Hazardous Waste Management System,

Dioxin-Containing Wastes

CITATION TO RECORD:

50 Federal Register 1978 (January 14, 1985); 40 C.F.R. § 261 264, 65, 270, and 775 [Resources Conservation and Recovery Act STATUS: § 6901 et seq.]

Final; effective July 15, 1985

BRIEF SUMMARY OF SCOPE:

Lists as acute hazardous wastes certain wastes containing CDDs, CDFs, chlorinated phenols; specifics management standards for these wastes; revokes duplicative regulation under the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.

CONTACT PERSON AND AGENCY:

RCRA Hotline (800) 424-9346
or
Matthew Straus (WH-562B)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 475-8551

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Hazardous Waste Management System;

Land Disposal Restrictions

CITATION TO RECORD:

51 Federal Register 40572 (November 7, 1986); 40 C.F.R. § 268 [Resource Conservation and Recovery Act as amended in 1984, 42

STATUS: \$ 6901 et seq.]

Final; effective November 8, 1988

BRIEF SUMMARY OF SCOPE: Prohibits land disposal of certain dioxin-containing wastes after effective date; in interim, specifics management standards for land disposal of these wastes.

1 ppb maximum interim level

CONTACT PERSON AND AGENCY:

RCRA Hotline (800) 424-9346 or (202) 382-3000 or
Stephen Weil or Jacqueline Sales (WH-562B)
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 382-4770

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Toxic Substances Control Act (TSCA).

CITATION TO RECORD:

STATUS:

Enacted law.

BRIEF SUMMARY OF SCOPE:

This law is intended to identify and control chemicals that pose an unreasonable risk to public health or the environment through their manufacture, processing, commercial distribution, use or disposal. A major regulatory tool under this law in the authority to screen new chemicals through a premanufacture notification process. Chemical manufacturers are required to notify the EPA prior to producing or importing new chemical substances. Existing chemicals may also be reviewed and regulated, if they fail the "unreasonable risk" test, in a number of ways ranging from labelling to outright bans. If appropriate, the EPA has the authority to require certain testing - both biological and chemical to ascertain characteristics of regulatory concern. The law also requires the EPA to maintain an inventory of all chemicals used in the U.S. to present an overall picture of the commercial chemical industry. In addition to the inventory, the EPA requires the chemical industry to report and keep records on the manufacture, processing, use and disposal of chemical substances and on information on exposure and significant adverse effects. Dioxins are not registered as a commercial chemical under this law, but occur as trace contaminants in other chemicals and can thus be regulated.

CONTACT PERSON AND AGENCY:

Assistant Administrator
Pesticides and Toxic Substances
U.S. Environmental Protection Agency
Washington, DC 20460

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Polyhalogenated Dibenzo-p-Dioxins/

Dibenzofurans; Testing and Reporting Requirements

CITATION TO RECORD:

52 Federal Register 21412 (June 5, 1987) [Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.]

STATUS:

Final; effective July 6, 1987

BRIEF SUMMARY OF SCOPE: Requires analytical testing of certain chemicals for HDD/HDF contamination, submission of existing test data on HDD/HDF contamination, submission of health and safety studies on HDDs/HDFs, and submission of reports of adverse human effects related to HDDs/HDFs.

CONTACT PERSON AND AGENCY:

Edward Klein (TS-799)
TSCA Assistance Office
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 554-1404

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - Federal

TITLE OF REGULATION: Polychlorinated Biphenyls in Electrical

Transformers.

CITATION TO RECORD:

50 Federal Register 29170 (July 17, 1985) 40 C.F.R. § 761 [Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.]

STATUS:

Final; effective August 16, 1985

BRIEF SUMMARY OF SCOPE: Restricts and conditions use of polychlorinated biphenyls in certain electrical transformers, in part because of the production of CDDs and CDFs in fire-related incidents involving these transformers.

CONTACT PERSON AND AGENCY:

Edward Klein (TS-799)
TSCA Assistance Office
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(202) 554-1404

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

U.S.A. - Federal

TITLE OF REGULATION:

Hexachlorophene; tolerance for

residues

CITATION TO RECORD:

40 C.F.R. § 180.302 [Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 et seq.]

STATUS:

Final

BRIEF SUMMARY OF SCOPE:

Establishes maximum level of

2,3,7,8-TCDD for technical grade hexachlorophene used in hexachlorophene pesticide products to be used on cotton.

All pesticidal uses of hexachlorophene suspended (June, 1988)

CONTACT PERSON AND AGENCY:

Frank Sanders (TS-767C)
Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, SW.
Washington, DC 20460
(703) 557-1650

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S./FEMA

TITLE OF REGULATION: Not yet formulated.

CITATION TO RECORD: Not yet item identifiable.

STATUS: At this time it is not even clear that FEMA will publish regulations addressing FEMA activities under section 305(a)(2) of The Emergency Planning and Community Right-to-Know Act of 1986 (Title III of the Superfund Amendments and Reauthorization Act of 1986). If it is determined that FEMA will issue regulations the publication of a proposed rule will not accur for some time.

BRIEF SUMMARY OF SCOPE: Section 305(a)(2) of the Emergency Planning and Community Right-to-Know Act of 1986 authorizes FEMA to make grants to support programs of State and local governments, and to support university-sponsored programs, which are designed to improve emergency planning, preparedness, mitigation, response and recovery capabilities, especially with respont to emergencies associated with hazardous EMERM chemicals, including dioxins and furans.

CONTACT PERSON AND AGENCY: Michael B. Hirsch

FEMA/OGC 500 C Street, S.W. Room 840 Washington, D.C. 20472 (202) 646-4099

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S./FEMA

TITLE OF REGULATION: 44 CFR 222: "Superfund Cost Share Eligibility Criteria

for Permanent and Temporary Relocation"

CITATION TO RECORD: 44 2 CFR 222

STATUS: This regulation became effective on April 6, 1987.

BRIEF SUMMARY OF SCOPE: This regulation does not relate specifically to either dioxins or furans. The FEMA regulation describes Federal/State cost sharing in the context of FEMA-administered temporary and permanent relocation activities which are undersaken pursuant to CERCLA, as amended.

CONTACT PERSON AND AGENCY:

Michael B. Hirsch KME FEMA/OGC 500 C Street, S.W. Room 840 Washington, D.C. 20472 (202) 646-4099

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S./FEMA

TITLE OF REGULATION: Temporary Relocation Assistance

CITATION TO RECORD: 44 CFR 220

STATUS: This regulation was published as proposed on June 10, 1986, and it will probably be finalized by approximately $\mathcal{J}_{i,j}$ (3.7)

BRIEF SUMMARY OF SCOPE: This FEMA regulation implements FEMA's responsibilities under Executive Order 12580 to provide temporary housing to individuals who are threatened by hazardous materials. FEMA's temporary housing activities are authorized by CERCLA, as amended. Nexther FEMA's temporary housing activities are not intended to see used in responding specifically or exclusively to dioxins or furner furner, but FEMA may become involved in responding to either of these chemicals.

CONTACT PERSON AND AGENCY:

Michael B. Hirsch FEMA/OGC 500 C Street, S.W. Room 840 Washington, D.C. 20472 (202) 646-4099

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S./FEMA

TITLE OF REGULATION: Permanent Relocation Assistance

CITATION TO RECORD: 44 CFR 221

STATUS: These regulations will be published as proposed during the summer or fall of 1987. They will not be finalized for some time thereafter.

BRIEF SUMMARY OF SCOPE: The regulations will deal with FEMA policy for implementing permanent relocations of families, businesses, and community facilities under CERCLA, as amended. FEMA's permanent relocation activities under the Superfund legislation are not intended for use in responding only to dioxins and furans, but the permanent relocation activities are authorized in responding to these, among other, EMEMBERER chemicals.

CONTACT PERSON AND AGENCY:

Michael B. Hirsch FEMA/OGC 500 C Street, S.W. Room 840 Washington, D.C. 20472 (202) 646-4099

CCMS/NATO Project on International Information Exchange on Dioxins and Related Chemicals

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States

COUNTRY:

TITLE OF REGULATION:

Federal Food, Drug and Cosmetics Act

CITATION TO RECORD:

21 USC 301 et seq

STATUS:

Enacted Statute

BRIEF SUMMARY OF SCOPE:

Under this Act, the Food and Drug Administration (FDA) has the authority to regulate the presence of dioxins and related chemicals in food. In this case, such chemicals would be subject to the provisions of 21 USC 342 and 21 USC 346. Although FDA has not issued regulations governing the presence of these chemicals in food, it has provided formal advisories to certain states regarding the need to limit consumption of fish contaminated with dioxins.

CONTACT PERSON AND AGENCY:

Chief Counsel
Public Health Service
Room: 4A-53, Parklawn Building
Rockville, Maryland 20857

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION: Superfund Legislation

CITATION TO RECORD: 49 U.S.C. \$11901(h)

STATUS: Not applicable.

BRIEF SUMMARY OF SCOPE:

Any person who engages in the for-hire motor carrier transportation of hazardous wastes as defined by the Environmental Protection Agency pursuant to section 3001 of the Solid Waste Disposal Act without obtaining authority from the Interstate Commerce Commission shall be liable to the United States for a civil penalty not to exceed \$20,000 for each violation.

CONTACT PERSON AND AGENCY: Charles E. Wagner

Interstate Commerce Commission

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States of America

Federal Agency

TITLE OF REGULATION: Hazardous Matter Nonmailable

CITATION TO RECORD: Domestic Mail Manual, 124.31

STATUS: February 7, 1975

BRIEF SUMMARY OF SCOPE:

In order to determine mailability, the regulation requires the following disclosures: the name of the material, the chemical composition by percentage of ingredient, flash point, irritant action to eyes and skin, special handling instructions to avoid harm to postal employees or mail, explanation of required state or Federal warning regulations and, proposed packaging method.

CONTACT PERSON AND AGENCY:

Francis E. Gardner 475 L'Enfant Plaza West, S.W.

Washington, D.C. 20260-5361

Tel: (202) 268-5178

United States Postal Service

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States of America

Federal Agency

TITLE OF REGULATION: Injurious Articles as Nonmailable

CITATION TO RECORD: 18 U.S. Code 1716

STATUS: March 4, 1909

BRIEF SUMMARY OF SCOPE:

All kinds of poison, and all articles and compositions containing poison are nonmailable. The Postal Service may regulate the mailing of the above articles if they are not outwardly or of their own force dangerous to life, health, or property. Fines up to \$1,000.00 or imprisonment up to 1 year, or both, may be imposed for knowingly depositing nonmailable items. If mailed with intent to kill or injure a person or the mails, the penalty is \$10,000 or 20 years imprisonment, or both. If a crime prohibited by this statute results in a person's death, the penalty is death or life in prison.

CONTACT PERSON AND AGENCY:

Francis E. Gardner 475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-5361 Tel: (202) 268-5178 United States Postal Service

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States of America

Federal Agency

TITLE OF REGULATION: Poisons & Controlled Substances

CITATION TO RECORD: Domestic Mail Matter, 124.361b

Publication 52, 361,22

STATUS:

July 7, 1981

May 15, 1981

BRIEF SUMMARY OF SCOPE:

Class A poisons, extremely dangerous gases or liquids, in which an oral lethal dose of 5 mg. or less per kg. of body weight is fatal to one half of test animals within 14 days, are not mailable under any conditions.

Class A poisons also include: 1) any material that has a lethal concentration of 50 parts per million or less by volume of a gas or vapor or 0.50 mg. or less of mist or dust per liter of air when administered by continuous inhalation for one hour, and 2) any material with an LD50 of 20 mg. or less per kg. of body weight when administered by continuous contact with the skin for 24 hours.

CONTACT PERSON AND AGENCY:

Francis E. Gardner

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-5361

Tel: (202) 268-5178

United States Postal Service

CCMS/NATO Project on International Information Exchange on Dioxins and Related Chemicals

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A.

TITLE OF REGULATION:

Claims based on exposure to herbicides containing dioxin during service in Republic of Vietnam.

CITATION TO RECORD:

Title 38, Code of Federal Regulations, Section

3.311a.

STATUS:

Effective date: September 25, 1985.

BRIEF SUMMARY OF SCOPE:

Provide for the award of disability compensation benefits to Vietnam Veterans for chloracne manifested not later than 3 months from the date of exposure.

Regulation specifically states that sound scientific and medical evidence does not establish a cause and effect relationship between exposure to dioxin and the subsequent development of porphyria cutanca tarda or soft tissue sarcomas or any other disease.

CONTACT PERSON AND AGENCY:

Robert White
Regulations Staff Chief
Office of Policy and Planning
Compensation and Pension Service
Dept. of Veterans Benefits
Veterans Administration
810 Vermont AVenue, NW
Washington, DC 20420
Phone FTS-373-3005
Commercial (202) 233-3005

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, California

TITLE OF REGULATION: Pesticides and Control Operations

CITATION TO RECORD: Title 3 of the California Code of Regulations

Section 6352

STATUS: Enacted 1987

BRIEF SUMMARY OF SCOPE: Registrations for 2,4,5-Trichlorophenoxyacetic

acid (2,4,5-T) are cancelled for uses around homes, in lakes, ponds, on ditch banks, on

recreation areas and similar sites in due part to

dioxin contamination.

CONTACT PERSON AND AGENCY: California Department of Health Services

(916) 355-0136

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, California

TITLE OF REGULATION:

Proposition 65

CITATION TO RECORD:

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Dioxins listed under Proposition 65 as a toxic substance and facilities generating, handling, and/or disposing of substances are required to notify workers under "Right to Know" laws. Also illegal to discharge any detectable concentration of dioxins into drinking water unless proven

nonhazardous.

CONTACT PERSON AND AGENCY:

Carmen Estera Proposition 65 (916) 445-6900

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, California

TITLE OF REGULATION:

Hazardous Waste Definitions

CITATION TO RECORD:

Title 22 of the California Code of Regulations

Section 6699

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

A waste is defined as hazardous if it contains TCDD at concentrations above 0.001 mg/kg and/or

total dioxins above 0.01 mg/kg.

CONTACT PERSON AND AGENCY:

California Department of Health Services

(916) 322-2098

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United States

State: Colorado

TITLE OF REGULATION:

Colorado Hazardous Waste Act

CITATION TO RECORD:

Section 25-15-302(3 and 4)

STATUS:

Adopted Regulation in August 1985

6-CCR-107-3

BRIEF SUMMARY OF SCOPE:

Gives the Board of Health (State) the authority ot catagorize hazardous waste based on the type of waste and to impose regulation on these wastes based on the same.

CONTACT PERSON AND AGENCY:

Paul Nazaryk Colorado Department of Health 4210 East 11th Avenue Denver, CO 80220

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

U.S.A.

State of Connecticut

TITLE OF REGULATION: Connecticut General Statutes Sec. 22a-449(c)

Duties and Powers of Commissioner
Regulations of Connecticut State Agencies, Hazardous waste Management
Regulations Sec. 22a-449(c) Sections 1-42

CITATION TO RECORD:

STATUS: February 14, 1986

BRIEF SUMMARY OF SCOPE: The regulation covers dioxins and/or furans or specific isomers that are listed as hazardous wastes by USEPA. If they are hazardous wastes under 40 C.F.R. 261, then they are regulated under the Connecticut Regulations.

CONTACT PERSON AND AGENCY:

Edward Parker, Assistant Director
Hazardous Waste Materials Unit
Connecticut Department of Environmental Protection
122 Washington Street
Hartford, CT 06106
Telephone (203) 566-2264

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States
State of Delawre

TITLE OF REGULATION: Delaware Environmental Protection Laws

CITATION TO RECORD: Delaware Code, Title 7, Chapter 60 et. seq.

STATUS: Enacted: July 17, 1973

BRIEF SUMMARY OF SCOPE: General environmental protection laws granting broad powers to control air, water and hazardous waste pollution.

Dioxin or furans are not specifically regulated.

CONTACT PERSON AND AGENCY:

Delaware Department of Natural Resources and Environmental Control Solid Waste Management Branch P. O. Box 1401, Talnall Building Dover, Delaware 19901

Ellen Malenfort

(302) 736-4781

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States

District of Columbia COUNTRY:

TITLE OF REGULATION:

District of Columbia Hazardous Waste

Management Act

CITATION TO RECORD:

District of Columbia Code, Title 6, Health

and Safety, Chapter 7 - Hazardous Waste

Management

STATUS:

Effective Date: August, 1984

BRIEF SUMMARY OF SCOPE:

General environmental control laws of broad scope. Washington, D. C. does not have any regulations which specifically control dioxins or furans. Hazardous waste

regulations are virtually the same as the Federal regulations -- 40 C.R.F. Parts 260 through 265 and 40 (FR Part 270). Dioxins or furans are not specifically mentioned.

CONTACT PERSON AND AGENCY:

Division of Environmental Control Department of Consumer and Regulatory

Affairs

5010 Overlook Avenue, S. W. Washington, D. C. 20032

Angelo Tompros

(202) 767-7486

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United States
District of Columbia

TITLE OF REGULATION:

District of Columbia Air Pollution Control Act

CITATION TO RECORD:

Title 20 of the District of Columbia Municipal

Regulations

STATUS:

Effective Date: March 15, 1985

BRIEF SUMMARY OF SCOPE:

This is a general act which regulate air pollutants. Dioxins or furans are not

specifically mentioned.

CONTACT PERSON AND AGENCY:

Division of Environmental Control
Department of Consumer and Regulatory

Affairs

5010 Overlook Avenue, S. W. Washington, D. C. 20032

Joseph Nwude

(202) 767-7486

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: State of Florida, U.S.A.

TITLE OF REGULATION:

Chapter 17-22, Florida Administrative Code (FAC), Public Drinking Water Systems, Part II, Quality

Standards, Analytical Methods Sampling.

CITATION TO RECORD:

Subsection 17-22.105(1)(h)(3), Florida

Administrative Code.

STATUS:

Final regulation (effective May 23, 1984).

BRIEF SUMMARY OF SCOPE:

Analyses for 2,3,7,8-dioxin were to be submitted to the Department by January 1, 1985, for all community systems serving 1,000 or more persons, and by April 1, 1986, for all community systems

serving less than 1,000 persons.

In addition, analyses for this chemical are to be performed every three years on finished water except when results or conditions warrant more frequent monitoring as determined by the

Department.

CONTACT PERSON AND AGENCY:

Kent Kimes

Drinking Water Section

Florida Department of Environmental Regulation

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

904/487-1779

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: State of Florida, U.S.A.

TITLE OF REGULATION:

Chapter 17-3, Florida Administrative Code, Water

Quality Standards, Part IV, Water Quality

Criteria - Groundwater.

CITATION TO RECORD:

Subsection 17-3.402(1)(b), minimum criteria for

groundwater, Florida Administrative Code.

STATUS:

Final regulation (effective January 1, 1983).

BRIEF SUMMARY OF SCOPE:

All groundwater shall at all places and at all

times be free from domestic, industrial,

agricultural, or other man-induced non-thermal components of discharges in concentrations which are carcinogenic, mutagenic, teratogenic or toxic

to human beings.

CONTACT PERSON AND AGENCY:

Randy Merchant

Bureau of Groundwater Protection

Florida Department of Environmental Regulation

Twin Towers Office Building

2600 Blair Stone Road Tallahassee 32399-2400

904/488-3601

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A., State of Georgia

TITLE OF REGULATION: Georgia Hazardous Waste Management Act.

CITATION TO RECORD: Georgia Law April 1979 p. 1127 #1, Georgia Code

12-8.

STATUS: Final. Regulations have been written under

authority of the act. Latest amendment effective

as of Sept. 1986, Georgia Chapter 391-3-11.

BRIEF SUMMARY OF SCOPE: The Georgia Regulations have adopted the Federal

Regulations under the Resource Conservation and Recovery Act, and the Hazardous and Solid Waste Amendments (HSWA). Under Authority of the Georgia Act the state can issue an order and

require clean-ups of CERCLA sites.

CONTACT PERSON AND AGENCY: Ms. Jennifer R. Kaduck

Georgia Environmental Protection Division

205 Butler St., Suite 1154

Atlanta, Georgia, U.S.A., 30334

Tel. (404) 656-7802

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States - Idaho

TITLE OF REGULATION: Pollution Source Permits

CITATION TO RECORD: Idaho Code, 39-115 Section

STATUS: Amendment to section made March 1987

BRIEF SUMMARY OF SCOPE: Places restrictions and conditions on issuance of state air quality permits

to PCB incinerator ->

1. Not in specified valley terrain

2. Has all local permits, approvals, etc.

3. Public hearing

4. BAT

CONTACT PERSON AND AGENCY: John Ledger, Idaho Department

of Health and Welfare

State House

Boise, Idaho 83720

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

UNITED STATES

COMMONWEALTH OF KENTUCKY

TITLE OF REGULATION: EXISTING SOURCES EMITTING TOXIC AIR POLLUTANTS

CITATION TO RECORD:

KENTUCKY ADMINISTRATIVE REGULATIONS

401 KAR 63:021

STATUS: EFFECTIVE 11/11/86

BRIEF SUMMARY OF SCOPE:

PROVIDES FOR CONTROL OF EMISSION OF TOXIC

AIR POLLUTANTS FROM EXISTING AFFECTED

FACILITIES.

LIST OF TOXIC AIR POLLUTANTS INCLUDES:

DIOXIN (2,3,7,8 - tetrachlorodibenzo-p-dioxin)

CONTACT PERSON AND AGENCY:

Marty Hall

Division of Air Pollution

18 Reilly Road

Frankfort, Kentucky 40506

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

UNITED STATES

COMMONWEALTH OF KENTUCKY

TITLE OF REGULATION: NEW OR MODIFIED SOURCES EMITTING TOXIC AIR POLLUTANTS

CITATION TO RECORD:

KENTUCKY ADMINISTRATIVE REGULATIONS

401 KAR 63: 022

STATUS: EFFECTIVE 11/11/86

BRIEF SUMMARY OF SCOPE: PROVIDES FOR CONTROL OF EMISSION OF TOXIC AIR POLLUTANTS FROM NEW OR MODIFIED AFFECTED FACILITIES.

LIST OF TOXIC AIR POLLUTANTS INCLUDES:

DIOXIN (2,3,7,8 - tetracholordibenzo-p-dioxin)

CONTACT PERSON AND AGENCY:

Marty Hall

Division of Air Pollution

18 Reilly Road

Frankfort, Kentucky 40506

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

UNITED STATES

COMMONWEALTH OF KENTUCKY

TITLE OF REGULATION: IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

CITATION TO RECORD:

KENTUCKY ADMINISTRATIVE REGULATION 401 KAR Chapter 31:040

STATUS:

EFFECTIVE DATE 2/4/86

BRIEF SUMMARY OF SCOPE:

This is a specific listing of hazardous wastes and is identical to the U.S. EPA promulgated regulations

CONTACT PERSON AND AGENCY:

Abbie Meyer Division of Waste Management 18 Reilly Road Frankfort, Kentucky 40601 (502) 564-5576

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country: \$U\$nited States

Commonwealth of Kentucky

TITLE OF REGULATION:

STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES

CITATION TO RECORD: KENTUCKY ADMINISTRATIVE REGULATION 401 KAR Chapter 34

STATUS:

effective date 2/4/86

BRIEF SUMMARY OF SCOPE:

This chapter establishes minimum standards which define the acceptable management of hazardous waste.

CONTACT PERSON AND AGENCY:

Abbie Meyer Division of Waste Management 18 Reilly Road Frankfort, Kentucky 40601 (502) 564-5576

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: UNITED STATES

COMMONWEALTH OF KENTUCKY

TITLE OF REGULATION:

INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF

HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL

FACILITIES

CITATION TO RECORD:

KENTUCKY ADMINISTRATIVE REGULATION

401 KAR Chapter 35

STATUS:

effective date 2/4/86

BRIEF SUMMARY OF SCOPE:

The purpose of this chapter is to establish minimum standards which define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or until post-closure responsibilities

are fulfilled

CONTACT PERSON AND AGENCY:

Abbie Meyer Division of Waste Management 18 Reilly Road Frankfort, Kentucky 40601 (502) 564-6716

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA , State of Maine

Maine Department of Environmental Protection

TITLE OF REGULATION:

Interim Standards for Sludges and Residuals Containing Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans (PCDDs and PCDFs)

CITATION TO RECORD:

Adopted pursuant to 38 M.R.S.A., Section 1304, Chapter 567 Rules for Land Application of Sludges and Residuals

STATUS:

Regulation adopted by Board of Environmental Protection on October 8, 1986. Regulation filed with Secretary of State on November 3, 1986. Effective Date of Regulation is November 8, 1986.

BRIEF SUMMARY OF SCOPE:

The Regulation identifies classes of sludge and residual generators who must test for PCDDs and PCDFs. Limits for dioxins and furans have been established based on the toxic equivalency factor approach. Maximum and minimum values have been established for 2,3,7,8, TCDD Equivalents in sludge and soils. Various restrictions and site management criteria are contained in the regulation.

A document entitled "Methodology for Sampling and Analysis of PCDDs and PCDFs in Sludge and Residuals" was developed as a guideline.

The Regulation applies to all 2,3,7,8 substituted isomers of dioxins and furans (except mono, di, tri, and octa) as well as the total congener class concentration of the tetra, penta, hexa, and hepta congener classes.

CONTACT PERSON AND AGENCY:

contact: Bryce J. Sproul

Sludge and Residual Utilization Program Department of Environmental Protection

Bureau of Water Quality Control

State House Station #17 Augusta, Maine 04333

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States State of Maryland

TITLE OF REGULATION:

Maryland Air Pollution Regulations

CITATION TO RECORD:

Code of Maryland Regulations, Title 10, Health and Mental Hygiene, Subtitle 18, Air Quality.

STATUS: Adopted: May 19, 1980

BRIEF SUMMARY OF SCOPE:

Dioxins or furans are not specifically regulated. This is a broad air pollution control law which gives authority to control air pollutants.

CONTACT PERSON AND AGENCY:

Air Quality Control Programs Department of Health and Mental Hygiene

201 W. Preston Street Baltimore, Maryland 21201

George P. Ferreri, Admin.

(301) 225-5235

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States State of Maryland

COUNTRY:

TITLE OF REGULATION: Maryland Hazardous Waste Regulations

CITATION TO RECORD: Code of Maryland Regulations, Title 10, Department of Health and Mental Hygiene,

Subtitle 51

STATUS: Adopted: April 3, 1981

BRIEF SUMMARY OF SCOPE: General environmental regulations. Maryland

has not specifically regulated dioxins or furans, but they would be covered by the

broad, general regulations.

CONTACT PERSON AND AGENCY: Waste Management Division

Department of Health and Mental Hygiene

201 W. Preston Street Baltimore, Maryland 21201

Bernie Bigham

(304) 225-5649

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, Massachusetts

TITLE OF REGULATION:

Relevant Statutes

CITATION TO RECORD:

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

The state of Massachusetts has numerous general regulations and statutes addressing air pollution, hazardous waste, water and sewage, and may be used

to control dioxins and related compounds.

CONTACT PERSON AND AGENCY:

Department of Environmental Quality Engineering

Executive Office of Environmental Affairs

One Winter Street Boston, MA 02108 (617) 292-5568

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: US, Mississippi

TITLE OF REGULATION:

Mississippi Hazardous Waste Management

CITATION TO RECORD:

STATUS:

BRIEF SUMMARY OF SCOPE:

Mississippi has adopted the Federal RCRA regulations which manage EPA listed wastes F020, F021, F022, F023, F026, F027, and F028. These wastes are regulated due in part to dioxin

content.

CONTACT PERSON AND AGENCY:

Charles Estes, P.E. Hazardous Waste Division

Mississippi Department of Natural Resources

P.O. Box 10385

Jackson, Mississippi 39209

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States

United States
State of Missouri
Department of Natural Resources

TITLE OF REGULATION:

10 CSR 25-4.261 Methods for Identifying Hazardous Waste

CITATION TO RECORD:

10 CSR 25-4.261 (2) (D), which incorporates by reference 40 CFR Part 261, Subpart D

STATUS:

Effective August 1, 1987

BRIEF SUMMARY OF SCOPE:

This regulation lists as hazardous waste certain manufacturing process wastes which could be expected to contain various dioxin isomers. It does not list specific isomers by name. In addition, it lists as hazardous waste residue or contaminated soil or other media resulting from a spill of the above wastes. 2378 TCDD is also specifically listed as an acutely hazardous waste in quantities greater than 1 gram.

CONTACT PERSON AND AGENCY:

Mr. John D. Doyle, P.E. Chief, Hazardous Waste Section Department of Natural Resources Waste Management Program P.O. Box 176 Jefferson City, MD 65102

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United States MIssouri

TITLE OF REGULATION:

Missouri Water Quality Standards Regulation

CITATION TO RECORD:

Missouri - RSMO 644, 10 CSR 20-7.031

STATUS:

Effective December 13, 1984

BRIEF SUMMARY OF SCOPE:

Persistent, bioaccumulative, man-made toxic substances are not allowed in the waters of the state. These substances include, but are not limited to: PCB's, DDT, endrin, aldrin, dieldrin, heptachlor, methoxychlor, mirex, toxaphene, lindane (gamma BHC) chlordane, benzidine, dioxin (2,3,7,8 TCDD), and alph-; beta-; delta BHC.

CONTACT PERSON AND AGENCY:

John Howland P.O. Box 176 Jefferson City, MO 65101 (314) 751-7143

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.
State: Montana

TITLE OF REGULATION:

Montana Hazardous Waste Act

CITATION TO RECORD:

Title:75 Chapter: 10 Part: 4 MCA

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Analogue of RICRA

CONTACT PERSON AND AGENCY:

Roger Thorvilson Solid and Hazardous Waste Bureau DHES, Cogwell Capital Station Helena, MO 59620

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S. State: Montana

TITLE OF REGULATION:

Environmental Quality Protection Act

CITATION TO RECORD:

Title: 75 Chapter: 10 Part: 7 MCA

STATUS:

Enacted 1985

BRIEF SUMMARY OF SCOPE:

State reserves right to regulate petroleum products and those substances listed in the Federal Registar of Hazardous substances Vol. 50.

CONTACT PERSON AND AGENCY:

Roger Thorvilson
Solid & Hazardous Waste Bureau
DHES, Cogivell
Capital Station
Helena, MO 59620

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S.A. - State of New Hampshire

TITLE OF REGULATION:

State of New Hampshire's Hazardous Waste Rules, He-P 1905.03(b), Appendices II and III.

CITATION TO RECORD:

Statutory enabling legislation: RSA 147-A:3 II.

STATUS:

Regulation effective date: June 24, 1986.

BRIEF SUMMARY OF SCOPE:

The regulation adopted the U.S. EPA's 1-14-85 adoption that classified wastes containing chlorinated dioxins, debenzofurous, and phenols as regulated acutely hazardous wastes.

CONTACT PERSON AND AGENCY:

Kenneth Marschner, Administrator, Waste Management Bureau, Division of Waste Management, Department of Environmental Services - 603-271-2942.

Charles E. Knox, Administrator, Program Implementation and Reporting Bureau, Division of Waste Management, N. H. Department of Environmental Services - 603-271-2900.

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, New Jersey

TITLE OF REGULATION:

Discharge of Hazardous Substances to Ground

Water

CITATION TO RECORD:

New Jersey Administrative Code, Title 7,

Chapter 1E

STATUS:

Effective May 1986

BRIEF SUMMARY OF SCOPE:

Regualtion lists 2,3,7,8-TCDD as a hazardous

substance on ground-water regulations.

CONTACT PERSON AND AGENCY:

New Jersey Department of Environmental Protection

P.O. Box 2809 Trenton, NJ 08625

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: US, New Jersey

TITLE OF REGULATION:

Hazardous Waste Listing and Definition

CITATION TO RECORD:

New Jersey Administrative Code, Title 7,

Chapter 26

STATUS:

Enacted

BRIEF SUMMARY OF SCOPE:

Hazardous constituents listed as being present in

hazardous waste include TCDD, TCDF, and 2,3,7,8-tetrachlorodibenzoparadioxin.

CONTACT PERSON AND AGENCY:

New Jersey Department of Environmental Protection

P.O. Box 2809 Trenton, NJ 08625

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, New York

TITLE OF REGULATION:

Ambient Water Quality Standards

CITATION TO RECORD:

Environmental Conservation Law, Section 3-0301[2]

[m],15-0313,17-0301 Title 6, Part 701.14

STATUS:

Enacted 1985

BRIEF SUMMARY OF SCOPE:

Ambient water quality standard for 2,3,7,8-TCDD

is $0.000001 \, \mu g/1$.

CONTACT PERSON AND AGENCY:

Shari Greenberg Chrimes Division of Legal Affairs

New York State Department of Environmental Conservation

Albany, NY 12233 (518) 457-6695

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, New York

TITLE OF REGULATION:

Ground-Water Classifications, Quality Standards,

and Effluent Standards and/or Limitations

CITATION TO RECORD:

Environmental Conservation Law, Section 17-0301,

17-0809

Title 6, Part 701.14

STATUS:

Enacted 1978

BRIEF SUMMARY OF SCOPE:

The effluent standards and/or limitations apply to the discharge from a point source to ground waters. The maximum allowable concentration for

2,3,7,8-TCDD is $0.000035 \mu g/1$.

CONTACT PERSON AND AGENCY:

Shari Greenberg Chrimes
Division of Legal Affairs
New York State Department of
Environmental Conservation

Albany, NY 12233 (518) 457-6695

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States Commonwealth of

Pennsylvania

TITLE OF REGULATION: Pennsylania Air Pollution Control Regulations

CITATION TO RECORD: PA. Code, Title 25, Part 1 - Department of

Environmental Resources, Chapters 121

through 141

STATUS: Adopted September 2, 1971

Dioxins or furans are not specifically BRIEF SUMMARY OF SCOPE: controlled by statute which grants authority to control hazardous air

pollutants.

Dioxins are controlled via guidelines for reviewing permit applications for new municipal waste resource recovery systems. These guidelines cover all dioxins but values are reduced to toxicity equivalency factors in terms

of 2,3,7,8 TCDD.

Bureau of Air Quality **CONTACT PERSON AND AGENCY:**

PA. Department of Environmental

Resources P.O. Box 2063

Harrisburg, PA. 17120

Jack M^CGrogan

(717) 787-9702

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

Country: United States, County of Philadelphia

TITLE OF REGULATION:

Control of Emissions of Toxic Air Contaminants

CITATION TO RECORD:

Philadelphia Public Health Department, Air Pollution Control Board, Air Management

Regulation IV

STATUS:

Effective August 7, 1981

BRIEF SUMMARY OF SCOPE:

Tetrachlorinated dibenzo-p-dioxins are listed as toxic air contaminants for the purposes of Regulation VI. Also, total TCDD's are included in ambient air quality gyidelines with an annual

average limit of 35 pg/m^3 .

CONTACT PERSON AND AGENCY:

Clen Lazenka, Head Air Management Laboratory

Philadelphia Public Health Department

1501 Lycoming Street Philadelphia, PA 19124

(215) 288-5178

CCMS/NATO Project on International Information Exchange on Dioxins and Related Chemicals

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

State of Rhode Island

COUNTRY: USA

TITLE OF REGULATION: Hazardous Waste Management Act of 1978

CITATION TO RECORD:

STATUS: Enacted into law in 1978, last amended on 7 November 1986

BRIEF SUMMARY OF SCOPE: This act has similar features to the Federal Resource Conservation and Recovery Act and the amendments contain certain features which implement the Federal statute at the state level. The Act does not specifically name dioxins or furans, but these chemicals could be regulated under the provisions of the Act.

CONTACT PERSON AND AGENCY:

Division of Air and Hazardous Materials Department of Environmental Management State of Rhode Island 75 Davis Street Providence, Rhode Island 02908

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: State of Tennessee, U.S.A.

TITLE OF REGULATION: Tennessee Hazardous Waste Management Regulations,

Rule Chapter 1200-1-11.

CITATION TO RECORD: Tennessee Code Annotated 68-46-101 through 118.

STATUS: Effective February 2, 1986.

BRIEF SUMMARY OF SCOPE: Federal regulations adopted verbatim.

CONTACT PERSON AND AGENCY: Chuck Allen
Tennessee Department of Health and Environment

Customs House, 4th floor

701 Broadway

Nashville, Tennessee 37219-5403

615/741-3424

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: US - vermont

TITLE OF REGULATION:

Hazardous Waste Management

CITATION TO RECORD:

EPR 6-602 Definition of Hazardous Waste
EPR 6-603 - 611 Various Hazardous Waste Management topics

STATUS:

All currently final - effective since July 1980, but amended February 1987 and currently under complete redrafting.

BRIEF SUMMARY OF SCOPE:

Vermont is an authorized state under RCRA and concerning dioxins and furans, has adopted by reference 40 CFR Parts 262 and 264.

CONTACT PERSON AND AGENCY:

Gary Gulka
Waste Management Division
Agency of Environmental Conservation

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: Us - Vermont

TITLE OF REGULATION:

Community Right to Know

CITATION TO RECORD:

18 Vermont Statutes, Chapter 36

STATUS:

Effective May 1985

BRIEF SUMMARY OF SCOPE:

Incorporates 29 CFR Part 1910, Subpart Z

CONTACT PERSON AND AGENCY:

Ray McCandless Occupational Health Department of Health

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: US: Verment

TITLE OF REGULATION:

Air Pollution Contral

CITATION TO RECORD:

EPR 5-101 (26) Definition - Hazardous Air Contaminants EPR 5-263 Control of Hazardous Air Contaminants

STATUS:

Both currently final; effective since November 1981. Expect to revise with specific listings soon; effective early 1988.

BRIEF SUMMARY OF SCOPE:

Currently very broad and interpreted as covering dioxins and furans; expected revisions will specifically list.

CONTACT PERSON AND AGENCY:

Harold T. Garabedian Air Pollution Control Division Agency of Environmental Conservation

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: United States
State of Virginia

TITLE OF REGULATION: Solid and Hazardous Waste Management Act

CITATION TO RECORD: Code of Virginia, Title 32 (Health),

Chapter 6 (Environmental Health Services)

Article 3

STATUS: Enacted: 1979

BRIEF SUMMARY OF SCOPE: General power to control all hazardous waste disposal.

CONTACT PERSON AND AGENCY: Exec

Executive Director
Department of Waste Management

James Madison Building Richmond, Virginia 23219

Cynthia Bailey

(804) 786-5271

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

United States

State of Virginia

TITLE OF REGULATION: Air Pollution Control Act

CITATION TO RECORD:

Code of Virginia, §10-17.18.

STATUS:

Enacted:

BRIEF SUMMARY OF SCOPE: Virginia does not have any statute or

regulations specifically covering dioxins or furans. This statute controls hazardous air pollutants generally.

CONTACT PERSON AND AGENCY:

Executive Director

Air Pollution Control Board Ninth Street Office Building Richmond, Virginia 23219

Richard Cook

(804) 786-2378

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY:

U.S.-Washington State

TITLE OF REGULATION:

Dangerous Waste Regulations

CITATION TO RECORD:

Washington Administrative Code (WAC) Chapter

173-303

STATUS:

Amended June 1986

BRIEF SUMMARY OF SCOPE:

Dangerous waste characterized not by inclusion on list but by subjecting waste to various tests - according to these tests, wastes containing dioxin would be characterized as dangerous and

covered by regulations.

CONTACT PERSON AND AGENCY:

Marie Zuroske

Washington Department of Ecology

PV-11

Olympia, Washington 98504

Telephone: (206) 459-6314

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States

COUNTRY: State of West Virginia

TITLE OF REGULATION: Hazardous Waste Management Act

CITATION TO RECORD: West Virginia Code §20-5E

Enacted: STATUS:

BRIEF SUMMARY OF SCOPE: No specific statutes or regulations for dioxin or furans. This is a general environmental protection statute giving broad authority to control hazardous pollutants.

CONTACT PERSON AND AGENCY:

Environmental Health Services Building 3, Room: 206 1800 Washington Street, East Charleston, West Virginia 25305

Robert Wheeler

(304) 348-2970

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

United States

COUNTRY: State of West Virginia

TITLE OF REGULATION: Air Pollution Control Act

CITATION TO RECORD: Code of West Virginia, Chapter 16 - (Public Health) Article 20 (Air Pollution Control)

Enacted: 1971

STATUS:

BRIEF SUMMARY OF SCOPE: This is a general environmental protection statute giving broad authority to control hazardous air pollutants.

CONTACT PERSON AND AGENCY:

Air Pollution Control Commission 1558 East Washington Street Charleston, West Virginia 25311

Carl G. Beard, II, Director

(304) 348-3286

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, Wisconsin

TITLE OF REGULATION:

Wisconsin State Air Pollution Control

Regulations

CITATION TO RECORD:

STATUS:

Pending Promulgation September 1988

BRIEF SUMMARY OF SCOPE:

New regulations and permitting requirements for incinerators that emit more than 0.0001 lb/yr of total dioxins. Permitting requirements include the use of Best Available Technology (BAT) to

control emissions.

CONTACT PERSON AND AGENCY:

Bureau of Air Management

Department of Natural Resources

P.O. Box 7921

Madison, Wisconsin 53707

(608) 266-7718

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: USA, Wisconsin

TITLE OF REGULATION:

1984 Ground-Water Protection Law

CITATION TO RECORD:

Chapter NR140

STATUS:

To be promulgated final in 1990

BRIEF SUMMARY OF SCOPE:

New ground-water limits for dioxins are being proposed by the Wisconsin Department of Natural Resources. The limit for ground water will be 0.00000022 ppb and a preventive action (early

warning) level of 0.000000022 ppb.

CONTACT PERSON AND AGENCY:

Wisconsin Department of Natural Resources

Madison Wisconsin 53707

(608) 266-2621

FORMAT FOR INVENTORY OF REGULATIONS CONCERNING DIOXINS AND RELATED CHEMICALS

COUNTRY: U.S. State: Wyoming

TITLE OF REGULATION:

Wyoming Environmental Quality Act

CITATION TO RECORD:

WS-35-11-101 etc.

STATUS:

Active

BRIEF SUMMARY OF SCOPE:

The Director of Environmental Quality has the authority to promogate rules for disposal of hazardous substances.

CONTACT PERSON AND AGENCY:

Dave Finley
Dept. of Environmental Quality