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ENVIRONMENTAL PROTECTION AGENCY

■

WATER PROGRAMS

Proposed Toxic Pollutant Effluent Standards

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ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 129]

WATER PROGRAM

Proposed Toxic Pollutant Effluent Standards

Notice is hereby given that the Environmental Protection Agency, pursuant to the authority contained in section 307(a) of the Federal Water Pollution Control Act (the Act) as amended by the Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 et seq.) proposes a new Part 129, setting forth proposed effluent standards for toxic pollutants included in the list of toxic pollutants required by section 307(a)(1).

Section 307(a)(2) provides as follows:

Within one hundred and eighty days after the date of publication of any list, or revision thereof, containing toxic pollutants or combination of pollutants under paragraph (1) of this subsection, the Administrator, in accordance with Section 553 of title 5 of the United States Code, shall publish a proposed effluent standard (or a prohibition) for such pollutant or combination of pollutants which shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms and the nature and extent of the effect of the toxic pollutant on such organisms, and he shall publish a notice for a public hearing on such proposed standard to be held within thirty days. As soon as possible after such hearing, but not later than six months after the publication of the proposed effluent standard (or prohibition), unless the Administrator finds on the record, that a modification of such proposed standard (or prohibition) is justified based upon a preponderance of evidence adduced at such hearings, such standard (or prohibition) shall be promulgated.

These proposed regulations establish effluent standards for the toxic pollutants listed below:

1. Aldrin (1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo - exo - 5,8-dimethanonaphthalene)

Dieldrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a - octahydro - 1,4-endo-exo-5,8-dimethanonaphthalene).

2. Benzidine and its salts (4,4'-diaminobiphenyl).

3. Cadmium and all cadmium compounds.

4. Cyanide and all cyanide compounds.

5. DDD (TDE) (1,1-dichloro-2,2-bis-(p-chlorophenyl)ethane and some o,p'-isomer).

DDE (1,1-dichloro-2,2-bis(p - chlorophenyl)ethylene).

DDT (1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane and some o,p'-isomer).

6. Endrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro - 1,4-endo-endo-5,8-dimethanonaphthalene).

7. Mercury and all mercury compounds.

8. Polychlorinated biphenyls (PCB's) mixtures of chlorinated biphenyl compounds with various percentages of chlorination.

9. Toxaphene (chlorinated camphene).

The criteria and rationale employed to select these pollutants were summarized in the FEDERAL REGISTER Notice of September 7, 1973, vol. 38, No. 173, page 24342.

The following is a summary of the basis and purpose of the effluent standards proposed in this Part: The four basic factors considered in setting the standards were toxicological data, hydrodynamic data, ample margins of safety and calculations of the acute and chronic limitations for the standards. The primary basis for toxicological considerations came from the Water Quality Criteria which were proposed in October (38 FR 29046 et seq., Friday, October 26, 1973). These criteria were based in part on a report by the National Academy of Sciences and the National Academy of Engineering entitled "Water Quality Criteria", 1972 which is currently being published by the Environmental Protection Agency. The toxicity of the pollutants on the list, their persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms, were considered in the establishment of the Water Quality Criteria upon which these standards are based.

Water Quality Criteria published pursuant to section 304(a) of the Act are those concentrations which are acceptable in the receiving water body. The criteria were developed to protect a variety of water uses including industrial, agricultural, recreational, propagation of fish and wildlife, aesthetics and potable water supplies. The protection of fish and wildlife and potable water supplies was the most sensitive of the fresh water usages. In estuarine and marine waters, the protection of fish and wildlife generally yielded the more restrictive recommended limitations. The criteria, as proposed, were designed for both acute and chronic toxicological protection. Since protection against chronic effects requires more stringent criteria, the proposed Water Quality Criteria were devised from data or calculation designed to afford chronic protection.

Because proposed Water Quality Criteria utilize both acute and chronic toxicity data to derive a single acceptable ambient water concentration, it was necessary to utilize the data upon which the criteria were based to calculate proposed standards which provide for protection against both acute and chronic toxicological effects.

To avoid the effects of acute toxicity it was determined that organisms need not necessarily be protected at all times from concentrations exceeding the proposed Water Quality Criteria, since brief exposures to higher concentrations may be tolerated. It may be assumed that most mobile organisms will not remain in the immediate vicinity of the outfall for as long as the usual 96-hour test period. Thus, for protection in the immediate vicinity of the outfall, a concentration of one tenth the 96-hour LC_{50} was determined to provide an ample margin of safety. (The 96-hour LC_{50} is that concentration derived from laboratory tests in which 50% of a group of test organisms survive after 96 hours of continuous exposure to a pollutant.) In order to achieve a concentration in the vicinity of the outfall which does not exceed the acute threshold, the discharger may either discharge the acute toxicity concentration and provide immediate diffusion through appropriate flow devices or reduce the concentration below the acute threshold.

To avoid the effects of chronic toxicity, an effluent standard is provided which is designed to ensure that, in most cases, the proposed Water Quality Criteria, which are intended to provide protection from chronic effects, are not exceeded over the long term in the receiving waters. This is achieved by limitation of the total weight of the pollutant which can be discharged into receiving waters of given size. To provide an additional margin of safety, the allowable weight discharged per unit of flow was reduced by safety factors designed to compensate, in part, for non-point sources of the pollutant, multiple discharges in a small area, industrial growth, and the difference in water storage times among lakes, estuaries, streams, and coastal waters. The standard for each type of receiving water is expressed as a number which, when multiplied by the rate of receiving water flow, yields the allowable weight of discharge of the pollutant per day from any facility.

These standards are not intended, however, to assure that Water Quality Criteria would be achieved in all receiving waters, since standards sufficiently restrictive to attain water quality criteria in (for example) small streams with extraordinarily large clusters of dischargers, would be overly restrictive for the usual case. These special "worst-case" situations are to be handled by the application of water quality standards through waste load allocations under section 303 of the Act. The resulting allocations may then be used to establish effluent limitations, if necessary, more stringent than the effluent standards set forth herein. Those limitations would then be incorporated into permits issued under section 402 of the Act.

Since there are no proposed Water Quality Criteria for benzidine, a different methodology was required for the derivation of an effluent standard. The methodology employed was designed to determine a level of discharge which would result in an acceptable level of risk exposure to man, the primary affected organism. Effluent standards for benzidine were derived by the extrapolation of laboratory test animal data using conservative statistical methods, and are based upon a calculated level of risk of less than one case of tumor induction per million people exposed over an entire generation to drinking water from supplies derived from waters contaminated with the maximum permitted concentration of benzidine. It is recognized that certain inadequacies exist in the available data on which the benzidine standard is based. Therefore, it is reasonable to assume that these standards could be revised in the future. The Environmental

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Protection Agency is initiating research to gather appropriate oral dose-response data, improve analytical sensitivity, and establish monitoring procedures.

Pursuant to paragraph 3 of Section 307 (a), any effluent standard promulgated under this section will be reviewed and, if appropriate, revised at least every three (3) years.

The standards for protection from chronic effects are applicable to the total of all discharges from any given facility. Thus, multiple outfalls from a single facility will not affect the total weight of any pollutant permitted to be discharged.

As required by section 307(a) of the Act, the proposed standards set forth herein designate specifically the categories of sources to which they will be applicable. Based on available data from permit applications and other information submitted under the National Pollutant Discharge Elimination System, the categories initially selected to be subject to these standards appear to represent the major dischargers of the listed pollutants. In addition to such data, total environmental damage potential was considered in evaluating sources of discharge.

The attached standards are not based upon economic considerations or upon the availability of treatment technology. However, the impact of the standards upon the economy has been examined and does not appear to be great.

Time limitations established by court order, (*NRDC vs Fri*, Civ. Action #849-73 (D.D.C.)), have required publication of these standards at this time, even though it is acknowledged that there may in some cases be inadequacies in the underlying data base. Public comment and technical data are solicited to assist in strengthening the standards. Changes made in these standards will be reflected in the final Water Quality Criteria under section 304(a) of the Act.

The effluent standards set forth in proposed form herein, will, if promulgated, apply to all the designated categories of point sources after their effective date. The applicability of these standards is not affected by the issuance of, or submission of an application for a discharge permit under the National Pollutant Discharge Elimination System (NPDES) established by section 402 of the Act. EPA's NPDES regulations (40 CFR Part 125, 38 FR 13528 et seq., Tuesday, May 22, 1973), provide at § 125.32(a)(6) that if a toxic effluent standard or prohibition is established under section 307(a) of the Act for a toxic pollutant which is present in a permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the permit must be modified in accordance with the toxic pollutant standards or prohibitions and the discharger so notified. Although this provision requires that notice be given to permittees of the new toxic pollutant effluent standard and will eliminate inconsistencies between permit conditions and toxic effluent standards, the applicability of the toxic pollutant standard does not depend upon its incorporation into permit conditions.

Section 402(k) of the Act provides that compliance with the terms of an NPDES permit constitutes compliance generally with the requirements of Title III of the Act, except for a standard under section 307 for a toxic pollutant injurious to human health. Thus, such standards will be enforceable against all dischargers designated as subject to such standards. Such standards will be applicable against dischargers holding valid permits and in compliance with such permits, and against dischargers who have applied for permits, but whose applications have not been acted upon. At present, publicly owned treatment works are not designated as a source category for toxic pollutant effluent standards. Review of data which are pertinent to the appropriateness of designating these facilities for control under section 307(a) has not been completed. In the interim, it is noted that controls through programs such as water quality standards, industrial pretreatment and non-point source controls provide the necessary protection.

Prior to adoption of the proposed standards, consideration will be given to any comments, suggestions, or objections thereto which are submitted in writing within 90 days after publication to Dr. C. Hugh Thompson, Chairman, Hazardous and Toxic Substance Regulation Task Force, Office of Water Program Operations, Environmental Protection Agency, Washington, D.C. 20460.

A public hearing to consider the proposed effluent standards will be held commencing January 25, 1974, at 9 a.m., at Jefferson Hall, U.S. Department of Agriculture, Independence Avenue, between 12th and 14th Streets SW., Washington, D.C. Persons adversely affected by the proposed standards may file, not later than January 18, 1974 unless justifiable cause for delay can be shown, objections to the proposed standards. Such objections shall be filed in accordance with 40 CFR Part 104, which is being published contemporaneously with these proposed standards.

The Agency also expects to hold technical symposia on the proposed standards in several locations throughout the country. At these symposia EPA personnel will exchange views with interested members of the public on standards-setting methodology for toxic pollutants, and will discuss data needs for setting such standards. It should be emphasized that these symposia are not intended to duplicate the public hearing described above. Section 307(a) requires that any modifications in the proposed standards must be justified on the record of the public hearing. Thus, the hearing will serve as the exclusive forum for consideration of modifications in the proposed standards.

Dated: December 14, 1973.

JOHN QUARLES,
Acting Administrator.

Chapter I of Title 40, Code of Federal Regulations, is amended by adding a new Part 129, as follows:

Subpart A—General

Sec.
129.01 Applicability.
129.01a Definitions.
129.01b Abbreviations.
129.01c Compliance.
129.01d Effective Date.

Subpart B—Effluent Standard for Aldrin-Dieldrin

129.02 Applicability.
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129.02c Effluent standard for Aldrin-Dieldrin.

Subpart C—Effluent Standard for Benzidine

129.03 Applicability.
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Subpart D—Effluent Standard for Cadmium

129.04 Applicability.
129.04a Definitions.
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129.04c Effluent standard for Cadmium.

Subpart E—Effluent Standard for Cyanide

129.05 Applicability.
129.05a Definitions.
129.05b Determination of weights and concentrations.
129.05c Effluent standard for Cyanide.

Subpart F—Effluent Standard for DDT

129.06 Applicability.
129.06a Definitions.
129.06b Determination of weights and concentrations.
129.06c Effluent standard for DDT.

Subpart G—Effluent Standard for Endrin

129.07 Applicability.
129.07a Definitions.
129.07b Determination of weights and concentrations.
129.07c Effluent standard for Endrin.

Subpart H—Effluent Standard for Mercury

129.08 Applicability.
129.08a Definitions.
129.08b Determination of weights and concentrations.
129.08c Effluent standard for Mercury.

Subpart I—Effluent Standard for Polychlorinated Biphenyls (PCB's)

129.09 Applicability.
129.09a Definitions.
129.09b Determination of weights and concentrations.
129.09c Effluent standard for PCB's.

Subpart J—Effluent Standard for Toxaphene

129.10 Applicability.
129.10a Definitions.
129.10b Determination of weights and concentrations.
129.10c Effluent standard for Toxaphene.

AUTHORITY: Sec. 3, 86 Stat. 816.

Subpart A—General

§ 129.01 Applicability.

The provisions of the following subparts apply to owners or operators of specified facilities constituting point sources discharging into navigable waters.

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§ 129.01 Definitions.

All terms not derived herein shall have the meaning given them in the Act. As used in this part, the term:

(a) "Act" means the Federal Water Pollution Control Act, as amended (33 U.S.C.A. section 1317 Supp. 1972, Pub. L. 92-500).

(b) "Administrator" shall mean the Administrator of the Environmental Protection Agency, or any employee of the Agency to whom the Administrator may by order delegate the authority to carry out his functions under section 307(a) of the Act, or any person who shall by operation of law be authorized to carry out such functions.

(c) "Effluent standard" means any effluent standard, which may include a prohibition of any discharge, established or proposed to be established for any toxic pollutant under section 307(a) of the Act.

(d) "No discharge" means no detectable discharge as determined by analytical methods as set forth in 40 CFR Part 136.

(e) "NPDES permit" means a permit for the discharge of pollutants into navigable waters under the National Pollutant Discharge Elimination System established by section 402 of the Act and 40 CFR Parts 124 and 125.

(f) "Working day" means the hours during a calendar day in which a facility discharges effluents subject to this part.

(g) The term "navigable waters" includes:

(1) All navigable waters of the United States;

(2) Tributaries of navigable waters of the United States;

(3) Interstate waters;

(4) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes;

(5) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce;

(6) Intrastate lakes, rivers, and streams which are utilized for industrial purposes by industries in interstate commerce.

(h) "Low flow" means the probable low rate of flow occurring during a period of seven consecutive days, once in ten years.

(i) "Stream" means any water body having a flow gradient from an upper elevation to a lower elevation, or any body of water except an estuary, including still or impounded water, in which water is retained for less than 60 days.

(j) "Lakes and impoundments" means all bodies of water in which the flow velocity is impeded by a natural or man-made barrier in such a way that water is stored for 60 days or more. Provided that this term shall not include impoundments, sumps, retention ponds or similar structures constructed for the storage, retention or disposal of toxic effluents.

(k) "Coastal waters" means those waters of the open sea lying seaward of the baseline from which the territorial sea is measured under the Convention of the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639).

(l) "Estuary" means any water body between the baseline from which the territorial sea is measured and the landward limit of tidal influence.

(m) "Tidal range" means the measured difference between high and low tide during a normal tidal cycle.

(n) "Daily composite sample" means a combination of at least five individual samples obtained at approximately equal time intervals during the working day.

(o) "Agricultural fertilizer manufacturing" means the manufacture of nitrogenous and phosphatic basic fertilizers, mixed fertilizers and other agricultural chemicals including:

Ammonia liquor.
Ammonium nitrate and sulfate.
Ammonium phosphate.
Anhydrous ammonia.
Aqua ammonia, made in ammonia plants.
Calcium meta-phosphate.
Compost.
Defluorinated phosphate.
Diammonium phosphate.
Fertilizer, mixed; made in plants not manufacturing fertilizer materials.
Fertilizers, mixed; made in plants producing phosphatic fertilizer materials.
Fertilizers, natural (organic), except compost.
Nitric acid.
Nitrogen solutions (fertilizer).
Phosphoric acid.
Plant foods, mixed; made in plants producing nitrogenous fertilizer.
Plant foods, mixed; made in plants producing phosphatic fertilizer.
Potting soil, mixed.
Superphosphates, ammoniated and not ammoniated.
Urea.

(p) "Alkalies and chlorine manufacturing" means the manufacturing of:

Alkalies.
Chlorine, compressed or liquified.
Potassium carbonate.
Potassium hydroxide (caustic potash).
Sodium bicarbonate.
Sodium carbonate (soda ash) (sal soda).
Sodium hydroxide (caustic soda).

(q) "Bituminous coal and lignite mining" means bituminous coal and lignite production or developing bituminous coal or lignite mines, including underground mining, auger mining, strip mining, or culm bank mining. Both mining operations and preparation at cleaning plants and washeries are included, whether or not such operations are performed in conjunction with the mines served.

(r) "Capacitor manufacturing" means the manufacture of industrial or commercial capacitors (fixed and variable) or electronic capacitors.

(s) "Cyclic organic chemical manufacturing" means the manufacturing of coal tar crudes and cyclic organic intermediate dyes, color lakes and toners.

(t) "Electroplating" means the electroplating of metals and formed products.

(u) "Facility employing polychlorinated biphenyls in process or products" means any facility using PCB's in plasticizers for paints, inks, copying paper, adhesives or sealants, in pattern waxes for investment casting, or in industrial fluids for heat transfer, hydraulic fluid, vacuum pump oils or cutting oils.

(v) "Ferrous metal production" means the smelting and refining of ferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous metals; the manufacture of castings and other basic products of ferrous metals; the manufacture of nails, spikes, and insulated wire and cable; and the production of coke.

(w) "Hospitals" means establishments which are primarily engaged in providing diagnostic services and extensive medical treatment including surgical services and other hospital services, as well as continuous nursing services.

(x) "Industrial inorganic chemicals manufacturing" means the manufacture of basic industrial inorganic chemicals, excluding manufacture of alkalies and chlorine, industrial gases, inorganic pigments, agricultural pesticides, medicinal chemicals, drugs and medicines, and soaps and cosmetics. This definition includes the manufacture of any of the following chemicals:

Aluminum compounds.
Ammonium compounds, except for fertilizer.
Barium compounds.
Bauxite, refined.
Beryllium oxide.
Boron compounds.
Bromine, elemental.
Caesium metal.
Calcium compounds.
Calcium metal.
Carbon, activated.
Cerium salts.
Chlorosulfonic acid.
Chromium compounds, inorganic.
Cobalt chloride.
Cobalt sulfate.
Copper chloride.
Copper iodide.
Copper oxide.
Copper sulfate.
Cyanides
Ferric chloride.
Fluorine, elemental.
Hydrochloric acid.
Hydrocyanic acid.
Hydrofluoric acid.
Hydrogen peroxide.
Hydrogen sulfide.
Indium chloride.
Iodine.
Iron sulfate.
Lead oxide.
Lead silicate.
Lithium compounds.
Lithium metals.
Magnesium compound, inorganic.
Manganese dioxide.
Mercury.
Mercury compounds.
Nickel compounds, inorganic.
Perchloric acid.
Phosphorus.
Phosphorus oxychloride.
Potassium compounds.
Rubidium.
Scandium.
Silica gel.
Silicafluorides.
Silver compounds, inorganic.
Sodium compounds, inorganic.
Strontium carbonate.
Strontium nitrate.
Strontium oxide.
Sulfur.
Sulfur chloride.
Sulfur dioxide.

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Sulfur hexafluoride.
Sulfuric acid.
Thiocyanates, inorganic.
Tin compounds, inorganic.
Zinc chloride.

(y) "Industrial organic chemicals manufacturing" means the manufacture of:

(1) Non-cyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts;

(2) Solvents such as amyl, butyl, and ethyl alcohols; methanol; amyl, butyl and ethyl acetates; ethyl ether, ethylene glycol ether and diethylene glycol ether; acetone, carbon disulfide and chlorinated solvents such as carbon tetrachloride, perchloroethylene and trichloroethylene;

(3) Polyhydric alcohols such as ethylene-glycol, sorbitol, pentaerythritol, synthetic glycerin;

(4) Synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic vanillin;

(5) Rubber processing chemicals such as accelerators and anti-oxidants, both cyclic and acyclic;

(6) Plasticizers, both cyclic and acyclic, such as esters of phosphoric acid, phthalic anhydride, adipic acid, oleic acid, lauric acid, sebacic acid, and stearic acid;

(7) Synthetic tanning agents such as naphthalene sulfonic acid condensates;

(8) Chemical warfare gases; and

(9) Esters and amines of polyhydric alcohols and fatty and other acids.

(z) "Laboratories" means any of the following:

(1) Medical laboratories primarily engaged in providing professional analytic or diagnostic services to the medical profession or to the patient on prescription of a physician.

(2) Dental laboratories primarily engaged in making dentures and artificial teeth or order for the dental profession.

(3) Commercial testing laboratories primarily engaged in product testing.

(4) Research and development laboratories engaged in laboratory or other physical research and development.

(aa) "Lumber and wood products manufacturing" includes any of the following, but does not include the manufacture of furniture:

(1) Logging camps engaged in cutting timber and pulpwood; merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood mills and veneer mills engaged in producing lumber and wood basic materials;

(2) Manufacturing of finished articles made entirely or mainly of wood or wood substitutes.

(bb) "Metal mining" means mining, developing mines, or exploring for metallic minerals (ores). This classification includes all ore dressing and beneficiating operations, although performed at mills, operated in conjunction with the mines served or at mills such as custom mills, operated separately.

(cc) "Non-ferrous metal smelting and refining" means the smelting and refining of non-ferrous metals from ore, pig, or scrap; the rolling, drawing and alloying of non-ferrous metals; and the manufacture of nails, spikes, and insulated wire and cable.

(dd) "Oil and gas extraction" means:

(1) Production of crude petroleum and natural gas, including operating oil and gas fields; exploration for crude petroleum and natural gas, drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property.

(2) Production of natural gasoline and cyclic condensate, including production of liquid hydrocarbons from oil and gas field gases.

(ee) "Paper and allied products production" means the manufacture of pulps from wood and other cellulose fibers, and from rags; the manufacture of paper and paperboard; and the manufacture of paper and paperboard into converted products such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.

(ff) "Pesticide formulating" means the formulation or preparation of insecticides, fungicides, and herbicides, from technical chemicals or from concentrates. Activities involving the production of the concentrates which require further processing before use are not included in this definition.

(gg) "Pesticide manufacturing" means the manufacture of insecticides, fungicides, and herbicides from technical chemicals including the production of concentrates which require further processing before use.

(hh) "Petroleum refining" means the production of gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.

(ii) "Photo finishing laboratory" means an establishment engaged in developing films or motion picture films and in making photographic prints and enlargements for the trade or for the general public.

(jj) "Storage or primary battery manufacturing" means the manufacture of storage batteries or primary batteries, dry or wet.

(kk) "Textile manufacturing" means the manufacture or processing of natural or synthetic fibers by any of the following operations, singly or in combination:

(1) Preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage;

(2) Manufacture of broad woven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn;

(3) Dyeing and finishing fiber, yarn, fabric and knit apparel;

(4) Coating, waterproofing, or otherwise treating fabric;

(5) Integrated manufacture of knit apparel and other finished articles from yarn; and

(6) Manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

(ll) "Transformer manufacturing" means the manufacture of power, distribution, instrument and specialty transformers or radio frequency or voice transformers.

§ 129.01b Abbreviations.

The abbreviations used in this part have the following meanings:

lb—pound (or pounds).
cfs—cubic feet per second.
m^3/s—cubic meters per second.
ft^3—cubic feet.
m^3—cubic meters.
ug/l—micrograms per liter.

§ 129.01c Compliance.

(a) Compliance with effluent standards set forth herein shall be determined using the test methods identified in 40 CFR Part 136 (38 FR 28758 et seq., October 16, 1973). The sample volume requirements for the determination of organochlorine pesticides are increased to the range of 500–1000 ml in order to achieve a level of sensitivity below the lowest critical acute limit. This is feasible for samples where the interference from undesirable co-extractives can be tolerated. Where a discharger subject to any effluent standard under this Part is required to obtain an NPDES permit, such permit shall contain conditions requiring such sampling, monitoring, and reporting as are necessary to assure compliance with this part.

(b) For the purpose of determining compliance with these standards, background amounts or concentrations of any pollutant subject to these standards in intake waters for a discharger shall not be included in measurement of the amount or concentration of such pollutant discharged.

(c) Computation of flow: For the purposes of this subpart, receiving water flow rates shall be determined as follows:

(1) *Streams.* The low flow of the stream shall be measured at the outfall or at the nearest upstream monitoring point.

(2) *Lakes and impoundments.* The low flow of lakes and impoundments shall be measured at the outlet. When more than one outlet exists, the low flow shall be the cumulative low flows for all outlets.

(3) *Estuaries.* The low flow of an estuary shall be the low flow of the tributary entering the estuary. When more than one tributary exists, the low flow shall be the cumulative low flows of all tributaries entering the estuary above the point of discharge.

(4) *Coastal waters.* The low flow of coastal waters shall be that volume of water in the immediate vicinity of the outfall which is influenced by the tidal range during the normal tidal cycle

§ 129.01d Effective date.

The effluent standards set forth herein shall be effective one year after promulgation.

Subpart B—Effluent Standard for Aldrin-Dieldrin

§ 129.02 Applicability.

The provisions of this subpart apply to aldrin or dieldrin pesticides manufacturing and formulating facilities constituting a point source discharging into navigable waters

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§ 129.02a Definitions.

As used in this subpart, the term:

(a) "Aldrin" means the compound aldrin as identified by the chemical name, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene.

(b) "Dieldrin" means the compound dieldrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-exo-5,8-dimethanonaphthalene.

§ 129.02b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentration of both aldrin and dieldrin, excluding any associated element or compound.

§ 129.02c Effluent standard for Aldrin-Dieldrin.

The effluent discharge of any facility subject to the provisions of this part shall meet the following conditions:

(a) Into streams, lakes, or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes, or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average aldrin-dieldrin concentration shall not exceed:

(i) 0.5 $\mu g/l$ for discharges into fresh water bodies (5.5 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into fresh water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentration permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of aldrin-dieldrin discharged into a/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.000259 times the receiving water body flow in m^3/sec give kg/day or 0.0000162 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 0.0735 kg/day or 0.162 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.000216 times the receiving water body flow in m^3/sec to give kg/day or 0.0000135 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 0.061 kg/day or 0.135 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.00242 times the receiving water body flow in m^3/sec to give kg/day or 0.000151 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 0.686 kg/day or 1.512 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.00286 times the receiving water body flow in m^3/sec to give kg/day or 0.000178 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 0.808 kg/day or 1.782 pounds/day regardless of receiving water flow.

Subpart C—Effluent Standard for Benzidine

§ 129.03 Applicability.

The provisions of this subpart applies to any benzidine manufacturing plants, cyclic organic chemical manufacturing plants, textile mills, hospitals, or laboratories constituting a point source discharging into navigable waters.

§ 129.03a Definitions.

As used in this subpart, the term Benzidine means the compound benzidine and its salts as identified by the chemical name 4,4'-diaminobiphenyl.

§ 129.03b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentration of benzidine and its salts, excluding any associated element or compound.

§ 120.03c Effluent standard for Benzidine.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes, or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equl to 202 hectares (500 acres), there shall be no opportunity provided for the discharge of the pollutants covered by this part.

(b) Into streams, lakes, or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average benzidine concentration shall not exceed

(i) 1.8 $\mu g/l$ for discharges into fresh water bodies (1.8 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration given in (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) The total daily weight of benzidine discharged into a stream, lake, estuary, or coastal water from any facility subject to this subpart shall not exceed 0.0016 times the receiving water body flow in m^3/sec to give kg/day or 0.0001 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.44 kg/day or 0.97 pounds/day regardless of receiving water flow.

(3) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration required by paragraph (b) (1) (i) of this section.

Subpart D—Effluent Standard for Cadmium

§ 129.04 Applicability.

The provisions of this subpart apply to any ferrous metal production, nonferrous metal smelting and refining, petroleum refining, oil and gas extraction, industrial inorganic chemicals, industrial organic chemicals, bituminous coal and lignite mining, alkalies and chlorine, storage or primary battery, electroplating, metal mining, or agricultural fertilizer manufacturing facility constituting a point source discharging into navigable waters.

§ 129.04a Definitions.

As used in this subpart, the term:

(a) Cadmium means the element cadmium and all compounds of cadmium Where weights are specified, such weights apply only to total cadmium excluding the weight of any associated elements or compounds.

(b) Cadmium means the element cadmium and all compounds of cadmium Where concentrations are specified: such concentrations apply only to total dissolved cadmium.

§ 129.04b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight of cadmium and to the total dissolved concentration of cadmium, excluding any associated element or compound.

§ 129.04c Effluent standard for Cadmium.

The effluent discharge of any facility subject to provision of this part shall meet the following conditions:

(a) Into streams, lakes, or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes, or estuaries with a low flow greater than 0.283 cubic

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meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters

(1) The daily average cadmium concentration shall not exceed

(i) 40 $\mu g/l$ for discharges into fresh water bodies (320 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b)(1)(ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b)(1)(ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of cadmium discharged into a/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.0206 times the receiving water body flow in m^3/sec to give kg/day or 0.00130 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 5.88 kg/day or 13.96 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.0173 times the receiving water body flow in m^3/sec to give kg/day or 0.00108 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 4.90 kg/day or 10.8 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.138 times the receiving water body flow in m^3/sec to give kg/day or 0.00864 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 39.2 kg/day or 80.4 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.164 times the receiving water body flow in m^3/sec to give kg/day or 0.01026 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 46.5 kg/day or 102.6 pounds/day regardless of receiving water flow.

Subpart E—Effluent Standard for Cyanide

§ 129.05 Applicability.

The provisions of this subpart apply to any petroleum refining, ferrous metal production, industrial organic chemicals, electroplating, non-ferrous metal smelting and refining, metal mining or photo finishing laboratory facility constituting a point source discharging into navigable waters.

§ 129.05a Definitions.

Cyanide means any cyanide compound that will produce free cyanide ion or molecular hydrogen cyanide (HCN) in the effluent. The recommended analytical method should detect only simple cyanides after all interferences have been eliminated or their effects minimized by appropriate removal techniques.

§ 129.05b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentration of cyanide, excluding any associated element or compound.

§ 129.05c Effluent standard for cyanide.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes, or estuaries with a flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes, or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average cyanide concentration shall not exceed:

(i) 100 $\mu g/l$ for discharges into fresh water bodies (100 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

Subpart F—Effluent Standard for DDT

§ 129.06 Applicability.

The provisions of this subpart apply to any DDT manufacturing or formulating facility constituting a point source discharging into navigable waters.

§ 129.06a Definitions.

As used in this subpart, the term: DDT means the compounds of DDT, DDD, and DDE as identified by the chemical names (DDT) 1,1,1-trichloro-2,2-bis(p-chlorophenyl) ethane and o,p'-isomer, (DDD) (TDE) 1,1 - dichloro - 2,2 - bis(p-chlorophenyl) ethane and o,p'-isomer, (DDE) 1,1 - dichloro - 2,2 - bis(p-chlorophenyl) ethylene.

§ 129.06b Determination of weight and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentration of DDT, DDD, and DDE, excluding any associated element or compound.

§ 129.06c Effluent standard for DDT.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes, or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes, or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average DDT concentration shall not exceed:

(i) 0.2 $\mu g/l$ for discharges into fresh water bodies (0.8 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of DDT discharged into a/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.000102 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000648 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0294 kg/day or 0.0648 pounds day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.0000866 times the receiving water body flow in m^3/sec. to give kg/day or 0.00000540 times the receiving body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0245 kg/day or 0.054 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.000260 times the receiving water body flow in

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m^3/sec. to give kg/day or 0.0000162 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0734 kg/day or 0.162 pounds/day regardless of receiving water flow.

(D) Coastal water from any facility subject to this subpart shall not exceed 0.000311 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000194 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.088 kg/day or 0.194 pounds/day regardless of receiving water flow.

Subpart G—Effluent Standard for Endrin

§ 129.07 Applicability.

The provisions of this subpart apply to any endrin manufacturing or formulating facility constituting a point source discharging into navigable waters.

§ 129.07a Definitions.

As used in this subpart:

(a) Endrin means the compound endrin as identified by the chemical name 1,2,3,4,10,10 - hexachloro - 6,7 - epoxy - 1,4,4a,5,6,7,8a - octahydro - 1,4 - endo - endo-5,8-dimethanonaphthalene.

(b) In amendment of 40 CFR Part 136; the limit of detection for endrine is 0.1 $\mu g/l$ if based on a 1000 ml sample.

§ 129.07b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentrations of endrin, excluding any associated element or compound.

§ 129.07c Effluent standard for endrin.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into costal waters.

(1) The daily average endrin concentration shall not exceed:

(i) 0.2 $\mu g/l$ for discharges into fresh water bodies (0.8 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section, *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorise any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of endrin discharged in s/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.000102 times the receiving water body flow in m^3/sec. to give kg/day or 0.00000648 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0294 kg/day or 0.0648 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.0000866 times the receiving water body flow in m^3/sec. to give kg/day or 0.00000540 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0245 kg/day or .054 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.000280 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000162 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0734 kg/day or 0.162 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.000311 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000194 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.088 kg/day or 0.194 pounds/day regardless of receiving water flow.

Subpart H—Effluent Standard for Mercury

§ 129.08 Applicability.

The provisions of this subpart apply to any paper and allied product, oil and gas extraction, industrial organic chemical, industrial inorganic chemical, alkalies and chlorine, ferrous metal production, non-ferrous metal smelting and refining, lumber and wood products except furniture, bituminous coal and lignite mining, storage or primary battery manufacturing, or metal mining facility constituting a point source discharging into navigable water.

§ 129.08a Definitions.

As used in this subpart, the term:

(a) Mercury means the element mercury and all compounds of mercury. Where weights are specified, such weights apply only to total mercury excluding the weight of any associated elements or compounds.

(b) Mercury means the element mercury and all compounds of mercury. Where concentrations are specified, such concentrations apply only to total dissolved mercury.

§ 129.08b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight of mercury and to the total dissolved concentration of mercury, excluding any associated element or compound.

§ 129.08c Effluent standard for mercury.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average mercury concentration shall not exceed

(i) 20 $\mu g/l$ for discharges into fresh water bodies (100 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) one-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorise an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of mercury discharged into s/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.00260 times the receiving water body flow in m^3/sec. to give kg/day or 0.000162 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.735 kg/day or 1.62 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.00216 times the receiving water body flow in m^3/sec. to give kg/day or 0.000135 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.612 kg/day or 1.35 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.0431 times the receiving water body flow in m^3/sec. to give kg/day or 0.0027 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 12.2 kg/day or 27.0 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.0519 times the receiving water body flow in m^3/sec. to give kg/day or 0.0032

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times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 14.7 kg/day or 32.4 pounds/day regardless of receiving water flow.

Subpart I—Effluent Standards for Polychlorinated Biphenyls (PCB's)

§ 129.09 Applicability.

The provisions of this subpart apply to any polychlorinated biphenyl manufacturing, recovering and regenerating facility; pesticide manufacturing and capacitor manufacturing facility; any manufacturing facility, formulating facility, or facilities which use polychlorinated biphenyls in processes or products, constituting a point source discharging into navigable waters.

§ 129.09a Definitions.

As used in this subpart, the term: Polychlorinated biphenyls (PCB's) means materials containing the biphenyl group which have been chlorinated to varying degrees. There are 210 possible different PCB compounds.

§ 129.09b Determination of weights and concentrations.

The standards set forth in this subpart shall apply to the total combined weight or concentration of PCB's, excluding any associated element or compound.

§ 129.09c Effluent standard for PCB's.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average PCB concentration shall not exceed:

(i) 280 $\mu g/l$ for discharges into fresh water bodies (10 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of PCB's discharged into a/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.000164 times the receiving water body flow in m^3/sec. to give kg/day or 0.00000648 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0294 kg/day or 0.0648 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.0000865 times the receiving water body flow in m^3/sec. to give kg/day or 0.00000540 times the receiving body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.0265 kg/day or 0.0540 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.000735 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000459 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.208 kg/day or 0.459 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.000883 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000551 times the receiving water body flow in cfs to give pounds/day: Provided, That no facility shall discharge in excess of 0.250 kg/day or 0.551 pounds/day regardless of receiving water flow.

Subpart J—Effluent Standard for Toxaphene

§ 129.10 Applicability.

The provisions of this subpart apply to any toxaphene manufacturing or formulating facility constituing a point source discharging into navigable waters.

§ 129.10a Definitions.

As used in this subpart, the term: Toxaphene means a material consisting of technical grade chlorinated camphene with the approximate formula of $C_{10}H_{10}Cl_8$ containing 67-69% chlorine and which is normally a mixture.

§ 129.10b Determination of weights and concentrations.

The standards set forth in the subpart shall apply to the total combined weight or concentration of toxaphene, excluding any associated element or compound.

§ 129.10c Effluent standard for toxaphene.

The effluent discharge of any facility subject to provisions of this part shall meet the following conditions:

(a) Into streams, lakes or estuaries with a low flow of less than or equal to 0.283 cubic meters per second (10 cfs) or into lakes with an area of less than or equal to 202 hectares (500 acres), there shall be no discharge of the listed pollutants.

(b) Into streams, lakes or estuaries with a low flow greater than 0.283 cubic meters per second (10 cfs) or into lakes with an area of greater than 202 hectares (500 acres) or into coastal waters.

(1) The daily average toxaphene concentration shall not exceed:

(i) 1.0 $\mu g/l$ for discharges into fresh water bodies (1.0 $\mu g/l$ for discharges into salt water bodies) which have a low flow greater than or equal to 10 times the waste stream flow with the provision that an immediate 1:10 diffusion is assured; or

(ii) One-tenth the concentration set forth in paragraph (b) (1) (i) of this section for discharges into water bodies which have a low flow less than 10 times the waste stream flow.

(2) An NPDES permit may authorize an increase in the concentrations permitted to be discharged under paragraph (b) (1) (ii) of this section: *Provided*, That the discharger demonstrates that immediate diffusion of the discharge to concentrations specified in paragraph (b) (1) (ii) of this section will occur: *And provided further*, That no such permit shall authorize any discharge in a concentration exceeding the concentration set forth in paragraph (b) (1) (i) of this section.

(3) The total daily weight of toxaphene discharged into a/an:

(i) Stream from any facility subject to this subpart shall not exceed 0.000519 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000324 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.147 kg/day or 0.324 pounds/day regardless of receiving water flow.

(ii) Lake from any facility subject to this subpart shall not exceed 0.000431 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000270 times the receiving water body flow in cfs to give pounds/day, provided that no facility shall discharge in excess of 0.122 kg/day or 0.270 pounds/day regardless of receiving water flow.

(iii) Estuary from any facility subject to this subpart shall not exceed 0.000431 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000270 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.122 kg/day or 0.270 pounds/day regardless of receiving water flow.

(iv) Coastal water from any facility subject to this subpart shall not exceed 0.000519 times the receiving water body flow in m^3/sec. to give kg/day or 0.0000324 times the receiving water body flow in cfs to give pounds/day: *Provided*, That no facility shall discharge in excess of 0.147 kg/day or 0.324 pounds/day regardless of receiving water flow.

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