PETITION OF NORTHWEST COALITION FOR ALTERNATIVES TO PESTICIDES, *ET AL.*, TO REQUIRE DISCLOSURE OF HAZARDOUS INERT INGREDIENTS ON PESTICIDE PRODUCT LABELS

 TO: Stephen L. Johnson, Administrator United States Environmental Protection Agency Office of Pesticide Programs 401 M Street SW Washington, D.C. 20460

PETITION FOR RULEMAKING

This petition for rulemaking is submitted by Northwest Coalition for Alternatives to Pesticides and 21 co-signing organizations concerned with disclosure of hazardous inert ingredients in pesticide products. The petition is submitted pursuant to provisions of the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136w, and the Administrative Procedure Act, 5 U.S.C. § 553(e). Petitioners request that EPA issue a determination within 60 days of the filing of this Petition to amend its labeling regulations, 40 C.F.R. § 156.10, to require that pesticide product labels clearly list any inert ingredients that EPA regulates as a hazardous chemical under other statutory provisions. Should EPA determine that it will not or cannot list all chemicals identified as hazardous under other statutes, petitioners request that EPA assess each enumerated list in this petition and make a section-by-section determination of whether to require labeling for each subset section. Should EPA determine that it will not or cannot make a section-by-section determination, petitioners request that EPA assess each chemical within each enumerated list in this petition and make an individual determination for each chemical of whether to require labeling for that chemical. Separately from the foregoing requests for labeling, petitioners also request that EPA require labeling of the hazardous inerts identified in the Hazardous Substance Data Bank.

Introduction

EPA's current pesticide labeling regulation, 40 C.F.R. §156.10, requires that pesticide manufacturers disclose only those chemical ingredients that are "active." EPA does not require listing of inert ingredients. However, contrary to their name, "inert" ingredients in pesticides are not inert in a biological or chemical sense. These chemicals can be toxic, carcinogenic, flammable, or otherwise hazardous to human and environmental health.¹

Many hazardous chemicals that are used as pesticide inert ingredients are regulated by EPA through statutory programs other than FIFRA. These chemicals are regulated under these statutes because EPA has made individual determinations that each of them are toxic, flammable, explosive, hazardous, or otherwise dangerous to human and environmental health. The fact that other statutory programs regulate so many chemicals used as inert ingredients demonstrates the extent to which many inerts present an unreasonable risk of injury to human health and the environment.

There are several compelling reasons to amend 40 C.F.R. § 156.10 to require that manufacturers list on pesticide labels all inert ingredients that EPA has determined to be hazardous chemicals under any statutory mandate. First, "inert" ingredients are not biologically or chemically inert, and pose significant risk to human and environmental health. Second, EPA has the authority to require manufacturers to disclose hazardous inert ingredients in their products. Third, EPA has already determined many inerts to be hazardous, and regulates those ingredients under environmental statutes

¹ At least sixteen inert ingredients are identified as toxic under the Clean Water Act, as listed in EPA's Substance Registry System (SRS), *available at* http://www.epa.gov/srs/. At least ninety-six inert ingredients have been evaluated for carcinogenicity by the International Agency for Research on Cancer (IARC), according to the SRS. Of these, two inerts are classified as carcinogenic to humans and seventeen are classified as possibly carcinogenic to humans. Additionally, at least eleven inert ingredients are identified as "flammable" by the Clean Air Act in the SRS. "Agents Reviewed by the IARC Monographs", volumes 1-88, *available at* http://www-cie.iarc.fr/monoeval/Listagentsalphorder.pdf. EPA has "long known and acknowledged that some inert ingredients are not benign to human health or the environment. The 'inert' ingredients in some products may be more toxic or pose greater risks than the active ingredient." EPA's Pesticide Registration Notice 97-6, *available at* http://www.epa.gov/opppmsd1/PR_Notices/pr97-6.html.

other than FIFRA. Finally, clearly labeling inert chemicals that have already been determined to be hazardous is in the public interest by supporting the public's ability to make informed consumer decisions, enabling faster and more accurate medical diagnoses after exposure to pesticides, and providing an incentive for manufacturers to use less toxic ingredients.

In light of the strong public interest served by listing hazardous inert ingredients on pesticide labels, in combination with EPA's clear statutory authority to regulate all ingredients used in pesticide products, EPA should amend 40 C.F.R. § 156.10 to require pesticide manufacturers to reveal on the labels of their products any inert ingredients that are also regulated by EPA under any of the following lists.²

- CAA § 202A Clean Air Act § 202(a) National Emissions Standards Act
- CAA § 112 Clean Air Act § 112
- CERCLA §101(14) Comprehensive Environmental Response, Compensation, and Liability Act all chemicals primarily identified in Clean Water Act § 311(b)(4) and § 307(a), Clean Air Act § 112, and Resource Conservation and Recovery Act § 3001
- CWA § 311 Clean Water Act § 311(b)(2)(A)
- PAI Organic Pesticide Active Ingredients Clean Water Act § 304
- EPA Pretreatment Standards- Clean Water Act § 307
- RCRA Appendix VII Resource Conservation and Recovery Act Appendix VII to 40 C.F.R.§ 261
- RCRA Appendix VIII Resource Conservation and Recovery Act Appendix VIII to 40 C.F.R. § 261
- RCRA F Waste Resource Conservation and Recovery Act list of hazardous wastes from nonspecific sources pursuant to RCRA § 3001
- RCRA P Waste Resource Conservation and Recovery Act list of acutely hazardous commercial products that when disposed of become acute hazardous wastes pursuant to RCRA § 3001
- RCRA U Waste Resource Conservation and Recovery Act list of commercial chemical products that when disposed of become hazardous wastes pursuant to RCRA § 3001

² These lists were selected because either Congress or EPA has made individual determinations that the chemicals included in these lists are hazardous or likely hazardous. Requiring listing of these inert ingredients should not limit EPA from determining what other chemicals should also be listed due to hazardous characteristics. EPA has an ongoing duty to perform these analyses as well.

- CERCLA §104(i)(2)- Priority List of Hazardous Substances
- EPCRA 302A Title III of Superfund Amendments and Reauthorization Act, also known as the Emergency Planning and Community Right-to-Know Act of 1986
- EPCRA TRI
- TSCA § 6 Unreasonable Risk Toxic Substances Control Act § 6
- List 2 Potentially Toxic Other Ingredients/High Priority for Testing
- OSHA Toxic and Hazardous Substances List
- ACGIH American Conference of Governmental Industrial Hygienists' Threshold Limit Value for Chemical Substances and Physical Agents in the Work Environment.

There are 374 chemicals included in these lists that are also included in EPA's list of inert ingredients under FIFRA, ("FIFRA-Inerts"), and these 374 chemicals will subsequently be referred to as the "Hazardous Inerts List."

I. EPA HAS THE AUTHORITY TO REQUIRE MANUFACTURERS TO DISCLOSE HAZARDOUS INERT INGREDIENTS IN THEIR PRODUCTS.

The EPA Administrator is authorized to require manufacturers to disclose hazardous inert ingredients in their products under the plain language of 7 U.S.C. § 136h(d)(1), which authorizes the Administrator to disclose the identity or percentage quantity of any deliberately added inert ingredient of a pesticide if the "Administrator has first determined that disclosure is necessary to protect against an unreasonable risk of injury to health or the environment." Additionally, EPA's regulations recognize that authority: "The Administrator may require the name of any inert ingredient(s) to be listed in the ingredient statement if he determines that such ingredient(s) may pose a hazard to man or the environment." 40 C.F.R. § 156.10(g)(7). Furthermore, EPA itself has recognized its authority as set forth in the statute: "FIFRA authorizes EPA to regulate all ingredients used in pesticide products, including inert ingredients that are not in themselves pesticidally active." 49 Fed. Reg. 37965.

While FIFRA states that EPA is not to make public information which contains or relates to confidential and privileged trade secrets or commercial or financial information,³ where EPA has already made the determination that something is hazardous, the Confidential Business Information provision does not apply. See 7 U.S.C. § 136h(d). That is exactly what has been presented by the subsets of chemicals found to be hazardous in this petition. Practically, requiring manufacturers to disclose inert ingredients on pesticide labels will not cause competitive harm to manufacturers. Many inert ingredients in pesticides may be identified through publicly available sources, although with considerable difficulty to the average consumer. Material Safety Data Sheets ("MSDSs"), for example, are required by the Emergency Planning and Community Right to Know Act, 42 U.S.C. § 11021, and OSHA's Hazard Communication Standards, 29 C.F.R. § 1910.1200(g), and are available to the public under 42 U.S.C. §§ 11021(c)(2) and 11044. The identities of inert ingredients are frequently disclosed on these MSDSs. Additionally, many inert ingredients are the subject of scholarly journals and presentations, all of which become public information. Finally, reverse engineering can identify specific pesticide ingredients in most products.⁴ Manufacturers themselves release ingredient information in response to public requests, although again this is a cumbersome and laborious process.

Clearly, it is within EPA's authority, not to mention within its realm of responsibility, to require the identification of dangerous inert ingredients on pesticide product labels. In fact, EPA did so as part of its Inerts Strategy of the late 1980's when it required the identification of all inert ingredients included on List 1 ("Inerts of Toxicological Concern").⁵

³ FIFRA § 10(b), 7 U.S.C. § 136(h)(d) (1972).

⁴ See Northwest Coalition for Alternatives to Pesticides v. Browner, 941 F. Supp. 197, 202 (D.D.C. 1996).

⁵ See Inert Ingredients in Pesticide Products; Policy Statement, ENVIRONMENTAL PROTECTION AGENCY (Apr. 22, 1987), available at http://www.epa.gov/opprd001/inerts/notices.htm.

II. EPA HAS ALREADY DETERMINED MANY INERTS TO BE HAZARDOUS AND REGULATES THEM UNDER STATUTES OTHER THAN FIFRA.

For the vast majority of chemicals on the Hazardous Inerts List, the EPA Administrator has failed to make a determination under FIFRA §10(d)(1), 7 U.S.C. § 136h(d)(1) whether they present "an unreasonable risk of injury to health or the environment." EPA's Office of Pollution Prevention and Toxic Substances (OPPTS) has rarely exercised its authority to make the determination that a particular inert ingredient is unreasonably risky. However, EPA itself has made the determination for these exact same chemicals under statutory programs other than FIFRA that they are hazardous to human or environmental health. These determinations, made under complimentary statutory schemes are the functional equivalent of determinations made under FIFRA § 10(d)(1), 7 U.S.C. § 136h(d)(1), and are sufficient for EPA to require manufacturers to disclose these chemicals on pesticide labels.

The statutory schemes referred to in this petition instruct EPA to regulate various chemicals that are sufficiently hazardous to warrant governmental control. As part of EPA's effort to comply with the statutes, EPA has developed several lists of chemicals that are regulated as poisonous, toxic, explosive, flammable, or otherwise hazardous to human or environmental health. The fact that an inert ingredient is included on one of these lists demonstrates that the inert likely presents "an unreasonable risk of injury to the health or the environment." Thus, the inerts on these lists meet the standard of the confidential business information exception found in 7 U.S.C. § 136h(d)(1), allowing disclosure of inert ingredients regardless of effect on industry trade secrets. In reality, most of these inerts are not secret from others in the industry, they are only secret for the public at large.

Several of these lists of chemicals, determined by EPA under statutes other than FIFRA to present hazards to humans or the environment, are summarized below. In addition, a few specific examples of hazardous substances requiring labeling under FIFRA are also summarized.

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1. <u>Lists of chemicals determined by EPA to present hazards to humans or the</u> <u>environment</u>⁶

The following section catalogues lists of chemicals created or regulated by EPA, that have been found to present hazards to human or environmental health:

A. CAA § 202A

Clean Air Act ("CAA") § 202(a), 42 U.S.C. § 7521(a), sometimes called the National Emissions Standards Act, requires EPA to develop standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines which contribute to air pollution and which may reasonably be anticipated to endanger public health or welfare. In establishing classes or categories of vehicles or engines for purposes of regulations under CAA, EPA may base such classes or categories on gross vehicle weight, horsepower, type of fuel used or other appropriate factors. Three chemicals appear on both the FIFRA-Inerts and CAA 202A lists.

B. CAA § 112

Clean Air Act § 112, 42 U.S.C. §§ 7412(b)(2), (b)(3), requires EPA to maintain and periodically review a list of hazardous substances that have been determined to contribute to air pollution. Congress also included a list of hazardous pollutants in the Act. 42 U.S.C. § 7412(r). There are 27 chemicals on that list that are also on the FIFRA Inerts lists. The Act also directed the Administrator to develop a list of 100 substances "known to cause death, injury, or serious adverse effects to human health or the environment." The latter list is found at 40 C.F.R. § 68.130 an includes 16 chemicals that are on the FIFRA Inerts lists.

C. CERCLA § 101(14)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 101(14), 42 U.S.C. § 9601(14) list of hazardous substances is a compilation of chemicals and mixtures

⁶ Each of the following descriptions was copied largely verbatim from EPA's website.

identified primarily in Clean Water Act (CWA) §§ 311(b)(4), and 307(a), Clean Air Act (CAA) § 112, and Resource Conservation and Recovery Act (RCRA) § 3001. *See* 42 U.S.C. § 9601(14). Substances from the Toxic Substances Control Act (TSCA) § 7 and additional sources as designated by the Administrator may also be included. Releases of substances on this list that are in excess of their reportable quantities must be reported to the National Response Center. These chemicals are also subject to regulation under the Superfund Amendments and Reauthorization Act (SARA) § 304. One hundred thirteen chemicals appear on both the FIFRA-Inerts and CERCLA lists.

D. CWA § 311

Clean Water Act (CWA) § 311(b)(2)(A), 33 U.S.C. § 1321(b)(2)(A), requires EPA to compile a list of hazardous substances which, when discharged to navigable waters or adjoining shorelines, present an imminent and substantial danger to the public health or welfare. This includes danger to fish, shellfish, wildlife, and beaches. The lists of chemicals and chemical substances compiled by EPA are listed in Tables A and B of 40 C.F.R. § 116.4. Isomers, hydrates, solutions, and mixtures that contain the listed substances are included. Seventy-nine chemicals appear on both the FIFRA-Inerts and CWA 311 lists.

E. Pesticide Active Ingredients (PAI)

In conjunction with § 304 of the Clean Water Act, 33 U.S.C. § 1314, EPA prepared a list of organic pesticide active ingredients as Table 1 to Part 455 of Title 40 of the Code of Federal Regulations. The list also includes trade names for some pesticides, in addition to the organic chemicals that are the active ingredients of the pesticides. Fourteen chemicals appear on both the FIFRA-Inerts and PAI lists.

F. EPA Pretreatment Standards - CWA § 307

Indirect dischargers, whose waste water passes through publicly owned treatment plants, are required to comply with pretreatment standards promulgated by EPA under § 307 of the CWA, 33

U.S.C. § 1317(b), for pollutants not susceptible to treatment by sewage systems or which would interfere with the operation of those systems. *Chemical Mfrs. Ass'n v. Natural Res. Def. Council*, 470 U.S. 116, 119 (1985). EPA has set effluent limitations for indirect dischargers under the same two-phase approach applied to those discharging waste directly into navigable waters: EPA considers specific statutory factors and promulgates regulations creating categories and classes of sources and setting uniform discharge limitations for those classes and categories. *Id.* As a result of a lawsuit brought by the Natural Resources Defense Council and other environmental groups against EPA, a Consent Decree identified a list of 423 pretreatment pollutants for additional study. This list, contained in paragraph-4(c) of the Consent Decree, is provided in this database. Eighty one chemicals appear on both the FIFRA-Inerts and the Pretreatment Standards/ Paragraph 4-C lists.

G. RCRA Appendix VII

The Resource Conservation and Recovery Act (RCRA) Appendix VII to 40 C.F.R. § 261 identifies the constituent(s) which is the basis for listing the wastes identified with F codes from nonspecific sources (40 C.F.R. § 261.31) or with K codes from specific sources (40 C.F.R. § 261.32). These wastes contain one or more constituents that are considered to be Toxicity Characteristic Waste or Toxic Waste. Chemical Abstract Service Registry Numbers (CASRNs) for the constituents are not provided in the CFR Reference. Seventeen chemicals appear on both the FIFRA-Inerts and RCRA Appendix VII lists.

H. RCRA Appendix VIII

The Resource Conservation and Recovery Act (RCRA) Appendix VIII to 40 C.F.R. § 261 lists the toxic constituents that serve as one of the criteria for determining whether a solid waste is a hazardous waste as defined in 40 C.F.R. § 261.11: Criteria for listing hazardous waste. Thirty-two chemicals appear on both the FIFRA-Inerts and RCRA Appendix VIII lists.

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I. RCRA F Waste

The Resource Conservation and Recovery Act (RCRA) identifies a list of hazardous wastes from non-specific sources (i.e., not defined by a specific industry) pursuant to RCRA § 3001, 42 U.S.C § 6921. These wastes contain one or more constituents that are considered to be Ignitable Waste, Corrosive Waste, Reactive Waste, Toxicity Characteristic Waste, Acute Hazardous Waste, or Toxic Waste. The hazardous constituents in each waste can be found in Appendix VII to Part 261 -- Basis for Listing Hazardous Waste. Hazardous wastes from non-specific sources are identified by a hazardous waste code with F as the initial character. RCRA wastes are also subject to regulation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 40 C.F.R. § 302.4 and to the exclusion limits for acutely hazardous waste established in 40 C.F.R. § 261.5. Eight chemicals appear on both the FIFRA-Inerts and RCRA F Waste lists.

J. RCRA P Waste

RCRA P Waste is a Resource Conservation and Recovery Act list of acutely hazardous commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates that, when disposed unused or when formulations containing any one of these as a sole active ingredient are disposed unused, become acute hazardous wastes pursuant to RCRA § 3001. These wastes are subject to regulation under CERCLA (40 C.F.R. § 302.4). Two chemicals appear on both the FIFRA-Inerts and RCRA P Waste lists.

K. RCRA U Waste

RCRA U Waste is a Resource Conservation and Recovery Act list of commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates that, when disposed (or when formulations containing any one of these as a sole active ingredient are disposed) unused, become hazardous wastes pursuant to RCRA § 3001. These wastes are also subject to regulation under CERCLA. Thirty-eight chemicals appear on

both the FIFRA-Inerts and RCRA U Waste lists.

L. CERCLA 104(i)(2)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), 42 U.S.C. § 9604(i)(2), requires the Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry (ATSDR) to develop and revise periodically the CERCLA Priority List of Hazardous Substances. This list includes substances most commonly found at facilities on the CERCLA National Priorities List (NPL) that have been deemed to pose the greatest threat to public health. The revised CERCLA Priority List contains 275 hazardous substances. Once a substance has been listed, it is a candidate to become the subject of a toxicological profile prepared by the ATSDR, and it may be targeted for priority data needs. Fifty-four chemicals appear on both the FIFRA-Inerts and CERCLA § 104(i)(2).

M. EPCRA § 302(a)

Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), also known as the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), establishes a program designed to encourage state and local planning and preparedness for spills and releases of extremely hazardous substances (EHS). Under § 302(a) of EPCRA, 42 U.S.C. § 11002(a), EPA developed a list of extremely hazardous substances and established threshold planning quantities (TPQs) for each of these substances. Facilities that have present an EHS in excess of its TPQ must notify its state emergency response commission and participate, as necessary, with the local emergency planning committee in the local emergency planning process. Fifteen chemicals appear on both the FIFRA-Inerts and EPCRA § 302(a) lists.

N. EPCRA TRI

The Toxics Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. EPCRA § 313, 42 U.S.C. § 11023, requires EPA and the States to annually collect data on releases and transfers of certain toxic chemicals from industrial facilities, and make the data available to the public in the TRI. Ninety-six chemicals appear on both the FIFRA-Inerts and TRI lists.

O. TSCA § 6 Unreasonable Risk

TSCA § 6, 15 U.S.C. § 2605, provides EPA with broad authority to regulate the manufacture, processing, distribution, use, and/or disposal of chemical substances when EPA concludes that such activity presents or will present an unreasonable risk of injury to health or the environment. Under this authority, EPA can ban or limit the manufacture, processing, or distribution of a chemical substance, or can limit the use of such substance. Five chemical substances have been banned, including polychlorinated biphenyls (PCBs) (40 C.F.R. § 761), asbestos (40 C.F.R. § 763), and lead (40 C.F.R. § 745). In promulgating regulations under § 6, EPA must: consider the availability of substitutes, use the least burdensome requirements, and must conclude that the risk is not addressed by another agency or statute. Two chemicals appear on both the FIFRA-Inerts and TSCA § 6 Unreasonable Risk lists.

P. List 2- Potentially Toxic Other Ingredients/High Priority for Testing⁷

List 2 inert ingredients are those which EPA "believes are potentially toxic and should be

assessed for effects of concern . . . Many of these inert ingredients are structurally similar to chemicals

known to be toxic; some have data suggesting a basis for concern about the toxicity of the chemical." 52

FR 13306. There are 96 inert ingredients on List 2.

Q. OSHA Toxic and Hazardous Substances⁸

The Occupational Safety and Health Administration (OSHA) has identified a list of Toxic and

Hazardous Substances (29 C.F.R. part 1910, subpart Z). These are substances OSHA requires to be

considered as hazardous for purposes of preparing a Material Safety Data Sheet. 119 chemicals appear

on both the FIFRA-Inerts and OSHA's Toxic and Hazardous Substances lists.

Sources:

http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

⁷ Some ingredients on List 2 are mixtures, and some of the components in these mixtures are included in the Hazardous Inerts List. For example, light aromatic solvent naphtha (CAS No. 64742-95-6), heavy aromatic solvent naphtha (CAS No. 64742-94-5), and medium aliphatic solvent naphtha (CAS No. 64742-88-7) contain 1,2,4-trimethylbenzene, which is listed as hazardous under TRI and EPCRA § 302a. Light steam-cracked aromatic naphtha (CAS No. 68527-23-1) contains toluene, which is listed as hazardous under CWA Priority and CERCLA § 104(i)(2). Light aliphatic solvent naphtha (CAS No. 64742-89-8) contains n-hexane, which is listed as hazardous under TRI and MTL. Residual fuel oil (CAS No. 68476-33-5) contains hydrogen sulfide, which is listed as hazardous under CWA § 311, RCRA U Waste, and RCRA Appendix VIII. Light aromatic distillate (CAS No. 67891-80-9) contains 1,3 butadiene, which is listed as hazardous under CAA § 202A, TRI, and CERCLA § 104(i)(2).

Shell Chemical LP. 2005. Material safety data sheet: solvent naphtha (petroleum), light aromatic, http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

Shell Chemical LP. 2005. Material safety data sheet: solvent naphtha (petroleum), heavy aromatic, http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

Shell Chemical LP. 2005. Material safety data sheet: solvent naphtha (petroleum), mediumm aliphatic, <u>http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;</u>

Shell Chemical LP. 2005. Material safety data sheet: Naphtha (petroleum), light steam-cracked aromatic, http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

Shell Chemical LP. 2005. Material safety data sheet: solvent naphtha (petroleum), light aliphatic,

Shell Chemical LP. 2005. Material safety data sheet: solvent naphtha (petroleum), light aromatic,

http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

Shell Chemical LP. 2006. Material safety data sheet: fuel oil, residual.

http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals;

Shell Chemical LP. 2006. Material safety data sheet: light aromatic distillate (petroleum), http://www.euapps.shell.com/MSDS/GotoMsds?loc=shellchemicals,

⁸ Though the OSHA subset is not an EPA determination, EPA should give deference to its sister agency also seeking to protect workplace environments.

R. ACGIH Threshold Limit Values

The chemicals listed in the latest editions of the American Conference of Governmental Industrial Hygienists' (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment (TLV) are hazardous to workers health and must appear on Material Safety Data Sheets. One hundred seventy-seven chemicals appear on the FIFRA Inerts list and the ACGIH TLV list.

2. <u>Examples of hazardous substances appearing on both EPA's FIFRA-Inerts list and on hazardous substance lists under another statutory scheme.</u>

To illustrate the types of hazards caused by the chemicals on the Hazardous Inerts List, we briefly summarize the findings of the National Institute for Occupational Safety and Health ("NIOSH") for eight chemicals that appear on both EPA's FIFRA-Inerts list as well as one or more of the above described lists.

A. Naphthalene (CAS # 91-20-3) is listed as hazardous by the following statutes: CERCLA § 101(14), CWA Priority, CWA § 311, MTL, EPA Pretreatment Standards – CWA § 307, CERCLA § 104(i)2, RCRA Appendix VII, RCRA Appendix VIII, RCRA U Waste, EPCRA TRI, and OSHA Toxic and Hazardous Substances. According to NIOSH, exposure to naphthalene in laboratory toxicology studies has caused severe skin irritation; genetic damage in insects, hamster cells, and human blood cells; developmental abnormalities in offspring and reduced newborn survival when exposure occurs during pregnancy; and cancer, including lymphoma.

B. Dibutyl phthalate (CAS # 84-74-2) is listed as hazardous by the following statutes: CERCLA § 101(14), CWA Priority, CWA § 311, MTL, EPA Pretreatment Standards – CWA § 307, CERCLA § 104(i)2, EPCRA § 302(a), RCRA Appendix VIII, RCRA U Waste, EPCRA TRI, and OSHA Toxic and Hazardous Substances. According to NIOSH, exposure to dibutyl phthalate in laboratory toxicology studies has caused genetic damage in microorganisms, hamster cells, and human

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cells; effects on the testes; reduced fertility; developmental abnormalities when exposure occurred during pregnancy; reduced newborn survival; anemia; effects on hormones; and reduced thyroid function.

C. Xylene (CAS # 1330-20-7) is listed as hazardous by the following statutes: CERCLA § 101(14), CWA § 311, CERCLA § 104(i)2, RCRA F Waste, RCRA U Waste, EPCRA TRI, and OSHA Toxic and Hazardous Substances. According to NIOSH, exposure to xylene in laboratory toxicology studies has caused severe eye irritation; developmental abnormalities in offspring when exposure occurred during pregnancy; reduced fertility; abortion; and hearing problems.

D. Methyl ethyl ketone (CAS # 78-93-3) is listed as hazardous by the following statutes: CERCLA § 101(14), MTL, CERCLA § 104(i)2, RCRA Appendix VII, RCRA Appendix VIII, RCRA U Waste, EPCRA TRI, and OSHA Toxic and Hazardous Substances. According to NIOSH, exposure to methyl ethyl ketone in laboratory toxicology studies has caused genetic damage in microorganisms; developmental abnormalities in offspring when exposure occurred during pregnancy; impaired liver function; and effects on the nervous system.

E. Benzyl alcohol (CAS # 100-51-6) is listed as hazardous by the following statutes: CERCLA § 104(i)2 and EPA Pretreatment Standards – CWA § 307. According to NIOSH, exposure to ethyl benzene in laboratory toxicology studies has caused genetic damage in rat, mouse, and hamster cells; reduced growth of newborns when exposure occurred during pregnancy; reduced activity; and degenerative changes to the brain.

F. Coal tar (CAS # 8007-45-2) is listed as hazardous by CERCLA § 104(i)2. According to NIOSH, exposure to coal tar in laboratory toxicology studies has caused skin cancer, and genetic damage in microorganisms, rat and mouse cells, and human cells.

G. Sodium chromate (CAS # 7775-11-3) is listed as hazardous by the following statutes: CERCLA § 101(14), CWA § 311, and TSCA § 6 Unreasonable Risk. According to NIOSH, exposure to sodium chromate in laboratory toxicology studies has caused genetic damage in microorganisms, rat and hamster cells, chicken embryos, and human cells; and sperm damage.

H. Ethoxyquin (CAS # 91-53-2) is listed as hazardous by the PAI. According to NIOSH, exposure to ethoxyquin in laboratory toxicology studies has caused genetic damage in microorganisms, rat cells, and human cells; developmental abnormalities in offspring when exposure occurred during pregnancy; kidney and liver damage.

These are only eight of 2,891 inert chemicals that are found in pesticides and present a risk of injury to human or environmental health, and are regulated by EPA under statutes other than FIFRA, but that are not listed on the labels because they are categorized as inerts. There is no reasonable justification for permitting industry to hide these chemicals behind the veil of confidential business information. The public is at risk, and EPA should require pesticide manufacturers to list these dangerous chemicals on the labels of their pesticide products.

III. EPA'S CURRENT POLICIES AND PRACTICES ARE INADEQUATE TO PROTECT THE PUBLIC

A review of the history of EPA policies and practices in regard to inerts reveals both the magnitude of the problem and EPA's failure to respond to it effectively. Although inerts can constitute as much as 99% of a product, 40 C.F.R. §156.10 as currently written does not require identification of 99.52% of known inert ingredients on pesticide labels. Prior to 1987, EPA only required the identification of four inert ingredients on pesticide product labels, and testing of inert ingredient toxicity was very limited. In 1987, EPA announced an "Inerts Strategy" designed to "reduce the potential for adverse effects from the use of pesticide products containing toxic inert ingredients, . . . encourag[e] the least toxic inert ingredients available, . . . and require[e] the development of data necessary to determine the conditions of safe use of pesticides containing toxic inert ingredients."⁹

⁹ See Inert Ingredients in Pesticide Products; Policy Statement, ENVIRONMENTAL PROTECTION AGENCY (Apr. 22, 1987),

The success of that program has been very limited. Central to the strategy was the classification of inert ingredients into five categories:

List 1: Inerts of Toxicological Concern
List 2: Potentially Toxic Inerts, High Priority for Testing
List 3: Inerts of Unknown Toxicity
List 4A: Minimal Risk Inerts
List 4B: Inerts that will not adversely affect public health or the environment given current use patterns

There were originally 66 chemicals on List 2. Despite their "High Priority for Testing," 43 of the original 66 chemicals have still not been tested to EPA's satisfaction and remain on List 2. Two of the chemicals were moved to List 3, two to List 4B and the remainder are no longer used as inert ingredients, which suggests that those unnecessarily hazardous chemicals have been retired or replaced by more benign chemicals. Since 1987, 55 other chemicals have been added to List 2.

The history of List 3 is similar. In 1998, there were 1776 chemicals on that list. Today there are 1863. Thus, not only has the universe of inerts of unknown toxicity increased, so has the number of potentially toxic inerts with a high priority for testing. To date, very few chemicals have been eliminated from use in pesticides, and although EPA has been trying to address the problem of inert ingredients since 1987, it has so far addressed only a tiny fraction of the universe of inerts.¹⁰ Whether EPA lacks the resources or the inclination to conduct case-by-case analyses of inert ingredients in a timely fashion, the OPPTS has failed to substantially perform its regulatory function, leaving the public in continued jeopardy from the host of inerts of known, potential or unknown toxicity. Because EPA has already performed the equivalent of these analyses under other statutes, EPA not only has the authority but also the obligation to require listing of these inert ingredients on pesticide labels.

available at http://www.epa.gov/opprd001/inerts/notices.htm.

¹⁰ Currently, there are 2827 chemicals identified by EPA as used as inert ingredients. Inert (Other) Pesticide Ingredients in Pesticide Products, EPA, *available at* http://www.epa.gov/opprd001/inerts/lists.html.

Another demonstration of EPA's ineffectiveness in adequately addressing the toxicity of inert ingredients is reflected in the fact that a chemical may even be an active ingredient in one pesticide and an inert ingredient in another, depending on the manufacturer's designation of the target pest to be controlled by the product. Under EPA's current regulation, an ingredient identified as "active" must be disclosed on the label, but the same ingredient need not be disclosed if it is designated as "inert" for that product. According to EPA's Substance Registry System, 516 inert ingredients are currently or were at one time registered as active ingredients.¹¹

IV. PUBLIC POLICY CONSIDERATIONS SUPPORT THE PROPOSED RULE CHANGE

The fact that EPA already regulates the chemicals that make up the Hazardous Inerts List demonstrates that these chemicals may pose a hazard to humans or the environment. Indeed, these harmful inert ingredients clearly impact the public, both those who purchase pesticides and those who suffer the third-party effects of pesticides. While protection of confidential business information is a balancing policy consideration, the potential risks to human health and the environment outweigh the benefit of protecting manufacturers.

In addition to the obvious fact that "inert" ingredients are not actually biologically or chemically inert, there are several other reasons to amend the labeling regulation to require disclosure of hazardous inert ingredients in pesticide products. First, pesticide labels that disclose hazardous inert ingredients do not mislead the public, and allow consumers to make better-informed purchasing decisions. Second, disclosure of hazardous inert ingredients on labels facilitates faster and more accurate medical diagnoses and treatment of people exposed to those chemicals. Third, full disclosure of hazardous inert ingredients provides an incentive for manufacturers to use less toxic ingredients.

¹¹ EPA's Substance Registry System (SRS), *available at* http://www.epa.gov/srs/.

1. <u>Requiring labeling of known hazardous inert ingredients will avoid misleading the</u> <u>public, and will provide the public with more adequate information to make informed</u> <u>consumer decisions.</u>

The public assumes that harmful ingredients are disclosed on product labels, yet manufacturers are not required to list many of the inert ingredients that EPA has already determined to be hazardous. Unless EPA amends its labeling regulation to match public expectations, the public may incorrectly assume that a product containing toxic "inert" ingredients pose no risk.

Under most consumer protection statutes, the responsible agency either requires disclosure of ingredients to aid the consumer in her own risk assessment or guarantees that a product has been tested to determine its guarantee of safety, or at least reveal the risks. To assure the public of safety, the Federal Food, Drug and Cosmetic Act, 21 U.S.C. § 301 *et seq.*, the Consumer Product Safety Act, 15 U.S.C. § 2051 *et seq.*, the Flammable Fabric Act, 15 U.S.C. § 1191 *et seq.*, and the Fair Packaging and Labeling Act, 15 U.S.C. § 1451 *et seq.*, require either disclosure of ingredients or product safety testing. Neither EPA registration of pesticide products nor their approval of pesticide labels provides an assurance of safety to the public. If, in EPA's judgment, the benefits of a pesticide outweigh the risks, EPA will register the pesticide.

In the spirit of consumer protection, if EPA cannot guarantee that a registered pesticide is safe, it must provide the public with the information necessary to allow the consumer to protect herself. Only a fully informed public can take appropriate precautionary measures in selecting pest control alternatives. Additionally, the proper functioning of the free market also requires the free flow of information; that information is now lacking. Therefore, EPA should require the disclosure of all hazardous inert ingredients on pesticide labels, and allow the public to make fully informed decisions.

2. <u>Disclosure of hazardous inert ingredients should be required in order to insure faster</u> and more accurate medical diagnoses.

Without disclosure of hazardous inert ingredients, doctors cannot adequately assess and treat

those who are suffering from exposure to pesticides. Failing to disclose inert ingredients can lead to traumatic results for individuals who must closely monitor their chemical exposure due to an allergy or medical condition. Two and a half percent of Americans suffer from medically diagnosed multiple chemical sensitivity syndrome (MCSS), while 11.2 percent report unusual sensitivity to common chemicals.¹² Labels that fail to disclose hazardous inert ingredients prevent doctors from performing necessary diagnostic tests, and make accurate interpretation of test results more difficult.¹³ In addition, treatment delays resulting from incomplete ingredient disclosure are detrimental to patient health, and can increase medical expenses.¹⁴

3. <u>Full disclosure of hazardous inert ingredients provides an incentive for manufacturers</u> to use less toxic ingredients.

Disclosure of hazardous inert ingredients will encourage pesticide manufacturers to reduce the use of toxic inerts in their formulations, thereby making pesticides less harmful. In 1987, EPA identified 57 List 1 inerts, and required that these ingredients be disclosed on the labels of products containing the ingredient.¹⁵ At the time, these inerts were used in approximately 1300 products. Today, there are only eight List 1 inerts.¹⁶ By 1996, the number of actively marketed products with List 1 inerts was only 40.¹⁷ The Office of Pesticide Programs has not been able to provide more current information.

¹² Stanley M. Caress and Anne C. Steinemann, *A National Population Study of the Prevalence of Multiple Chemical Sensitivity*, 59 (6) ARCHIVES OF ENVIRONMENTAL HEALTH, 300, 305 (2004).

¹³ Declarations of Routt Reigart and Howard Freed, attached to petition.

¹⁴ *Id.*

¹⁵ See Inert Ingredients in Pesticide Products; Policy Statement, ENVIRONMENTAL PROTECTION AGENCY (Apr. 22, 1987), available at http://www.epa.gov/opprd001/inerts/notices.htm.

¹⁶ U.S. EPA. 2004. Inert ingredients ordered by CAS number – List 1. http://www.epa.gov/opprd001/inerts/lists.html.

¹⁷ U.S. EPA. 1996. List of pesticide products containing List 1 inert ingredients. Obtained by Sandra Marquardt under the Freedom of Information Act, June 21, 1997. Page 14.

V. ALTERNATIVES TO REQUIRING THAT PESTICIDE PRODUCT LABELS CLEARLY LIST THE INERT INGREDIENTS IN THE HAZARDOUS INERTS LIST

1. <u>Make an individualized determination of whether to require disclosure for each subset</u> of chemicals already determined to be hazardous under various statutory mandates.

If EPA is unwilling to require disclosure of all inerts already determined by EPA to present hazards to human health or the environment, then EPA should at least assess each list set forth in this proposal (section II, subsection 1, A-R of this petition) to determine whether or not to require disclosure of the individual subsets of hazardous inerts.

2. <u>Make an individualized determination of whether to require disclosure for each</u> <u>chemical within each subset of chemicals already determined to be hazardous under</u> <u>various statutory mandates.</u>

If EPA is unwilling to require disclosure of all inerts already determined by EPA to present hazards to human health or the environment, then EPA should examine the chemicals individually within each subset and make a determination as to whether to require disclosure of each individual chemical set forth in this proposal (section II, subsection1, A-R of this petition).

3. <u>Require disclosure of all inerts listed in the Hazardous Substance Data Bank.</u>

The Hazardous Substance Data Bank (HSDB) is a factual, non-bibliographic data bank focusing upon the toxicology of potentially hazardous chemicals including emergency handling procedures, environmental fate, human exposure, industrial hygiene, and regulatory requirements. HSDB is maintained by the National Library of Medicine, and is fully peer reviewed by the Scientific Review Panel (SRP), a committee of subject matter experts. HSDB is being built, maintained, reviewed, and updated by the National Library of Medicine (NLM). Four hundred fifty-five chemicals appear on both FIFRA-Inerts and HSDB.

EPA did not create the HSDB under a statutory scheme; however, the chemicals on the HSDB list are regulated by EPA, and many of these inerts have been determined to be hazardous to human and environmental health. Therefore, in addition to the other requests in this petition, Petitioners also

request that EPA amend its pesticide labeling statute to require disclosure of all inerts catalogued in the

HSDB.

Dated: August 1, 2006

Respectfully Submitted,

<u>s/Norma Grier</u> Norma Grier Northwest Coalition for Alternatives to Pesticides P.O. Box 1393 Eugene, OR 97440

and

Agricultural Resources Center / Pesticide Education Project Alaska Community Action on Toxics American Bird Conservancy **Beyond Pesticides** Californians for Alternatives to Toxics Californians for Pesticide Reform Center for Environmental Health Citizens Campaign for the Environment Environmental Working Group Grassroots Environmental Education Migrant Clinicians Network Natural Resources Defense Council North American Hazardous Materials Management Association New Jersey Environmental Federation Pesticide Action Network North America Physicians for Social Responsibility Safer Pest Control Project The Endocrine Disruption Exchange Texans for Alternatives to Pesticides **Toxics Information Project** Washington Toxics Coalition

<u>s/Charles M. Tebbutt</u> Charles M. Tebbutt Western Environmental Law Center 1216 Lincoln St. Eugene, OR 97401

Table 1. Hazardous Inerts List *

Chemical Identity	/						;	Sourc	e Lists	s										-
-	CAS	Pesticide Active	EPCRA (SARA)	A EPCRA) (SARA) TSCA	CERCLA 101(14)	CERCLA 104(I)(2) (SARA	RCRA F	RCRA P	RCRA U	RCRA Appendi	RCRA Appendi	CWA	CWA	CAA	САА	CAA	EPA List 2	OSHA Toxic &	ACGIH	Total # of
Chemical Name	number	Ingredients	302A	TRI 6	(SARA 110)	110)	Waste	e Waste	Waste	x VII	x VIII	307	311	112b	112	- 202A	Inerts	Hazardous	TLVs	Lists
1-(3-Chloroallyl)-3,5,7-																				
Triaza-1-azoniaadamantane	4080-31-3	x		x																2
1.1.1-Trichloroethane	71-55-6	X		x	х	x			х	х	х	х		х			х	х	х	11
1.1.2.2-Tetrachloroethane	79-34-5			X	X	X			X	X	X	~		X			~	X	X	9
1.2-Butylene oxide	106-88-7			x	X	<i>,</i> ,			~	~	~			x			х		~	4
1.3-Cyclohexadiene. 1-methyl-	100 00 /													~			~			
4-(1-methylethyl)-	99-86-5											х								1
1.3-Pentadiene	504-60-9				Х				Х						Х					3
1-Bromo-1-(bromomethyl)-1.3-																				
propanedicarbonitrile	35691-65-7	7		х																1
1-Butanol	71-36-3			х	Х	х	Х		Х			х						х	х	8
1-Dodecanol	112-53-8											х								1
1H-Benzotriazole	95-14-7																Х			1
1H-Benzotriazole, 4(or 5)-methyl-	29385-43-	1															Х			1
1H-Benzotriazole, 4(or 5)-methyl-,																				
sodium salt	64665-57-2	2															Х			1
1-Hexadecanol	36653-82-4	4										Х								1
1H-Indole-5-sulfonic acid, 2-(1,3-																				
dihydro-3-oxo-5-sulfo-2H-indol-2-																				
ylidene)-2,3-dihydro-3-oxo-,	860-22-0																x			1
1-Octadecanol	112-92-5											x					~			1
1-Propanol	71-23-8											~						х	х	2
2 3-Dichloropropene	78-88-6			x	x								х					X	~	3
2 6-Di-tert-butyl-n-cresol	128-37-0			X	X							x	~						х	2
2-Butanol	78-92-2			х								~						х	X	3
2-Butanone, oxime	96-29-7																х		~	1
2-Butoxyethyl acetate	112-07-2																~		х	1
2-Ethoxyethanol	110-80-5			x	x				х	x	х	x						x	X	8
2-ethylbexanoic acid	149-57-5			X	X				~	X	~	~						X	X	1
2-Heptanone	110-43-0											х						х	X	3
2-Hexanone, 5-methyl-	110-12-3																	X	X	2
2-Mercaptobenzothiazole	149-30-4			х													х	X	~	2
2-Methyl-3(2H)-isothiazolone	2682-20-4																X			1
2-Naphthalenol	135-19-3											х					~			1
2-Propanol, 1-(2-butoxvethoxv)-	124-16-3																х			1
2-Propanol, 1-[2-(2-methoxy-1-																				
methylethoxy)-1-methylethoxy]-	20324-33-8	8										х					х			2
2-Propanol, 1-butoxy-	5131-66-8																Х			1
2-Propen-1-ol	107-18-6		Х	х	Х			Х			Х		х		Х			х	х	9
2-Propenoic acid, 2-methyl-, butyl	97-88-1																х			1
3-lodo-2-propynyl butylcarbamate	55406-53-	х		х							х									3
4,4'-Methylenedi(phenyl	101-68-8			Х	Х													Х	Х	4
4-Chloro-3,5-dimethylphenol	88-04-0																Х			1
4-Hydroxy-4-methyl-2-pentanone	123-42-2					Х						Х						Х	Х	4

							CERCLA														
		Pesticide	FPCRA	FPCRA		CERCLA	104(1)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						FPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	P	U	Appendi	Appendi	CWA	CWA	CAA	САА	САА	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112r	202A	Inerts	Hazardous	TLVs	Lists
8-Ouinolinol sulfate	134-31-6	X			-	(,														1
9.12-Octadecadienoic acid (9Z.12Z)		~																			•
methyl ester	112-63-0												х								1
9-Octadecenoic acid (97)- methyl	112-62-9												x								1
Acetic acid	64-19-7					x							X	x					×	x	5
Acetic acid nhenvlmethyl ester	140-11-4					Х							X	X					X	X	2
Acetic aphydride	108-24-7					Y							~	Y					Y	x	1
Acetone	67-64-1			Y		X	Y	Y		Y				~					X	Ŷ	7
Acetonitrile	75-05-8			× ×		X	~	~		Ŷ	Y	Y			x			Y	X	Ŷ	ó
Acetonhonono	00 06 0			v		×				×	~	×	v		×			~	A	v	7
Acetylopa [Ethypo]	74 94 2			~		^				^		~	^		~	v				× ×	2
Adipic acid	124 04 0					v								×		^				Ŷ	2
	124-04-9	۷				^								~				v		^	1
Alkalles, Isu-	04303-00-	0											V					^		v	1 2
	80-56-8												Ň							~	2
	98-55-5			V			V						X						V	V	1
Aluminum	7429-90-5			X			X												X	X	4
Aluminum oxide	1344-28-1	-		Х															Х	Х	3
Aluminum sulfate	10043-01-	3				X								X							2
Ammonium acetate	631-61-8					X								X							2
Ammonium bicarbonate	1066-33-7					Х								X							2
Ammonium carbamate	1111-78-0					Х								X							2
Ammonium carbonate	506-87-6					Х								Х							2
Ammonium chloride	12125-02-	9				Х								Х						Х	3
Ammonium hydroxide	1336-21-6					Х								Х							2
Ammonium nitrate	6484-52-2			Х																	1
Ammonium silicofluoride	16919-19-	0				Х								Х							2
Ammonium sulfate	7783-20-2			Х																	1
Ammonium thiocyanate	1762-95-4					Х								Х							2
Antimony potassium tartrate	28300-74-	5				Х								Х							2
Antimony trioxide	1309-64-4					Х								Х						Х	3
Argon	7440-37-1																			Х	1
Asphalt (Bitumen) fume	8052-42-4																			Х	1
Barium sulfate	7727-43-7			Х															Х	Х	3
Benzaldehyde	100-52-7												Х								1
Benzenamine, 4,4'-																					
carbonimidoylbis[N,N-dimethyl-,	2465-27-2																	Х			1
Benzene, 1,4-dimethoxy-	150-78-7												х								1
Benzeneethanol	60-12-8												х								1
Benzethonium chloride	121-54-0	х																			1
Benzoic acid	65-85-0					х	х						х	х							4
Benzophenone	119-61-9												X								1
Benzovl peroxide	94-36-0			х									~						х	х	3
Benzyl alcohol	100-51-6			~			х						х							~	2
Benzyl benzoate	120-51-4	x					~						~								1
Bicyclo[2 2 1]bentan-2-ol 1 3 3-	1632-73-1	~											x								1
his(2-ethylbeyyl)nbthalate (DEHD)	117_81_7												~		x					x	2
Boray	1202 04 4														^					Ŷ	∠ 1
Porio acid disodium salt	1003-90-4	2																		×	1
Donic aciu, uisoululli salt,	1202 04 2	3																	V	×	1
Boncoxide	1303-80-2			V															X	X	2
ы опорог	52-51-7			X																	1

						CERCLA														
		Pesticide	EPCRA	EPCRA	CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA) TSO	CA 101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI 6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112	202A	Inerts	Hazardous	TLVs	Lists
Butane	106-97-8	5													Х				Х	2
Butyl acrylate	141-32-2			Х															Х	2
Butyl benzyl phthalate	85-68-7			х	Х	х					Х	х					х			6
Butyric acid	107-92-6				X	X						X	х							4
C.I. Acid Blue 9. diammonium salt	2650-18-2			х																1
C L Acid Blue 9 disodium salt	3844-45-9			X																1
C L Basic Red 1	989-38-8			X																1
C L Pigment Blue 15	147-14-8			X																1
C. L. Pigment Green 36	14302-13-	7		X																1
C L Pigment Green 7	1328-53-6	,		x																1
C L Solvent Orange 7	3118-07-6			X																1
C12-30-Aromatic distillates	69602 90 4	2		X													v			1
Calcium Carbonato	471 24 1	2															~		v	1
	471-34-1	h			V								V						^	2
	20204-00-2	2			~								~					X	V	2
	1305-62-0				V	V							X					X	X	3
	///8-54-3				X	X							X					X		3
	1305-78-8												х					X	X	3
Calcium sulfate	///8-18-9																	X	X	2
Camphor	76-22-2											х						Х	X	3
Carbon black	1333-86-4																	Х	Х	2
Carbon dioxide	124-38-9																	Х	Х	2
Cellulose	9004-34-6																	Х	Х	2
CFC-11	75-69-4			Х	Х	Х			Х	Х	Х						Х	Х	Х	9
CFC-113	76-13-1			Х		Х				Х							Х	Х	Х	6
CFC-12	75-71-8			Х	Х	Х			Х		Х						Х	Х	Х	8
Chlorine dioxide	10049-04-4	4		Х											Х			Х	Х	4
Chloroacetic acid	79-11-8		Х	Х	Х									Х						4
chlorobenzene	108-90-7													Х					Х	2
Chloropicrin	76-06-2	Х		Х														Х	Х	4
Chlorothalonil	1897-45-6	Х		Х																2
Coal tar	8007-45-2					Х														1
Colchicine	64-86-8		Х																	1
Cresol	1319-77-3			Х	Х	Х			Х	Х	Х		Х	Х			Х	Х	Х	11
Cristobalite (SiO2)	14464-46-1	1																Х	Х	2
Cumene	98-82-8			Х	Х	Х			Х			Х		Х				Х	Х	8
Cupric acetate	142-71-2				Х								Х							2
Cupric nitrate	3251-23-8				Х								Х							2
Cupric sulfate	7758-98-7				Х	Х							Х							3
Cvclohexane	110-82-7			Х	Х				Х				х				Х	Х	Х	7
Cyclohexanol	108-93-0			Х														Х	Х	3
Cyclohexanone	108-94-1				х	х	х		х			х					х	X	X	8
Cyclohexene, 1-methyl-4-(1-																				-
methylethylidene)-	586-62-9											х								1
Dazomet	533-74-4	x		x							x	~								3
Decanoic acid	334-48-5	~		X							~	x								1
Di(2-ethylbexyl) adinate	103_23_1			x								~								1
Diallyl phthalate	131-17-0			~													x			1
Diammonium citrate	3012-65-5				x								x				~			2
	84-74-2		Y	Y	X	x			Y		Y	Y	Ŷ	Y			Y	×	Y	∠ 12
Dichloroaniline	0+-/4-2 2712/_27/	4	^	^	^	^			^		^	^	^	^			Ŷ	^	^	12
Dichlorophono	27134-27-0			×													× v			י 2
Dictriol optierie	11-20-4	^		^													^			3

							CERCLA														
		Pesticide	EPCRA	EPCRA		CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	A CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112	r 202A	Inerts	Hazardous	TLVs	Lists
Diethanolamine	111-42-2			Х		Х									Х			Х		Х	5
Diethyl phthalate	84-66-2			Х		Х	Х			Х		Х	Х					Х		Х	8
Diethylamine	109-89-7					Х								Х					Х	Х	4
Diethylene glycol monobutyl ether	112-34-5												Х					Х			2
Diethylene glycol monoethyl ether	111-90-0												Х					Х			2
Diethylene glycol monomethyl ether	⁻ 111-77-3												Х					Х			2
Diisobutyl ketone	108-83-8																		Х	Х	2
Dimethyl phthalate	131-11-3		Х	Х		Х	Х			Х		Х	Х		Х			Х	Х	Х	11
Dimethyl sulfoxide	67-68-5												Х								1
Dimethylamine	124-40-3			Х		Х				Х				Х		Х			Х	Х	7
Di-n-octyl phthalate	117-84-0		Х	Х		Х	Х			Х		Х	Х								7
Dioctyl adipate	123-79-5												Х					Х			2
Dipropylene glycol monomethyl	34590-94-	8											Х						Х	Х	3
Disodium phosphate	7558-79-4					Х								Х							2
Disodium selenite	10102-18-	8	Х			Х								Х							3
Disodium Tetraborate	1330-43-4																			Х	1
Distillates (petroleum), acid-treated	64742-14-	9																Х			1
Distillates (petroleum), heavy	67891-79-	6																Х			1
Distillates (petroleum), heavy	64741-53-	3																х			1
Distillates (petroleum), heavy	64741-51-	1																х			1
Distillates (petroleum).	64742-47-	8																x			1
Distillates (petroleum)	0171217	0																~			•
hydrotreated middle	64742-46-	7																х			1
Distillates (petroleum), light arom.	67891-80-	9																X			1
Distillates (petroleum), light																					
catalytic cracked	64741-59-	9																х			1
Distillates (petroleum), light	44741 ED	າ																v			1
Distillatos (potroloum) light	64741-52-	2																$\hat{\mathbf{v}}$			1
Distillates (petroleum), light	64/41-50-	0																~			I
dowayad bassy paraffinia	41710 KE	0																v			1
Distillatos (potroloum), solvent	04/42-03-	0																~			I
dewayed light paraffinia	41710 E4	0																v			1
Dedecancia acid methyl actor	111 02 0	9											v					^			1
Dodecul morcantan	112 55 0												^							v	1
Dodecyl mercaptan Dodecylbopzoposulfonic acid	27176 97	0				v								×						^	י ר
Ethano	2/1/0-0/-	0				^								^		v				v	2
Ethanol	64-17-5						Y									^			Y	Ŷ	2
Ethanol 2-(diethylamino)-	100-37-8						X												X	~	1
Ethanolamino	100-37-8																		×	v	י ר
Ethoxyguin	01 52 2	v																	~	^	2 1
Ethylacotato	71-55-2 1/1 70 6	~				v	v	v		v									×	v	6
Ethyl Ethor	60 20 7					^	~	~		^						v			~	×	2
Ethyl mothacrylato	07 62 2					v				v		v				^				^	2
Ethylbenzene	100-41-4			x		X	x	x		~		~	x	x	x			x	x	x	10
Ethylene glycol	107_21_1			x		X	x	~					~	~	~			~	~	x	4
Ethylene alvcol monobutyl ether	111_76_2			~		~	~						x					x	x	x	4
Ethylenediamine	107-15-3		x			×							~	х		x		~	x	x	6
Ethylenediaminetetraacetic acid	60-00-4		~			X								x		~			~	~	2
Ferric chloride	7705-08-0					X								x							2
Ferric oxide	1309-37-1					~								~					х	х	2
																					-

							CERCLA														
		Pesticide	EPCRA	EPCRA		CERCLA	104(I)(2)	RCRA	RCRA R	CRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste W	/aste	x VII	x VIII	307	311	112b	112r	202A	Inerts	Hazardous	TLVs	Lists
Ferric sulfate	10028-22-	5				Х								Х							2
Ferrous ammonium sulfate	10045-89-	3				Х								Х							2
Ferrous sulfate	7720-78-7					Х								Х							2
Ferrous sulfate heptahydrate	7782-63-0	1				Х								Х							2
Formaldehyde	50-00-0		Х	Х		Х	Х			Х	Х	Х		Х			Х		Х	Х	11
Formic acid	64-18-6			Х		Х				Х	Х	Х		Х					Х	Х	8
Fuel oil no. 2	68476-30-	2																Х		Х	2
Fuel oil no. 4	68476-31-	3																Х		Х	2
Fuel oil no. 6	68553-00-	4																Х			1
Fuel oil, residual	68476-33-	5																х			1
Fuels diesel	68334-30-	5																x		х	2
Fumaric acid	110-17-8	0				x								x				~		~	2
Glutaraldebyde	111-30-8					X								~						х	1
Glycerine	56-81-5																		×	x	2
Glyoxal	107-22-2																		~	X	2
Graphit	7702 12 5																		~	v	2
Graphic	12207 24	E																	~	^	2
UCEC 142b	75 40 2	5		v														v	^		1 2
	70-00-0			Ň			V											$\hat{\mathbf{v}}$	V	V	2
	73-43-4			Ň			~											$\hat{\mathbf{v}}$	^		5
HUFU-22	/5-45-0			~			~											~		~	4
	(47 40 04	-																V			1
(petroleum)	64/42-94-	5																X		V	1
Hellum	/440-59-/																		X	X	1
Heptane	142-82-5						Х												Х	Х	3
Hexadecanoic acid	57-10-3												Х								1
Hexadecanoic acid, methyl ester	112-39-0												Х								1
Hexane	110-54-3			Х		Х	Х								Х				Х	Х	6
Hexanoic acid	142-62-1												Х								1
Hexylene glycol	107-41-5												Х							Х	2
HFC-152a	75-37-6															Х		Х			2
Hi-Sol 10	64427-33-	4																Х			1
Hydrochloric acid	7647-01-0		Х	Х		Х	Х							Х	Х	Х			Х	Х	9
Hydrogen peroxide	7722-84-1		Х																Х	Х	3
Hydroquinone	123-31-9		Х	Х		Х									Х				Х	Х	6
Hydrotreated heavy paraffinic																					
petroleum distillates	64742-54-	7																Х			1
Hydrotreated light paraffinic																					
petroleum distillates	64742-55-	8																Х			1
Indole	120-72-9												Х								1
Isoamyl acetate	123-92-2					Х								Х					Х	Х	4
Isobutanol	78-83-1					Х				Х	Х	Х							Х	Х	6
Isobutyl acetate	110-19-0					х								Х					Х	Х	4
Isodecanol	25339-17-	7																Х			1
Isooctvl alcohol	26952-21-	6																		Х	1
Isopentane [Butane, 2-methyl-]	78-78-4															х				х	2
Isophorone	78-59-1					х	х						х		х				х	X	6
Isopropanol	67-63-0			х			X												X	X	4
Isopropyl acetate	108-21-4			~															x	x	2
Isopropylamine	75-31-0															х			x	x	3
Kaolin	1332-58-7															~			x	x	2
Kerosene	8008-20-6																		~	x	1
	0000-20-0																			~	

							CERCLA														
		Pesticide	EPCRA	EPCRA		CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112r	- 202A	Inerts	Hazardous	TLVs	Lists
Kerosine (petroleum),	64742-81-0	0																Х		Х	2
Kieselguhr	61790-53-2	2																	Х	Х	2
Lauric acid	143-07-7												Х								1
Light aliphatic solvent																					
naphtha (petroleum)	64742-89-8	8																Х			1
Light aromatic solvent																					
naphtha (petroleum)	64742-95-0	6																Х			1
Limestone	1317-65-3																		Х		1
Limonene	138-86-3												х								1
Lithium carbonate	554-13-2			Х																	1
Low-boiling catalytic																					
reformer fractionator residue																					
distillates (petroleum)	68477-31-0	6																х			1
Magnesium carbonate	546-93-0	0																~	x	х	2
Magnesium oxide	1309-48-4																		X	X	2
Maleic acid	110-16-7					x								x					A	~	2
Maleic aphydride	108-31-6			Y		X				Y	Y	Y		X	Y				Y	x	0
Medium alinhatic solvent	100-31-0			~		Х				~	~	~		~	~				~	~	7
nanhtha (notroloum)	61712 00 -	7																v			1
Monthol	1400 04 6	/											×					^			1
Mesitul evide	1490-04-0												Ŷ					v	×	v	1
Methacrylic acid	70 /1 /												Ŷ					^	~	×	4
Methanal	/9-41-4 47 E4 1			v		v	V	v		v			^		v		v		×	×	2
Methyl Ether Methers, swybia 1	0/-30-1			~		~	~	~		~					~	v	~		~	~	9
Methyl Ether [Methane, oxybis-]	115-10-6			V							V					X			X	X	1
Metnyi etnyi ketone	/8-93-3			X		X	X	X		X	X	х	X		X				X	X	9
Metnyi isobutyi ketone	108-10-1			X		X	X	Х		X		N/	х		X			X	X	X	10
Methyl methacrylate	80-62-6			Х		х	X			Х		х		х	х			Х	X	Х	10
Methylnaphthalene	1321-94-4	-					Х														1
Mica-group minerals	12001-26-2	2																	X	X	2
Morpholine	110-91-8																		Х	Х	2
n-Amyl acetate	628-63-7					Х								Х					X	Х	4
Naphtha	8030-30-6																		Х	Х	2
Naphtha (petroleum), heavy	64741-65-	7																Х			1
Naphtha (petroleum), heavy	64741-41-9	9																Х			1
Naphtha (petroleum), light steam-																					
cracked arom.	68527-23-	1																Х			1
Naphthalene	91-20-3			Х		Х	Х			Х	Х	х	Х	Х	Х				Х	Х	11
Naphthenic acids	1338-24-5					Х								х							2
Natural rubber latex	9006-04-6																			Х	1
n-Butyl acetate	123-86-4					х	х							х					х	х	5
n-Butyl lactate	138-22-7																			X	1
Nitric acid	7697-37-2															х				x	2
Nitrilotriacetic acid	139-13-9			х												~				~	1
Nitroethane	79-24-3			~														x	x	х	3
Nitrogen	7727-37-9																	~	X	X	1
Nitromethane	75-52-5																	x	×	x	3
Nitrous Oxide	10024-97-	2																~	~	x	1
N-Methyl-2-pyrrolidone	872_50_4	<u>-</u>		x									x							~	2
Nonanoic acid	112-05-0			~									Ŷ								∠ 1
	112-00-0	0											^					V			1
Normal C5-20 paramins (petroleum)	04//1-/2-8	ö																X			1

							CERCLA														
	C 1C	Pesticide	EPCRA	EPCRA	TCCA	CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA	C) A / A	C) A / A	~ ^ ^	~ ^ ^	~ ^ ^	EPA	OSHA	ACC111	Total
Chamical Nama	CAS	Active	(SARA)	(SARA)	TSCA	101(14) (SADA 110)	(SARA 110)	F Wasto	P Wasta	U	Append		207	211	112h	CAA		LIST 2	I OXIC &	ACGIH	# OT
		Ingredients	302A	IRI	0	(SARA ITU)	110)	waste	waste	waste	X VII	X VIII	307	311	1120	112	1 202A	ments	Hazardous	ILVS	LISIS
N-VINyI-2-pyl1olidone	88-12-0												V					v		×	1
o-chiorotoluene	95-49-8		V	V		V	X						~	V	v			Ň		×	3
o-cresol	95-48-7		Х	Х		X	X						X	X	X			X		X	9
Octadecanoic acid, methyl ester	112-61-8												X								1
Octanoic acid	124-07-2												х							.,	1
Oxalic acid	144-62-7																		X	Х	2
Paraffin oils	8012-95-1																		Х		1
Paraffin wax fume	8002-74-2																			Х	1
Pentaerythritol	115-77-5																		Х	Х	2
Pentanoic acid	109-52-4												Х								1
Perlite	93763-70-3	3																		Х	1
Phenol	108-95-2		Х	Х		Х	Х			Х	Х	Х	Х	Х	Х				Х	Х	12
Phenol, (1,1-dimethylethyl)-4-	25013-16-5	5											Х								1
Phenol, 2-(1-methylethyl)-	88-69-7												Х					Х			2
Phenol, 3-(1-methylethyl)-	618-45-1												Х					Х			2
Phenol, 4-(1-methylethyl)-	99-89-8												Х					Х			2
Phenol, 4-methoxy-	150-76-5												Х							Х	2
Phenol, nonyl-	25154-52-3	3																Х			1
Phosphoric acid	7664-38-2			Х		Х	Х							Х					Х	Х	6
Phosphoric acid, triethyl ester	78-40-0												Х								1
Phthalic anhydride	85-44-9			Х		Х				Х	Х	Х			Х				Х	Х	8
Picric acid	88-89-1			Х			Х												Х	Х	4
Piperonyl butoxide	51-03-6	х		Х																	2
p-Nitrophenol	100-02-7			Х		Х	Х			Х		х		Х	х			Х			8
Polymeric diphenylmethane																					
diisocvanate	9016-87-9			х																	1
Portland cement	65997-15-1	1																		х	1
Potassium bromate	7758-01-2			х																~	1
Potassium bydroxide	1310-58-3			~		x								x						x	3
Potassium pormanganato	7722 64 7					×								Ŷ						~	2
Propapo	7/ 09 6					^								^		v			~	v	2
Propagal (2 othowymathylathowy)	20025 20 0	D														^		v	~	^	1
Propanol, (2-ethoxymethylethoxy)-	30025-36-0	D																^			1
methoxymethylethoxy)																					
methylethoxy]-	25498-49-	1																X			1
Propanol, 1(or 2)-butoxy-	29387-86-8	8																Х			1
Propargyl alcohol	107-19-7			Х		Х			Х			Х								Х	5
Propionaldehyde	123-38-6			Х		Х									Х					Х	4
Propionic acid	79-09-4	Х				Х	Х						Х	Х						Х	6
Propylene glycol 1-methyl ether	107-98-2																	Х		Х	2
p-tert-Butylphenol	98-54-4												Х								1
Quaternary ammonium																					
compounds, benzyl-C12-16-																					
alkyldimethyl, chlorides	68424-85-	Х																			1
Residues (petroleum), catalytic																					
reformer fractionator	64741-67-9	9																Х			1
Resorcinol	108-46-3					Х				Х		Х		Х						Х	5
Rhodamine B	81-88-9			х																	1
Rosin core solder thermal																					-
decomposition products	8050-09-7																			х	1
Rotenone	83-79-4	×																	×	~	2
Saccharin	81-07-2	~		x		x						x							~		2
Gaoonarin	51-07-2			~		~						~									5

Attachment A

							CERCLA														
		Pesticide	EPCRA	EPCRA		CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112r	202A	Inerts	Hazardous	TLVs	Lists
Salicylic acid	69-72-7	0											Х								1
Silane, triethoxypentyl-	2761-24-2																	Х			1
Silica gel, pptd., crystfree	112926-00	-8																	Х	Х	2
Silica, vitreous	60676-86-	0																	Х	Х	2
Silicic acid, calcium salt	1344-95-2																		Х	Х	2
Sodium bisulfite	7631-90-5					Х								х						Х	3
Sodium chromate(VI)	7775-11-3				Х	Х								Х							3
Sodium dodecylbenzenesulfonate	25155-30-	0				Х								Х							2
Sodium fluoride	7681-49-4					Х	х							х							3
Sodium hexametaphosphate	10124-56-	8				Х								Х							2
Sodium hydroxide	1310-73-2			Х		Х								Х					Х	Х	5
Sodium Metabisulfate	7681-57-4																			Х	1
Sodium nitrite	7632-00-0			Х		Х								Х							3
Sodium o-phenylphenoxide	132-27-4			Х																	1
Sodium sulfate	7757-82-6			Х																	1
Sodium tripolyphosphate	7758-29-4					х								Х							2
alinh	64742-96-	7																x			1
Starch	9005-25-8	,																~	x	x	2
Staria asid	F7 11 4												v						X	~	1
Steddard colvent	00E2 41 2												^					v	v	v	2
	0014 01 1																	^	^	Ň	3 1
Suproco	9014-01-1 57 50 1																		v	Ŷ	ו ר
Sulfur	37-30-1																v		^	^	2
Sulfur chlorido (S2Cl2)	10025 47	0				V								v			^		V	v	1
Sulfuria acid	7444 02 0	9	v	v		×	v												×	×	4
	14007 04	۷	^	^		^	^							^					×	Ŷ	2
Taic (My3H2(SIO3)4)	75 45 0	0		v															X	×	2
Tetradocapolo acid	/ 3-03-U			~									v						~	~	3
Tetradecanoic acid methyl ester	124 10 7												Ŷ								1
	124-10-7					V	V			v			^						V	v	F
Tetranyururururu	7722.00 5					~	~			~									~	×	5 1
Titanium diaxida	12462 68-3	7		v															V	×	1
	13403-07-	/		×		V	V			V	v	V	v	v	v			v	X	×	3
Toluene	108-88-3	2		~		~	~			~	~	~	~	~	~			~	~	×	12
Triothanolomina	102 71 4	3																v		×	ו ר
Triethanolamine	102-71-0	7				V								v				^		^	2
Triethylamine	2/323-41-	/		v		~				v	v	v		×	v				V	v	2
	121-44-0 552 20 7			^		^				^	~	^		^	^				^	Ŷ	9
	002-00-7 05551 10	7																		Ŷ	1
	20001-10-	/																		Ň	1
	1217 05 0																			Ŷ	1
Trisodium phosphato	7401 54 0					V								v						^	ו ר
	7601-54-9					~								~					V	v	2
Vapillin	8000-04-2												v						~	~	2
Valiliiii	121-33-5	4											^						V	v	1
VIII yillouene	20013-15-	4																	~	~	∠ 1
	0032-32-4			v		v	\sim	v		v				v	v			v	v	~ ~	10
	1330-20-7			~	v	~	~	~		^				~	~			~	~	~	10
Zina ablarida	7440-00-0			X	X	X	X							V					V	v	4
	1040-85-7					X								X					×	× v	4
	1314-13-2																		^	~	~

							CERCLA														
		Pesticide	EPCRA	EPCRA		CERCLA	104(I)(2)	RCRA	RCRA	RCRA	RCRA	RCRA						EPA	OSHA		Total
	CAS	Active	(SARA)	(SARA)	TSCA	101(14)	(SARA	F	Р	U	Appendi	Appendi	CWA	CWA	CAA	CAA	CAA	List 2	Toxic &	ACGIH	# of
Chemical Name	number	Ingredients	302A	TRI	6	(SARA 110)	110)	Waste	Waste	Waste	x VII	x VIII	307	311	112b	112r	202A	Inerts	Hazardous	TLVs	Lists
Zinc stearate	557-05-1																		Х		1

* Table 1 is derived primarily from EPA's Substance Registry System (http://www.epa.gov/srs/). The list of OSHA Toxic and Hazardous Substances that is not included in the Substance Registry List is available at http://www.osha.gov/dts/chemicalsampling/toc/chmcas.html. The list of chemicals identified by EPA as list 2 inert ingredients can be found at http://www.epa.gov/opprd001/inerts/inerts_list2.pdf. The list of ACGIH TLV chemicals is from the 2004 edition of "TLVs and BEIs" published by the American Conference of Governmental Industrial Hygienists.

DECLARATION OF J. ROUTT REIGART

I, J. Routt Reigart, MD, FAAP, hereby declare:

1. My name is J. Routt Reigart, MD, FAAP. I submit this declaration in support of the petition of the Northwest Coalition for Alternatives to Pesticides, et al., to require disclosure of certain pesticide ingredients on pesticide labels.

2. I am Professor of Pediatrics at the Medical University of South Carolina and Director of General Pediatrics at the Medical University of South Carolina.

3. My specialties are clinical toxicology, heavy metal toxicity, and chemical and pesticide toxicology. I am co-editor of the USEPA manual *Recognition and Management of Pesticide Poisoning*. I was a co-founder and medical consultant for many years for the National Pesticide Telecommunications Network (now NPIC). I am past-chair of the American Academy of Pediatrics Committee on Environmental Health and past-chair of the USEPA Children's Health Protection Advisory Committee. I also served as a member of the USEPA Tolerance Reassessment Advisory Committee which was charged with advising on the implementation of the Food Quality Protection Act of 1996.

4. When treating patients who have been exposed to pesticides, exact knowledge of all potential hazardous agents in the pesticide formulation is essential to the proper diagnosis and management of the exposed individual. The hazard is not limited to the active ingredients and for many pesticides, particularly many herbicides and fungicides, the "inert" ingredients are often more toxic than the active ingredients. Particularly in the case of acute poisonings, rapid emergent access to all ingredients in a formulation is essential to success in treating such patients. Such information should be available on the label.

5. Currently, inert ingredient information is not readily available. Only a few inert

ingredients are identified on Material Safety Data Sheets (MSDS's) which are rarely available to treating physicians in an emergency situation. A direct request to the pesticide producer (usually a phone call) is usually necessary to secure this information. The time required to locate MSDS's or call the producer and locate the responsible respondent can result in serious and significant harm to the poisoned individual.

6. Poisoned patients deserve prompt and appropriate care by the medical community. This care is presently hampered by the cumbersome inaccessibility of information about "inert" but toxic substances in pesticide formulations. It is unreasonable to continue to subject our population to this unnecessary risk. I strongly urge the incorporation of proper and necessary information on all pesticide labels.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: May <u>2</u>, 2006.

J. Routt Reigart, MD, FAAP Medical University of South Carolina

DECLARATION OF HOWARD FREED

I, Howard Freed, hereby declare:

1. My name is Howard Freed. I submit this declaration in support of the petition of the Northwest Coalition for Alternatives to Pesticides, et al., to require disclosure of certain pesticide ingredients on pesticide labels.

2. I am a physician who practices and teaches Emergency Medicine full time in a University setting. I am a Clinical Professor of Emergency Medicine at Georgetown University School of Medicine, and Clinical Professor of Medicine at Howard University School of Medicine. I have treated thousands of patients in the Emergency Room setting over the last thirty years. I have also served on New York State's Pesticide Management Advisory Council.

3. When treating patients who have been exposed to pesticides, physicians need inert ingredient information in order to evaluate all possible exposures, diagnose pesticide-related illness, and provide appropriate treatment. Without inert ingredient information, physicians may not perform necessary diagnostic tests and may not be able to appropriately advise patients. Physicians in the Emergency Room are forced to treat blindly for all "inert" exposures when the information is needed but kept secret.

4. Currently, inert ingredient information is not available to physicians treating pesticide poisonings and exposures. Only a few inert ingredients are identified on Material Safety Data Sheets. Some of the undisclosed ingredients are known to be toxic and/or hazardous.

5. The current system of calling the "medical hotline" telephone number on the products is inadequate. Calling pesticide producers to acquire ingredient information is sometimes time consuming, difficult, and still may not yield the desired clinical information. For example, I recently called a well known, major manufacturer for information about a product that a 52 year old woman had been exposed to. I was told that even the *exact* product name on the label was not enough for them to identify the product,

Attachment C

and that in any case they would not tell me what specific chemicals were in the product so that I could call my local Poison Control Center for information about them.

6. When a patient has a significant exposure, keeping the ingredients of a product a secret from the treating physician can only hurt and can never help patient care. Physicians could provide better, more efficient health care if more product ingredients were disclosed on pesticide labels.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: May 5, 2006.

Howard Freedung

Howard Freed