Theoretical Model and Solubility Characteristics of Aroclor (Trade Mark) 1254 in Water: Problems Associated with Low-Solubility Compounds in Aquatic Toxicity Tests

National Environmental Research Center, Corvallis, Oreg.

Final rept.
AUTHOR: Schoor, W. Peter
C4525B4 FLD: 07D, 99F, 68D USGRDR7511
Sep 74 38p
REPT NO: EPA-660/3-74-013
MONITOR: 18

ABSTRACT: A theoretical model of the behavior of substances having low water-solubility is presented and discussed with respect to aqueous bioassay. Ultracentrifugal techniques were used in an attempt to study size distributions of Aroclor 1254 aggregates in aqueous emulsions. Results indicate strong adsorption from emulsion by surfaces and a water-solubility at 20C of less than 0.1 micrograms/l in distilled water and approximately 40% of that value in water containing 30 g/l NaCl. Implications with regard to aqueous bioassay are discussed.

DESCRIPTORS: *Chlorine aromatic compounds, *Solubility, *Water chemistry, Colloids, Emulsions, Adsorption, Water pollution

IDENTIFIERS: *Biphenyl/chloro, Aroclor 1254, NTISEPAORD

PB-240 550/4ST NTIS Prices: PC$3.75/MF$2.25

MONS 054364

Chlorinated Hydrocarbons in the Sargasso Sea Atmosphere and Surface Water

Rhode Island Univ., Kingston. Dept. of Food and Resource Chemistry.*National Science Foundation, Washington, D.C. Office for the International Decade of Ocean Exploration.
AUTHOR: Bidleman, T. F., Olney, C. E.
C4521E1 FLD: 04A, 08J, 68A, 68D USGRDR7511
Aug 73 5p
GRANT: NSF-GX-33777
MONITOR: NSF/IDOE-75-8
Also pub. as Rhode Island Agricultural Experiment Station, Contrib-1500.
Pub. in Science, v183 p516-518, 8 Feb 74.

ABSTRACT: Polychlorinated biphenyls (PCB), DDT, and chlordane concentrations were measured in air sampled from a tower on the south shore of Bermuda and in Sargasso Sea surface water approximately 80 to 320 kilometers south of Bermuda. The atmospheric chlorinated hydrocarbons appeared to be gaseous, and the DDT concentration was two orders of magnitude higher than previously reported particulate values. The PCB and DDT were enriched in the surface microlayer (150 micrometers) relative to their concentrations in water at a depth of 30 centimeters. Atmospheric residence times for PCB and DDT of 40 to 50 days, calculated from the concentrations in the air and water, are 20 times shorter than values previously estimated for DDT from rainfall and DDT production data.

DESCRIPTORS: *Chlorine aromatic compounds, *Air pollution, *Atmospheric composition, *Water pollution, Air water interactions, Sea water, Bermuda, DDT, Chlordon

IDENTIFIERS: Residence time, Biphenyl/chloro, Reprints, NTISIDOE, NTISNSF

PB-239 980/6ST NTIS Prices: Not available NTIS

MONS 054365

The Fate of Select Pesticides in the Aquatic Environment

Illinois Univ., Urbana.*National Environmental Research Center, Corvallis, Oreg.*Illinois State Natural History Survey, Urbana. (175 750)

Ecological research series (Final)
AUTHOR: Sanborn, James R.
C4461B2 FLD: 06F, 13B, 68E, 68D, 57H, 48E USGRDR7510
Dec 74 93p
GRANT: EPA-R-800736
MONITOR: EPA/660/3-74-025
Paper copy available from GPO, Stock no. 5501-00995.

ABSTRACT: In this study, 17 organic pesticides and five industrial chemicals were examined in a terrestrial-aquatic model ecosystem in an effort to determine their persistence and accumulation by the organisms of this system. Several classes of pesticides are represented as one or more insecticides, herbicides, miticids or plasticizers were investigated in this system. The use of this system for examining uptake and persistence of widely used agricultural chemicals provides the necessary data for comparison of field data to provide a framework which can be used to assess the potential environmental impact of new pesticides before they are given a recommendation for generalized use. The data obtained from this work suggest that this model ecosystem is useful for the determination of the uptake and persistence of pesticides by the organisms. In general, it was found that most chemicals, with the exception of the persistent soil insecticide, dieldrin, underwent extensive degradation under the experimental conditions of the system.

DESCRIPTORS: *Pesticides, *Biodeterioration, *Water pollution, *Soil chemistry, Fungicides, Accumulation, Residues, Herbicides, Insecticides, Culicidae, Daphnia, Algae, Chemical composition, Soil chemistry, Decomposition, Fishes, Snails, Carbamates, Chlorine aliphatic compounds, Chlorine aromatic compounds, Parathions, Soil microorganisms

IDENTIFIERS: *Ecosystems, Water pollution effects(Animals), *Pesticide residues, Bux Ten insecticide, Carbaryl, Carbofuran, Dieldrin, Lindane , Biphenyl/chloro, Orthene, Alachlor, Propachlor, Bladex, Bentazon, Dicamba, D 2-4 herbicide, Pyrazon, Trifluralin, NTISEPAORD

PB-239 749/5ST NTIS Prices: PC-GPO/MF$2.25-NTIS

MONS 054366

Report to International Joint Commission, United States and Canada, Great Lakes Water Quality Status of Pertinent EPA Research

National Environmental Research Center, Corvallis, Oreg.
AUTHOR: Bartsch, A. F., Frank, Charles L., Peterson, Spencer
C4391D2 FLD: 13B, 68D USGRDR7509
Dec 74 22p
REPT NO: EPA/660/9-74-002
MONITOR: 18

ABSTRACT: The report summarizes major segments of research activities that the U.S. Environmental Protection Agency has completed or now has under way that relate to nitrilotriacetate, viruses, disinfection of municipal wastewater and the effects of polychlorinated biphenyls on fish and fish products. The summary highlights research areas which may have impact on objectives of the International Joint Commission and recommended in its 1973 annual report and should not be considered inclusive of all activities presently funded by EPA in the above subject areas.

DESCRIPTORS: *Water pollution, *Great Lakes, Water quality, Viruses, Biphenyl, Chlorine aromatic compounds, Acetic acid, Municipalities, Waste water, Disinfection, Fishes, Toxicity, Potable water

IDENTIFIERS: Biphenyl/chloro, Acetic acid/nitrilo-tri, NTISEPAERC

PB-239 260/3ST NTIS Prices: PC$3.25/MF$2.25

MONS 054367

Sublethal Effects of Oil, Heavy Metals and PCBs on Marine Organisms

Texas A and M Univ., College Station. Dept. of Biology.*National Science Foundation, Washington, D.C. Office for the International Decade of Ocean Exploration. (402 267)
AUTHOR: Anderson, J. W., Neff, J. M., Petrocelli, S. R.
C4165K2 FLD: 06F, 08A, 57H, 48A, 68D USGRDR7506
1974 48p
GRANT: NSF-GX-37344, NSF-GX-37347
MONITOR: NSF/IDOE-74-37
Presented at a Symposium Organized by the American Society of Zoologists Entitled The Mechanisms of Survival in Toxic Environments, held at Academic Press on December, 1974.

ABSTRACT: The review describes what has been and is now being done in the study of the sublethal effects of three major classes of pollutants commonly found in the estuarine environment. Heavy metals and chlorinated hydrocarbons are in general accumulated to a greater extent and bound to organisms much more firmly than petroleum hydrocarbons. Retention of petroleum derived hydrocarbons by animals in clean water may vary from several days to approximately two months, and is species dependent. The class of petroleum hydrocarbons accumulated to the greatest extent and retained the longest is the 'Naphthalenes'. Inorganic mercury, Aroclor 1254 and petroleum hydrocarbons have been shown to effect the respiratory rate and chloride ion regulation of selected marine animals. There is some indication that the levels of petroleum hydrocarbons in the animal tissues may act to temporarily alter the regulatory ability of the test individuals.

DESCRIPTORS: *Water pollution, *Aquatic animals, *Metals, *Oils, *Chlorohydrocarbons, Hydrocarbons, Bays, Estuaries, Naphthalene, Iron, Cadmium, Manganese, Cobalt, Zinc, Mercury(Metal), Toxicity

IDENTIFIERS: *Water pollution effects(Animals), Oil pollution, International Decade of Ocean Exploration, Biphenyl/chloro, NTISIDOE

PB-238 514/4ST NTIS Prices: PC$3.75/MF$2.25

Pesticide Residue Analysis in Water (103.1) Training Manual

Environmental Protection Agency, Cincinnati, Ohio. Office of Water Program Operations.

Final rept.
AUTHOR: Hallbach, Paul E.
C4163G2 FLD: 07C, 14B, 99A*, 68E*, 68D USGRDR7506
Sep 74 282p*
REPT NO: EPA/430/1-74-012
MONITOR: 18

ABSTRACT: The report presents outlines of material for the conduct of a training course on analysis of pesticide residues in the aquatic environment. General extraction, chromatographic, spectroscopic, and analytical techniques are included as well as specific analyses for selected pesticides. Sampling and analyses of water, biological tissues, and industrial effluents are described.

DESCRIPTORS: *Pesticides, *Water analysis, Solvent extraction, Gas chromatography, Chromatographic analysis, Spectroscopic analysis, Industrial wastes, Sampling, Cholinesterase inhibitors, Carbamates, Ureas, Chlorine aromatic compounds, Triazines, Phosphorus organic compounds, Chemical analysis, Tissues(Biology), Laboratory equipment

IDENTIFIERS: *Water pollution detection, Biphenyl/chloro, D 2-4 herbicide, NTISEPAOWP

PB-238 072/3ST NTIS Prices: PC$8.75/MF$2.25

MONS 054369

Resource Evaluation Studies on the Matagorda Bay Area, Texas

Texas A and M Univ., College Station.*National Oceanic and Atmospheric Administration, Rockville, Md. Office of Sea Grant. (347 350)
AUTHOR: Ahr, Wayne M., Harry, Harold W., Holliday, Barry, Miloy, John, Vetter, Larry
C3975E4 FLD: 13B, 48B, 68D, 86M USGRDR7503
Sep 73 170p
REPT NO: TAMU-SG-74-204
GRANT: NOAA-04-3-158-18
MONITOR: NOAA-74092303
Report on Sea Grant Program.

ABSTRACT: The study was designed for finding answers to the following: (1) What are the water circulation patterns of Matagorda Bay and how does water circulation affect processes such as coastline change and pollution dispersal among others; (2) what is the chronic pesticide and PCB (polychlorinated biphenyls) level in bay sediments and what are the physical-chemical variables that govern the distribution and retention of chlorinated hydrocarbons in the sediments; (3) what are the occurrences and distribution patterns of selected benthic microfauna and will data on microfaunal populations elucidate processes of coastal change, pollution and water circulation; and (4) what is the economic structure of the Matagorda Bay area.

DESCRIPTORS: *Marine resources, *Coastal zone management, *Land use, *Water pollution, Grants, Policies, Circulation, Pesticides, Matagorda Bay, Chlorohydrocarbons, Biphenyl, Environmental impacts, Water consumption, Sediments, Benthos, Water economy, Texas

IDENTIFIERS: Sea Grant program, *Water circulation, Water use, Biphenyl/chloro, NTISCOMNOA

COM-74-11706/0ST NTIS Price: PC$6.25/MF$2.25

MONS 054370

Marine Studies of San Pedro Bay, California. Part VII. Sediment Investigations. Sediment Compositions in Los Angeles-Long Beach Harbors and San Pedro Basin

University of Southern California, Los Angeles. Allan Hancock Foundation.*National Oceanic and Atmospheric Administration, Rockville, Md. Office of Sea Grant. (400 911)
AUTHOR: Chen, Kenneth Y., Lu, James C. S.
C3914L4 FLD: 13B, 8G, 68D, 47E, 86M USGRDR7502
Aug 74 191p
REPT NO: USC-SG-8-74
GRANT: NOAA-04-3-158-145
MONITOR: NOAA-74102209
See also Part 6, COM-74-11558.

ABSTRACT: Most surface sediments in the Los Angeles-Long Beach Harbors and nearby San Pedro Basin are grossly contaminated, with the exception of a few localities. Restricted dredging of polluted sediments from fractional areas of the harbor complex is probably beneficial to the ecosystem if the polluting substances can be properly disposed of. The Los Angeles County Sanitation District sewer outfall at White's Point is found to contribute substantial amounts of trace metals and chlorinated pesticides to the San Pedro Basin, while the harbor complex is found to be an important source of polychlorinated biphenyls into the San Pedro Basin. Interrelationships of pollution parameters are presented.

DESCRIPTORS: *Water pollution, *Harbors, *Sediments, *San Pedro Bay, Pesticides, Outfall sewers, Dredging, Metals, Chlorohydrocarbons, Chlorine aromatic compounds, Biphenyl, California

IDENTIFIERS: Sea Grant program, *Trace metals, San Pedro(California), Los Angeles Harbor, Long Beach Harbor, Ecosystems, NTISCOMNOA

COM-74-11748/2SL NTIS Prices: PC$7.00/MF$2.25

MONS 054371

Estimation of Polychlorinated Biphenyls in the Presence of DDT-Type Compounds

Baird-Atomic, Inc., Bedford, Mass. (388 786)

Environmental monitoring series (Final)
AUTHOR: Brownrigg, J. T., Hornig, A. W.
CJ283B3 FLD: 7C, 6F, 13B, 68E, 99A USGRDR7419
Jun 74 100p
CONTRACT: EPA-68-01-0082
PROJECT: EPA-ROAP-09ABZ-013
MONITOR: EPA-670/4-74-004

ABSTRACT: Earlier studies suggested that the low temperature luminescence properties of PCB's (polychlorinated biphenyls) and DDT compounds could be used to identify these compounds singly or in mixtures. The present investigation was undertaken to develop a relatively simple, rapid method for estimating these compounds in water. The emphasis in this procedure has been on the inherent sensitivity and specificity of luminescence, avoiding chemical separation where possible. The present procedure involves collection of grab samples followed by extraction, drying, concentration, and redilution in a second solvent suitable for luminescence measurement at 77K. Studies include the determination of recoveries and detection sensitivities for some of the compounds of interest and also analyses of several environmental waters. (Modified author abstract)

DESCRIPTORS: *Water analysis, *DDT, *Luminescence, Surface waters, Cryogenics, Sensitivity, Pesticides, Spectroscopic analysis, Emission spectra, Solvent extraction

IDENTIFIERS: *Biphenyl/chloro, *Water pollution detection, NTISEPAERC

PB-233 599/0 NTIS Prices: PC$4.00/MF$1.45

MONS 054372

Premature Births in California Sea Lions: Association with High Organochlorine Pollutant Residue Levels

National Marine Fisheries Service, Seattle, Wash. Marine Mammal Div.
AUTHOR: DeLong, Robert L., Gilmartin, William G., Simpson, Joan G.
C2461F1 FLD: 6F, 86Q USGRDR7408
30 Jan 73 5p
MONITOR: NOAA-74012311
Revision of report dated 16 Oct 72.
Pub. in Science, v181 p1168-170, 21 Sep 73.

ABSTRACT: Premature pupping in California sea lions has been noted on the breeding islands since 1968. Organochlorine pesticides and polychlorinated biphenyl residues were two to eight times higher in tissues of premature parturient females and pups than in similar tissues of full-term parturient females and pups collected on San Miguel Island in 1970. The mean total DDT residues in the blubber and liver of premature parturient females were 8.0 and 3.8 times greater, respectively, than the concentrations in the same tissues of normal parturient cows. The brains of premature pups contained twice the residue concentrations as the brains of full-term pups. The (PCB) levels in blubber, liver, and brain of the premature parturient group were 6.6, 4.4 and 2.4 times higher than those in the full-term group. In neither blubber nor liver did the ranges of residue values of total DDT or PCB in premature and full-term groups overlap. Dieldrin residues were not detected in all samples and when present, were low. (Modified author abstract)

DESCRIPTORS: *Seals(Mammals), *Pesticides, *Chlorine organic compounds, Dieldrin, DDT, Pregnancy complications, California, Histology, Pathology, Brain, Liver

IDENTIFIERS: Sea lions, Water pollution effects (Animals), *Biphenyl/chloro, NOAA

COM-74-10457/1 NTIS Prices: Reprint

MONS 054373

Adsorption of Chlorinated Hydrocarbons from Seawater by a Crosslinked Polymer

Woods Hole Oceanographic Institution, Mass. (381 000)
AUTHOR: Harvey, George R.
C2393L1 FLD: 7D, 8J, 13B, 99A*, 68D, 47C USGRDR7407
Mar 73 35p*
REPT NO: WHOI-Contrib-2798
PROJECT: EPA-16020GCQ
MONITOR: EPA-R2-73-177
Paper copy available from GPO $0.55 as EP1.23/2:73-177.

ABSTRACT: A synthetic resin, Amberlite XAD-2, has been evaluated as an adsorption medium for chlorinated hydrocarbons dissolved in seawater. The resin was found to be very efficient and the method was developed into a routine analytical procedure for the monitoring of seawater. (Author)

DESCRIPTORS: *Adsorption, *Chlorine organic compounds, *Sea water, *Water analysis, Performance evaluation, DDT, Insecticides, Dieldrin

IDENTIFIERS: Amberlite XAD-2 resin, *Water pollution detection, Biphenyl/chloro, EPAO

PB-227 349/8 NTIS Prices: PC-GPO/MF$1.45-NTIS

Organochlorine Residues from Plankton

Institute for Marine Environmental Research Edinburgh (Scotland) Oceanographic Lab (408290)
AUTHOR: Williams, R., Holden, A. V.
C2124K2 FLD: 8A, 13B, 68D USGRDR7404
1973 3p
MONITOR: 18
Prepared in cooperation with the Department of Agriculture and Fisheries for Scotland, Pitlochry.
Availability: Pub. in the Marine Pollution Bulletin v4 n7 p109-111 Jul 73.

ABSTRACT: Concentrations of PCBs, DDT and dieldrin in plankton at a number of stations from Gouroch in the Firth of Clyde to the International Ocean Weather Station India 400 miles west of Scotland show an unexpected gradient from the polluted estuary to the open ocean levels. The results are consistent with the general assumption that there is progressive concentration of these residues in marine food chains. (Author)

DESCRIPTORS: *Plankton, *Residues, *Chlorine compounds, DDT, Dieldrin, Accumulation, Biphenyl, Water pollution, Atlantic Ocean, Gas chromatography, Great Britain

IDENTIFIERS: Zooplankton, *Chlorine organic compounds, Biphenyl/chloro , SD

AD-771 349/8 NTIS Price: Not available NTIS

MONS 054375

Environmental Distribution and Metabolic Fate of Key Industrial Pollutants and Pesticides in a Model Ecosystem

Illinois Univ., Urbana. Water Resources Center.

Research rept.
AUTHOR: Metcalf, Robert L., Lu, Po-Yung, Kapoor, Inder P.
C2105K1 FLD: 13B, 6F, 68D*, 99B, 57H USGRDR7403
Jun 73 102p*
REPT NO: WRC-RR-69
CONTRACT: DI-14-31-0001-3273
PROJECT: OWRR-B-050-ILL
MONITOR: OWRR-B-050-ILL(1)

ABSTRACT: The contamination of water supplies with toxic substances liberated into the environment either accidentally as industrial or household wastes or purposefully as pesticides and food additives is an important problem in environmental quality. Radiolabeled contaminants used in a laboratory model ecosystem provide an elegant method for determining the degradative fate of potential pollutants, indications of their toxic effects to a variety of food chain organisms, and measurement of their ecological magnification in food chain organisms. The results have been expressed in terms of ecological magnification and biodegradability index, and have been examined for correlation with such physio-chemical properties as water solubility, and partion coefficient, and for relationships to electron distribution. (Modified author abstract)

DESCRIPTORS: *Organic wastes, *Chemical industry, *Biodeterioration, *Pesticides, *Water pollution, Industrial wastes, Methodology, Toxicity, Food chains, Carbamates, Organic phosphates, Statistical data, Models, Solubility, Isotopic labeling, Plasticizers, Chlorine organic compounds, Phthalates, Accumulation, Food chains

IDENTIFIERS: *Ecosystems, *Path of pollutants, Biphenyl/chloro, OWRR

PB-225 479/5 NTIS Prices: PC$4.25/MF$1.45

MONS 054376

Biological Models of Freshwater Communities

Washington Univ., Seattle. Coll. of Fisheries. (403 974)

Final rept.
AUTHOR: Taub, Frieda B.
C1992C3 FLD: 6F, 57H, 68D USGRDR7401
Aug 73 80p
PROJECT: EPA-16050-DXM
MONITOR: W74-00925
Paper copy available from GPO $1.05 as stock no. EP1.23:660-73-008.

ABSTRACT: Data from continuous cultures of an alga (Chlamydomonas reinhardtii) and protozoan (Tetrahymena vorax) have been used to construct a model of algal standing crop over ranges of light intensity, dilution rate, and nutrient concentration both in the absence and presence of predation by the protozoa. The model predicts that predation can reduce algal standing crop only within certain ranges of the environmental variables. The comparative toxicities of Aroclor 1242, a polychlorinated biphenyl, and DDT, were tested on the alga and protozoan, and also on daphnids, ostracods, and guppies. (Modified author abstract)

DESCRIPTORS: (*Fresh water biology, Models), (*Pesticides, Toxicity), Algae, Protozoa, Ciliata, Water pollution, Bacteria, Primary biological productivity, Luminous intensity, Computerized simulation, DDT, Stress(Physiology), Cultures(Biology), Chlorine aromatic compounds

IDENTIFIERS: Chemostats, Tetrahymena vorax, Chlamydomonas reinhardtic, Biphenyl/chloro, *Eutrophication, EPAORM

PB-225 029/8 NTIS Prices: PC-GPO/MF$1.45-NTIS

MONS 054377

Chlorinated Hydrocarbons in Plankton from the Gulf of Mexico and Northern Caribbean

Texas A and M Univ., College Station. (347 350)
AUTHOR: Giam, C. S., Wong, M. K., Hanks, A. R., Sackett, W. M., Richardson, R. L.
C1983G2 FLD: 13B, 8A USGRDR7401
1973 8p
MONITOR: IDOE-73-42
Pub. in the Bulletin of Environmental Contamination and Toxicology, v9 n6 p376-382 1973.

ABSTRACT: During 1971 and 1972 a baseline study of pollutants in the open Gulf of Mexico and Northern Caribbean was conducted. Plankton samples were collected and analyzed for DDT, its metabolities and PCBs. The results showed that DDTs and PCBs are widely spread, although the level is generally low. There are few discernible geographic trends in the sampled areas. It was noted, however, that of the six samples containing PCB's above 100 microgram wet weight, four are near coastal areas, including the two samples with the highest PCB values. About 70% of the samples had higher PCB than DDT values. No definite trend can be observed from the PCB/DDT ratio of the samples analyzed. Generally, the total DDT and PCB levels in plankton samples is comparable to that in small whole fish and muscle of some larger fish.

DESCRIPTORS: (*Water pollution, *Mexico Gulf), (*Pesticides, Mexico Gulf), Chlorine organic compounds, Chlorine aromatic compounds, DDT, Plankton, Caribbean Sea, Concentration(Composition), Chlorohydrocarbons, Residues

IDENTIFIERS: Baseline measurements, PCB, Biphenyl/chloro, IDOE

PB-224 521/5 NTIS Prices: Not available NTIS

MONS 054378

DDT, DDE and Polychlorinated Biphenyls in Biota from the Gulf of Mexico and Caribbean Sea, 1971

Texas A and M Univ., College Station. (347 350)
AUTHOR: Giam, C. S., Hanks, A. R., Richardson, R. L., Sackett, W. M., Wong, M. K.
C1983F3 FLD: 13B, 8A USGRDR7401
Dec 72 7p
MONITOR: IDOE-73-39
Pub. in the Pesticides Monitoring Jnl., v6 n3 p139-143 Dec 72.

ABSTRACT: Residue levels of DDT, DDE, and PCB's were determined in various species of fish, shrimp, crabs, and other biota from the Gulf of Mexico and Carribean Sea. Samples were collected from the Gulf during two Gulf-wide cruises in May and October 1971 and from part of the Carribean Sea during the October cruise. DDT, DDE, and PCB's were found widely distributed in all biota; however, samples from coastal areas generally had higher levels than samples from the open waters. (Author)

DESCRIPTORS: (*Water pollution, *Mexico Gulf), (*Pesticides, Mexico Gulf), Marine fishes, Shrimps, Crabs, Residues, DDT, Caribbean Sea, Bioassay, Chlorine organic compounds, Chlorine aromatic compounds, Chlorohydrocarbons

IDENTIFIERS: DDE Pesticide, PCB, Biphenyl/chloro, IDOE

PB-224 515/7 NTIS Prices: Not available NTIS

MONS 054379

Recommended Methods of Reduction, Neutralization, Recovery, or Disposal of Hazardous Waste. Volume XIV. Summary of Waste Origins, Forms, and Quantities

TRW Systems Group, Redondo Beach, Calif. (354 595)

Final rept.
AUTHOR: Ottinger, R. S., Blumenthal, J. L., Dal Porto, D. F., Gruber, G. I., Santy, M. J.
C1901L1 FLD: 13B, 68 USGRDR7324
Aug 73 160p
REPT NO: TRW-21485-6013-RU-00-Vol-14
CONTRACT: EPA-68-03-0089
MONITOR: EPA-670-2-73-053-n
Paper copy also available from NTIS $72.00/set of 16 reports as PB-224 593-SET.

ABSTRACT: This volume provides information on the origins, forms, and quantities of 13 groups of hazardous waste stream constituents, including pesticides, mercury and mercury compounds, arsenic and arsenic compounds, cadmium and cadmium compounds, lead compounds, soluble copper compounds, selenium and selenium compounds, boron hydrides, chromium compounds, inorganic cyanides, hydrofluoric and fluoboric acids, specific organic chemicals, explosive propellant and chemical warfare materiel and radioactive material. Separate reports on paint wastes and wastes from battery manufacture and the electroplating industry are also presented.

DESCRIPTORS: (*Wastes, *Hazardous materials), (*Pollution, Hazardous materials), (*Industrial wastes, Hazardous materials), Classifications, Paints, Pigments, Electroplating, Storage batteries, Lead, Cadmium, Chromates, Cyanides, Selenium, Mercury, Metal finishing, Copper, Chromium, Radioactive wastes, Pesticides, Herbicides, Fungicides, Plant location, Geography, Chlorine organic compounds, Mercury inorganic compounds, Flue dust, Metal industry, Arsenic inorganic compounds, Phosphoric acid, Lead inorganic compounds, Lead organic compounds, Petroleum industry, Printing inks, Textile industry, Xerography, Boron, Boron hydrides, Tanning materials, Iron and steel industry, Hydrofluoric acid, Fluoroboric acid, Acroleins, Aromatic polycyclic hydrocarbons, Phenols, Biphenyl, Explosives, Propellants, Military chemical agents, Water pollution, Air pollution, Inventories

IDENTIFIERS: Cacodylic acid, National Disposal Sites, Mine wastes, Chloropicrin, NERC

PB-224 593/4 NTIS Prices: PC$4.75/MF$1.45

MONS 054380