

36408 - 36462

E110.5

Regulations - Federal Register

CCR 000036408

Endangered Species:					
TAKING, POSSESSION, EXPORTATION, ETC. <i>See</i> Fish and Wildlife Service.					
Energy, Special Committee on:					
ESTABLISHMENT (Executive Order 11712)	9657				
Energy Advisory Committee for Natural Gas:					
MEETING	34700				
ENERGY OFFICE, NATIONAL:					
ABOLISHMENT (Executive Order 11726)	17712				
ESTABLISHMENT (Executive Order 11712)	9657				
ENERGY POLICY OFFICE:					
AUTHORITY DELEGATIONS:					
By Director to Secretary of Interior, et al.; petroleum products, functions under Economic Stabilization Act	29379				
From Cost of Living Council Chairman:					
Petroleum products determinations	20960, 22909				
Propane price stabilization	27548				
EDITORIAL CHANGES, Petroleum Allocation Office substituted for Oil and Gas Office	32577				
ENVIRONMENTAL STATEMENTS, low sulfur petroleum products	31040				
ESTABLISHMENT OF OFFICE (Executive Order 11726)	17711				
MEETING, Energy Research and Development Advisory Council	27955				
PETROLEUM PRODUCTS:					
<i>See also main heading Federal Energy Office.</i>					
Fuel allocation program, mandatory; proposed rules	21798				
Low sulfur products, priorities for use	23339, 32577				
Middle distillate fuels, mandatory allocation program	21798, 28660				
Customs territory of U.S., term removed	30740				
Definitions, State office	30740				
Forms	30260				
Proposed rules	32766				
Purpose and intent, "on voluntary basis"; term deleted	32494				
Propane:					
Mandatory allocation program	23977, 27397				
Price stabilization authority, delegation	27548				
PROCEDURAL RULES	29330				
Middle distillate fuels	30260, 30740				
Energy Research and Development Advisory Council:					
MEETING	30469, 33131				
ENGINEERS CORPS:					
<i>See also Defense Department.</i>					
CIVIL WORKS PROJECTS:					
Economic, social and environmental effects, guide- lines for assessment of	1637				
Meetings, public, regarding planning; procedure	1929				
DANGER ZONE REGULATIONS:					
Florida:					
Florida Bay, 21495.					
Virginia:					
Atlantic Ocean south of entrance to Chesapeake Bay, 16223.					
ENVIRONMENTAL STATEMENTS; planning, prepa- ration and coordination	9242, 12622, 28708				
Proposed rules	31626				
HIGHWAYS. <i>See</i> Relocation assistance.					
HOUSING. <i>See</i> Relocation assistance.					
LABORATORY INSTALLATIONS, investigations and tests for other organizations	5171				
LIGHTS AND DAY SIGNALS, Sections revoked	12804				
MEETINGS:					
Advisory committees, etc.:					
Chief of Engineers Environmental, 12242.					
Coastal Engineering Research, 12242, 21195.					
Dredging Study, 7404, 16087, 30115.					
Environmental, 30046.					
National Dredging Study, 7404, 16087, 30115.					
Winter Navigation, 31545.					
Procedure regarding civil works planning and regulat- ing uses of navigable waters	1929				
NAVIGATION REGULATIONS:					
Florida:					
Oklawaha River, 5468.					
Taylor Creek, 21404.					
Massachusetts:					
Weymouth Back River, 25176.					
Michigan:					
St. Clair and Detroit Rivers, 8246.					
New York:					
St. Lawrence River, 30741.					
PERMITS for activities in navigable or ocean waters, proposed rules	12217				
RELOCATION ASSISTANCE and real property acqui- sition policies	3052, 14239				
Highway and housing relocations, responsibility for costs of improved standards	27098				
WATER RESOURCE DEVELOPMENT PROJECTS ad- ministered by Chief of Engineers, public use	7552, 9166				
Fees:					
Recreation use, special	3051, 4716, 7797				
Schedule guidelines	8604				
Prior Parts superseded	7552				
ENGRAVING AND PRINTING BUREAU:					
CONDUCT on building and grounds and annex, author- ity citation changes	24898				
Environmental Education, National Advisory Council on:					
MEETING	12147				
Environmental Policy:					
<i>See specific agencies.</i>					
Environmental Preservation:					
<i>See also Environmental Protection Agency; Environ- mental Quality Council; and specific agencies.</i>					
POLLUTION. <i>See</i> Pollution.					
RADIATION. <i>See</i> Radiation.					
ENVIRONMENTAL PROTECTION AGENCY:					
AIR POLLUTION, AIR QUALITY:					
<i>See also Aircraft and engines; Motor vehicles and engines, below.</i>					
Ambient air quality:					
Monitoring equivalent and reference methods, pro- posed rules	28439				
National primary and secondary standards:					
Monitoring equivalent and reference methods, definitions: proposed rule	28438				
Nitrogen dioxide, measurement of concentration; proposed rules	15174				
Sulfur oxides secondary standard	11355, 25681				
State implementation plans; preparation, adoption, approval, etc.:					
Complex sources, stationary and mobile source activity from buildings, facilities, and instal- lations	9600, 10163, 15835				
Compliance requirements, violation and enforce- ment of	30633				
Compliance schedules, 1-year postponements:					
Hearings and appeals relating to	22026, 27286				
Requests for	15953				

ANNUAL INDEX, 1973

49

Page

Ambient air quality—Continued	Page
State implementation plans; preparation, adoption, approval, etc.—Continued	
Control systems, supplementary, use for attainment and maintenance of national standards, etc.; proposed rules	25700, 27318
Definitions, etc.	12698
Deterioration of air quality, prevention of, definitions, methods, etc.; proposed rule	18995, 22419
Disapproval of all State plans on basis of projected future growth	6280, 12920
Indirect source review by State and local agencies for State plans, proposed rule	29895, 32286, 33322
Monitoring equivalent and reference methods, measurement of pollutants; proposed rules	28438
Nitrogen dioxide control strategy, proposed rule	14762
Reclassification of quality control priority regions, proposed rules	15180
Reporting, etc.	3084, 20834
Responsibility to comply with emission regulations, clarification for source owners and operators	30877
Prior proposed rule withdrawn	30876
Transportation control measures	1464, 15195
Various States and Virgin Islands, supplementary plans, rules proposed or adopted, hearings, etc.:	
Alabama, 7324, 11114, 15185, 16564, 29607, 31451, 33020, 34476.	
Alaska, 7324, 16145, 16172, 16187, 16564, 18940, 22738, 23340, 24341, 32659.	
Arizona, 7324, 7556, 10119, 12704, 12819, 15185, 16564, 18944, 29607, 33373, 34490, 34745.	
Arkansas, 15185.	
California, 2198, 3085, 3526, 4518, 7325, 12698, 12706, 12920, 15185, 16564, 17685, 18707, 18954, 19132, 20469, 20851, 26462, 26760, 30136, 31244, 33973, 34125, 34464, 35467.	
Colorado, 7325, 15185, 16173, 16187, 16392, 16564, 20754, 20852, 21803, 22739, 24341, 30820.	
Connecticut, 12698, 15185.	
Delaware, 13561, 14375, 14753, 15185.	
District of Columbia, 7325, 11114, 15185, 16173, 16187, 16564, 19132, 20762, 20851, 22740, 24341, 29296, 31536, 33709.	
Florida, 15185, 16174, 16187, 24333, 24341, 26324, 29608.	
Georgia, 15186.	
Hawaii, 12712, 30877, 31183.	
Idaho, 12708, 16145, 16174, 16187, 22741, 24341, 29296, 34477.	
Illinois, 7328, 10465, 15186, 16145, 16175, 16187, 16565, 17726, 17736, 17761, 18963, 24341, 29296, 29297, 33561, 33563.	
Indiana, 7326, 12698, 15186, 16565, 17689, 30977, 34894.	
Iowa, 15186, 30877, 32584.	
Kansas, 7326, 14388, 16565, 17682, 30877, 32585, 34361.	
Kentucky, 15186, 16145, 16176, 16187, 19071.	
Louisiana, 3526, 3600, 7326, 14388, 16565, 17682, 18652.	
Maine, 22474.	
Maryland, 7327, 10120, 12819, 12920, 15186, 16145, 16177, 16187, 16565, 19132, 20774, 20784, 22743, 24341, 26151, 29296, 31537, 33716, 34247.	
Massachusetts, 7327, 9089, 12921, 15186, 16566, 17694, 18879, 20835, 21505, 21919, 30829, 30878, 30963, 32807, 34116.	
Michigan, 11126, 12712, 15186, 16145, 16178, 16187, 22743, 24341.	
Minnesota, 7327, 15186, 16566, 17701, 19132, 20851, 30833.	
Mississippi, 15186, 35325.	
Missouri, 7327, 14388, 15186, 16566, 17682, 30878, 32585.	
Nebraska, 12699, 15186.	
Nevada, 12708, 15187, 32267, 34020, 34330.	
New Hampshire, 12713, 16145, 16175, 22744, 34476.	
New Jersey, 7328, 12713, 15187, 15723, 16567, 17787, 20851, 21505, 23805, 31392, 33775.	
New Mexico, 7556, 12709, 15187, 34745.	
New York, 7328, 10465, 12921, 15187, 16146, 16179, 16187, 16567, 23823, 24341, 31296.	
North Carolina, 16146, 31455.	
Ohio, 7328, 12713, 12921, 15187, 16567, 17703, 22045, 30974, 31542.	
Oklahoma, 12701.	
Oregon, 7329, 10466, 16168, 16180, 16187, 16567, 20768, 22746, 24341, 26462, 30827.	
Pennsylvania, 7329, 7459, 10120, 12701, 12819, 12921, 15187, 16567, 17797, 21505, 22495, 23805, 32893.	
Rhode Island, 12713, 15187, 16168, 16181, 16187, 16352, 18979, 18880, 22747, 29297, 30878, 32257, 34325.	
South Carolina, 16168, 16182, 16187, 22747, 24341, 29609.	

Ambient air quality—Continued	Page
State implementation plans; preparation, adoption, approval, etc.—Continued	
Various States and Virgin Islands, supplementary plans, rules proposed or adopted, hearings, etc.—Continued	
Tennessee, 12239, 12250, 15187, 16169, 16183, 16187, 22748, 24341, 29609, 34477.	
Texas, 7329, 10119, 12819, 12921, 15187, 16568, 17807, 20851, 30642, 30651.	
Utah, 7329, 7557, 10120, 12709, 12819, 15187, 16568, 18964, 32666, 33778.	
Vermont, 12713, 20836, 34300.	
Virgin Islands, 12714.	
Virginia, 10119, 12701, 12819, 15187, 16568, 19133, 20794, 31455, 31538, 33723.	
Washington, 7330, 10465, 12701, 15187, 16169, 16184, 16187, 16569, 18974, 22750, 24321, 26390, 31543, 32674, 34478.	
West Virginia, 16170, 16185, 16187, 21812, 22751, 24341, 27319, 30136, 32836.	
Wisconsin, 12702, 12713, 15188, 16170, 16187, 22752, 24341, 30878.	
Wyoming, 12713, 29297, 32267.	
Contracts, grants, and loans, Federal, administration of Clean Air Act	16242, 35311
(Executive Order 11738)	25161
Stationary sources of pollution:	
Emission standards, hazardous air pollutants:	
Asbestos	8829
Beryllium	8830
Mercury	8831
Enforcement proceedings, hearings	26403
Performance standards, certain categories:	
Asphalt concrete plants	15380
Proposed rules	15407
Brass and bronze ingot production plants, secondary	15380
Proposed rules	15410
Iron and steel plants	15380
Proposed rules	15411
Lead smelters, secondary	15380
Proposed rules	15410
Nitric acid plants	13562
Petroleum refineries	15380
Proposed rules	15407
Sewage treatment plants	15380
Proposed rules	15411
Storage vessels for petroleum liquids	15380
Proposed rules	15409
Sulfuric acid plants	13562
Technical amendments to Appendix	13562
Startup, shutdown, and malfunction, emissions during; definitions, etc.	10821, 28565
AIRCRAFT AND ENGINES, control of air pollution from:	
Emission standards, test procedures, etc.	19090, 20327, 34734
In-use aircraft gas turbine engines, exhaust emissions; proposed rule	19050
Fuel venting and smoke, temporary exemption from standards	35001
ATOMIC ENERGY COMMISSION, memorandum of understanding with for public health and safety	32965
AUTHORITY DELEGATIONS:	
By Administrator to certain officials:	
Assistant Administrator for Air and Water Programs et al., signing certain Federal Register documents	9262
Judicial Officers	30136
AUTOMOBILES. See Motor vehicles and engines, below.	
CLAIMS against EPA:	
Employees' personal property, proposed rules	30888
Federal Tort Claims Act, procedures under	6904, 16868
COMMITTEES:	
See also Meetings, below.	
Effluent Standards and Water Quality Information Advisory Committee, hearings on certain pollutant source categories	9179, 15868, 19070
Great Lakes Water Quality Board:	
Federal Support Committee, establishment, functions	10330
Hazardous Materials Advisory Committee, committee management	6845
CONDUCT STANDARDS for officers and employees	9556

CCR 000036410

ENVIRONMENTAL PROTECTION AGENCY— Continued

ENVIRONMENTAL PROTECTION, memorandum of understanding with Atomic Energy Commission for public health and safety..... 32965

ENVIRONMENTAL STATEMENTS:

Preparation..... 1696
Statements filed by various Federal agencies, EPA comments on, etc.:

Agriculture Department, 1957, 4360, 5366, 7416, 9178, 10134, 10667, 11369, 14706, 15865, 19068, 20497, 22252, 22507, 26148, 27955, 29354, 31467, 33412, 34489.

Architect of Capitol, 10667.

Atomic Energy Commission, 1956, 5366, 7416, 9178, 10134, 10667, 14706, 15865, 20497, 22252, 26148, 27955, 29354, 31467, 33412.

Coast Guard, 7416.

Commerce Department, 1957, 4360, 5366, 10667, 15865, 19068, 26148, 31467.

Defense Department, 4360, 5366, 10135, 14706, 15865, 19068, 22252, 26148, 31467, 33412, 34489.

Delaware River Basin Commission, 11369.

Energy Policy Office, 33412.

Engineers Corps, 1956, 4360, 5366, 7416, 9178, 10134, 10667, 11369, 14706, 15865, 19068, 20497, 22252, 22507, 26148, 27955, 29354, 31467, 33412, 34489.

Environmental Quality Council, 20497.

Federal Aviation Administration, 5366, 7416.

Federal Communications Commission, 1958.

Federal Highway Administration, 7416, 9178.

Federal Maritime Commission, 4360, 5366, 9178, 15865.

Federal Power Commission, 1957, 5366, 7417, 10134, 11369, 14706, 15865, 19068, 20497, 27955, 29654, 31467, 33412.

General Services Administration, 4360, 7417, 9178, 10134, 11369, 15865, 19068, 22252, 26148, 27955, 29354, 31467.

Health, Education, and Welfare Department, 15965, 26148, 29354, 33412.

Housing and Urban Development Department, 1957, 4360, 5366, 9178, 10134, 10667, 14706, 15865, 20497, 26148, 29354.

Interior Department, 1957, 4360, 7416, 10134, 10667, 11369, 14706, 15865, 19068, 20497, 22252, 26148, 27955, 29354, 31467, 33412, 34489.

International Boundary and Water Commission, 22252.

Interstate Commerce Commission, 7417, 14706, 26148, 33412, 34489.

Justice Department, 10134, 29354.

Labor Department, 26148, 27955.

Maritime Administration, 26148.

Missouri River Basin Commission, 11369.

National Aeronautics and Space Administration, 5366, 27955, 29354, 34489.

National Capital Planning Commission, 15865, 26148, 29354.

Soil Conservation Service, 9178.

Souls-Red-Rainy Basins Commission, 22252.

Tennessee Valley Authority, 4360, 9178, 10667, 14706, 19068.

Transportation Department, 1957, 4360, 5366, 7416, 10134, 10135, 10667, 11369, 14706, 15865, 19068, 20497, 22252, 26148, 27955, 29654, 31467, 33412, 34489.

Veterans Administration, 5366, 31467.

FEDERAL FACILITIES, pollution, prevention, control, abatement at (Executive Order 11752)..... 34793

FELLOWSHIPS. See under Grants, below.

FOOD ADDITIVES:

Pesticide residues in processed foods, packaging materials, etc.:

Definitions and policy statement..... 18055, 21685, 29645
Specific additives, rules proposed or adopted:

BHC, 25216.

Benzimidazole moiety, 21812, 22819.

Butyl benzyl phthalate, 19451, 31202.

Chlordane, 7488.

Copper, 9848.

Dalapon, 16418.

Endrin, 7246.

Formetanate hydrochloride, 7488, 16417.

Isopropyl 4,4'-dibromobenzilate, 5366.

Phosalone, 22428.

Propargite, 14186.

Simazine, 19925.

Thiabendazole, 1303.

FUELS AND ADDITIVES. See under Aircraft and engines; Motor vehicles and engines.

GRANTS:

Applications, administration, etc., proposed rules..... 21342

Research and demonstration; definitions, objectives, etc..... 12784, 16220

State and local assistance, water programs. See under

Water programs, below.

Training grants and fellowships..... 2705, 16060

INFORMATION:

Trade secrets, disclosure..... 7573, 22473

Water programs..... 27236, 29836

INSECTICIDES:

See also Pesticides, below.

Residual insecticides in food establishments, definitions and policy statement..... 18055, 21685, 29645

LOANS, environmental financing for water pollution control; proposed rules..... 22635

MEETINGS, advisory committees:

Air Pollution:

Chemistry and Physics, 8616, 20523.

Control Techniques, 4592, 10135, 34685.

Manpower Development, 6226, 12153, 26151.

Air Quality, 4801, 5282, 10669, 17524, 23556, 30577.

Antimicrobial Program, 26227, 32288, 35528.

Coal Desulfurization, 12250.

Drinking Water Standards, 5676.

Effluent Standards and Water Quality Information, 8016, 9179

13052, 14709, 16933, 18921, 25217, 30577, 34685.

Environmental Radiation Exposure, 5280.

Grain and Feed Industry, 16933.

Hazardous Materials, 1526, 4436, 6845, 12849, 19986, 27548, 33796.

Meteorology, 29523.

Municipal Waste Water Systems, 6226, 16933, 27319.

PAX Company Arsenic, 4436, 6428, 9115.

Paint and Varnish Industry, 13394.

Pesticide Control Act Implementation, 9115.

Petrochemical Industry, 5368, 10135, 13689, 19925, 32289.

President's Air Quality, 5282.

Radiation Exposure, 23010.

MOTOR VEHICLES AND ENGINES, control of air pollution from:

Aftermarket parts and automotive service, relationship to Clean Air Act Amendments of 1970, questionnaire..... 18264

Ambient air quality transportation control measures, preparation, adoption, and submittal requirements..... 1464, 15195

Calibration procedure..... 17167, 30083

Certification test results, Federal; including miles per gallon figures:

1973 model year..... 10868

1974 model year..... 30494

Fuel economy for automobiles, voluntary labeling program..... 22944

Fuel and fuel additives, regulation of:

Lead and phosphorus additives in gasoline, labeling, etc..... 1255, 1260, 26450, 33741

Test procedures, proposed rules..... 34126

Octane numbers, certain proposed deletions..... 28302

Heavy duty vehicles, new; emission regulations for:

Diesel:

Gaseous exhaust emission..... 17166, 30082

Model years affected, rules proposed or adopted, etc.:

1974..... 5191, 17166, 30082, 32138, 32258

Proposed rules..... 5190

Smoke exhaust emission..... 17165

Model years affected, rules proposed or adopted, etc.:

1973..... 5189, 32258

1974..... 17165, 30082, 32258

Proposed rules..... 5187

Gasoline-fueled..... 17164

Model years affected, rules proposed or adopted, etc.:

1973..... 5186, 32258

1974..... 17164, 30082

Proposed rules..... 5185

High altitudes, certification of new vehicles for initial sale at; proposed rules..... 28302

Light Dies M

Gas M

P: Tru M

P: Low e Cer

Defi Fed

Pro Miles

1973 1974 Mobil Adv

L

Statio sh tic

Suspe 1973

Ac H

C C I C C I

1976

Of

NOISE, Criteri

nc Low-n pr

Motor

Railro pr

NONDIS EPA a Federa

OCCUPA OCEAN

OIL POI Discha

(E Non-tr

fa Oil sto

Ge fa

PESTICI addi

CCR 000036411

Page

PESTICIDES on crops and raw agricultural products:

Page

Light duty vehicles, new; emission regulations for:	
Diesel-fueled	21348, 28303
Model years affected, rules proposed or adopted, etc.:	
1975 and later years	21348, 28303, 30081, 32258
Gasoline-fueled	17133, 21363
Model years affected, rules proposed or adopted, etc.:	
1973	5184
1974	14684, 17135, 19683, 30080, 31428, 32258
1975 and later years	14685, 16063, 16780, 17149, 17441, 22474, 28302, 30080, 31428, 32258
Proposed rules	5183, 6906, 28302
Trucks, gasoline-fueled	21363
Model years affected, rules proposed or adopted, etc.:	
1975 and later years	21363, 28304, 30081, 30439, 31428, 32258
Proposed rules	6907, 28304
Low emission vehicles:	
Certification as, petitions for:	
Electrobus Division of Tork-Link Corp.,	33796.
Definition	17167
Federal government, use by	9263
Proposed rules	18686
Miles per gallon, test results:	
1973 model year	10868
1974 model year	10868
Mobile Source Air Pollution Control Program:	
Advisory Circulars, information to manufacturers, availability	9263
Light and heavy duty engines, applications for certification; availability of Circular No. 27	9263
Stationary sources, performance standards for emission during startup, shutdown, and malfunction, definitions, etc.	10821, 28565
Suspension requests:	
1975 vehicles:	
Administrator's comments	10317, 20365
Hearings, etc.:	
Automobili F. Lamborghini s.p.a.,	22509.
Checker Motors Corp.,	14708, 15653.
Chrysler Corp.,	5281, 6226, 15652.
Ford Motor Co.,	5281, 6226.
General Motors Corp.,	5281, 6226.
Glasco Industries, Inc.,	22509.
International Harvester Co.,	5281, 6226.
Toyo Kogyo Co. et al.,	32965.
1976 vehicles:	
Officine Alfieri Maserati S.p.A. et al.,	35528.
NOISE, standards for emission control:	
Criteria reflecting scientific knowledge of effects of noise on public health and welfare, availability	20119
Low-noise emission products, certification procedures; proposed rules	10822
Motor carriers, interstate; proposed rules	3087, 10644, 20105, 20852, 30773, 32528
Railroad carriers, interstate, equipment and facilities; proposed rules	3086, 10644
NONDISCRIMINATION:	
MPA assisted programs, proposed rules	15457
Federally assisted programs	17968
OCCUPATIONAL SAFETY. See under Pesticides, below.	
OIL DUMPING. See under Water programs, below.	
OIL POLLUTION PREVENTION:	
Discharge Prevention and Containment, functions (Executive Order 11735)	21243
Non-transportation-related onshore and offshore facilities	19334, 34165
Oil storage facilities for removal of discharges by U.S. Government, liability limits for small onshore facilities	25440
PESTICIDE RESIDUES on processed foods. See Food additives, above.	

Cancellations, applications, etc.; certain pesticide and rodenticide product registrations:

Aldrin and dieldrin,	18484, 18712, 20372, 26403.
Arsenic,	23010.
S[[(p-Chlorophenyl)thio]methyl] - O,O - dimethyl phosphorodithioate,	18706.
DDT containing products,	1623, 3349, 9090, 9590, 13394, 13395, 18582, 25509, 27549, 32836, 35349, 35350.
4-(2,4-Dichlorophenoxy) butyric acid,	18706.
Endosulfan,	18706.
Mercury,	9263.
6 - Methyl - 2,3 - quinoxalinedithiol cyclic S,S - dithiocarbonate,	18706.
Mirex,	8615, 8616, 14708, 15474, 22429, 23823, 23989, 24683.
Monuron,	16796.
Quaternary ammonium compounds,	21686.
Rodenticides, certain,	16796.
Simazine,	18706.
Sodium cyanide containing products,	29524.
Sodium cyanide, sodium monofluoroacetate, and strychnine,	23010, 26404, 26759, 33796.
Streptomycin,	18706.
2,4,5-Trichlorophenoxyacetic acid,	27855.
Definitions and interpretations, turnip tops	3511
Exemptions from tolerances:	
<i>Bacillus thuringiensis</i> Berliner,	10639, 10643, 12819.
Copper triethanolamine,	25440.
N,N-Diallyl dichloroacetamide,	7330.
Dimethyl sulfoxide,	16392.
<i>Heliothis zea</i> ,	14170.
Inert ingredients,	4330, 6070, 19840, 21435, 24918.
Isophorone,	10939.
Sebacoyl chloride, polymethylene polyphenylisocyanate, and ethylenediamine mixture,	15868.
Sodium chlorate,	22897, 24668, 28937, 29590, 35494.
Sodium cyanide, sodium monofluoroacetate, and strychnine,	33796.
Xylene,	1275, 9832, 16352.
Federal Environmental Pesticide Control Act of 1972:	
Civil penalties proceedings	26360
Disposal and storage of pesticides and containers, proposed rules	13623
Exemption of Federal or State agencies for use of pesticides under emergency conditions	9519, 33305
Hearings, assignments of Administrative Law Judge	34117
Inquiry	1142, 3002, 10998, 26227
Labeling claims:	
Nontoxic claims, prohibition of	26360
Residual bacteriostatic and/or self-sanitizing activity, policy statement; proposed rule	22637, 29481
Memorandum of agreement with Food and Drug Administration, certain changes	24233
Production of pesticides, registration of establishments, submission of reports, labeling	19842, 30558
Records and books of pesticide production and distribution	29481, 34129
Registration of products under Act:	
See also Cancellations, above.	
Applications, consideration of data by Administrator in support of	31862
Hearings arising from refusals to register, cancellations, suspensions, etc.; practice rules	8670, 19371
Federal Insecticide, Fungicide, and Rodenticide Act. See Federal Environmental Pesticide Control Act of 1972, above.	
Interim tolerances for certain pesticides:	
Benzene hexachloride,	14175, 21783, 32909.
Carbaryl,	1763, 18548.
2-Chloro-1-(2,4-dichloro-phenyl) vinyl diethyl phosphate,	33974.
4,6-Dinitro-o-cresol,	8069, 15365, 27523.
Occupational safety requirements, worker reentry, protective clothing, etc.; hearings	20362, 23556, 28324

ENVIRONMENTAL PROTECTION AGENCY— Continued

PESTICIDES on crops and raw agricultural products— Continued

Specific and temporary tolerances, rules proposed,
adopted or withdrawn:

See also Exemptions from tolerance requirements;
Interim tolerances, above.

Accephate, 12249.
Acetic acid, 22910.
Alachlor, 21813, 32909.
Aldicarb, 21813, 22819.
Aluminum phosphide, 7985.
4-Amino-6-(1,1-dimethyl-ethyl)-3-(methylthio)-1,2,4-triazin-5
(4H)-one, 31559.
4-Aminopyridine, 22428.
Ammonium isobutyrate, 1763, 8016.
Asulam, 3349, 20290.
Atrazine, 24683.
Azide ion, 10669.
Bacillus thuringiensis Berliner, 5337, 19045.
Benomyl, 17875, 21812, 22182, 22254, 26450, 29589, 29645.
Bentazon, 8691.
Benzoyl chloride (2,4,6-trichlorophenyl) hydrazone, 6917, 7416.
Bifenox, 33635.
Bluret, 24683.
2-*tert*-Butylamino-4-chloro-6-ethylamino-*s*-triazine, 1742, 22252.
N-*sec*-Butyl-2,6-dinitroaniline, 8301.
N-*sec*-butyl-4-*tert*-butyl-2,6-dinitroaniline, 29645.
2-(*p*-*tert*-Butylphenoxy)cyclohexyl 2-propynyl sulfite, 2429,
10721, 14169, 17875.
S-[(*tert*-Butylthio)methyl]O,O-diethyl phosphorodithioate,
10173.
CIPC, 29645.
Captan, 2687.
Carbaryl, 10643, 17003, 18652.
Carbofuran, 22428.
Chlordimeform, 23, 33604.
2-Chloroallyl diethyldithiocarbamate, 3511, 4670.
2-Chloro-2', 6'-diethyl-N-(methoxy-methyl) acetanilide, 1762,
10669.
2-[4-Chloro-6-(ethylamino)-*s*-triazin-2-yl] amino]-2-methyl-
propionitrile, 9815, 31203, 33797.
4-Chloro-5-(methylamino)-2-(α,α,α -trifluoro-*m*-tolyl)-3(2H)-
pyridazinone, 13500, 13598.
2-Chloro-N-(1-methyl-2-propynyl) acetanilide, 32164.
2-Chloro-1-(2,4,5-trichlorophenyl) vinyl dimethyl phosphate,
12214.
Chlorpyrifos, 28664.
Cycloheximide, 5336, 33635.
N-(Cyclopropylmethyl)- α,α,α -trifluoro-2,6-dinitro-N-propyl-p-
toluidine, 1762, 9848.
Cyprazine, 9815.
2,4-D, 29589.
Dialfor, 17523.
Dichlobenil, 4592.
3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide, 10668,
17760, 27524, 33973.
2,6-Dichloro-4-nitroaniline, 23404.
2,4-Dichlorophenoxyacetic acid, 20267.
2,4-Dichlorophenyl p-nitrophenyl ether, 32966, 35494.
N,N-Diethyl 2,4-dinitro-6-trifluoromethyl-m-phenylenediamine,
16797, 18055.
O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphoro-
thioate, 22428, 23781, 26913.
O,O-Diethyl-O-[*p*-(methylsulfinyl) phenyl] phosphorothioate,
31183.
O,O-Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate,
9849, 11126.
Dimethoate, 7986.
p-(Dimethylamino) thiocyanobenzene, 9848.
Dimethyl phosphate of 3-hydroxy-N-methyl-*cis*-crotonamide,
4437, 12215, 14168.
O,S-Dimethyl phosphoramidodithioate, 30565, 32164, 35314.
cis-2,5-Dimethyl-1-pyrrolidinecarboxanilide, 77.
Dimethyl sulfide, 22124.
Dimethyl tetrachloroterephthalate, 25216, 25455, 27844, 34117.
Dimethyl (2,2,2-trichloro-1-hydroxyethyl) phosphonate, 5245,
31174.
O,O-Dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate, 2687.
2,4-Dinitro-6-octylphenyl crotonate, 22894.
2,6-Dinitro-4-octylphenyl crotonate, 22894.
Dinoseb, 7330.
Diuron, 2687.

Specific and temporary tolerances, rules proposed. Page
adopted or withdrawn—Continued

Endosulfan, 7986, 9832, 16352.
Endothall, 19925.
Ethephon, 1762, 5365, 9815, 14375, 15668, 18442, 24682.
2-Ethylamino-4-isopropylamino-6-methylthio-*s*-triazine, 7330.
S-Ethyl diethyldithiocarbamate, 9848, 16417, 33398.
Ethyl *m*-hydroxycarbanilate carbanilate, 906.
Ethyl 4-(methylthio)-*m*-tolyl isopropylphosphoramidate, 17760,
28968, 34685.
O-Ethyl S-phenyl ethylphosphonodithioate, 16418.
S-[2-(Ethylsulfinyl) ethyl] O,O-dimethyl phosphorothioate,
19451.
Formetanate hydrochloride, 7488, 22182.
Gibberellic acid, 22475.
Isobutyric acid, 11126, 14169, 23402.
Isopropyl 4,4'-dibromobenzilate, 5366.
Isopropyl (E,E)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate,
16003.
Leptophos, 15103, 17270, 31559.
Maneb, 4394.
N-(Mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorodi-
thioate), 4275, 4718, 7459.
Methanearsonic acid, 8016.
Methazole, 15104.
Methidathion, 23404.
Methomyl, 7987, 12215, 22428, 23437, 31559, 34361.
Methoxychlor, 28663.
m-*cym*-5-yl Methylcarbamate, 16268.
2-Methyl-4-chlorophenoxyacetic acid, 13376.
4-(Methylthio)-3,5-zylyl methylcarbamate, 4591.
Monuron, 16780.
 α -Naphthaleneacetic acid, 1742.
Neodecanoic acid, 9848.
Nicotine, 13375.
Oryzalin, 4591, 27524.
Oxytetracycline hydrochloride, 23806, 29589.
Paraquat, 13375, 31203, 32066.
Paraquat cation, 1762.
Parathion or its methyl homolog, 19699, 26450.
Phorate, 17875.
Phosalone, 1762, 5337, 17004, 33997.
N,N-bis-(Phosphonomethyl) glycine, 18484, 32164.
Potassium arsenite, 2708, 14829.
Propargite, 22123.
Silvex, 17511, 22894.
Simazine, 11126, 28664.
Sodium arsenite, 2708, 14829.
Streptomycin, 19416, 31539.
Succinic acid 2,2-dimethylhydrazide, 19071, 24683, 28937.
Terbacil, 29645, 34490.
cis-N-[(1,1,2,2-Tetrachloroethyl)thio] - 4 - cyclohexene-1,2-
dicarboximide, 19925.
Thiabendazole, 1303, 6428, 16644, 29610, 35467.
Toxaphene, 18056.
3,5,6-Trichloro-2-pyridinol, 9849.
Tricyclohexyltin hydroxide, 14168, 17875.
Triphenyltin hydroxide, 3045, 17875.
Zineb, 4394.

PROCUREMENT:

Contract financing, 20836, 20837.
Forms, 1219, 7798, 8458, 10639, 18881, 21157, 31526, 32910.
Proposed rules, 16392, 20267.
General, dispute clauses, 21497.
Government property, proposed rules, 22637.
Negotiation, 12214, 20836.
Novation and change of name agreements, 3964.
Small business concerns, 33772.

RADIOACTIVE DISCHARGES from nuclear facilities,
environmental effects of; understanding with
Atomic Energy Commission 24936

RODENTICIDES. See under Pesticides, above.

RULEMAKING PROCEDURES, preparation and issu-
ance of explanations to accompany proposed rules. 15653

SOLID WASTE DISPOSAL PROGRAMS:

Grants, research and demonstration 12784, 16220
Land disposal guidelines, proposed rules 10549
Thermal processing guidelines, proposed rules 10545

TRADE SECRETS, disclosure 7573, 22473

TRAINING GRANTS AND FELLOWSHIPS 2705, 16060

TUITION FEES for direct training; technical and man-
agerial courses 32807

WASTE TREATMENT AND DISPOSAL. See under
Solid waste disposal programs; Water programs.

ANNUAL INDEX, 1973

53

	Page		Page
WATER POLLUTION:		Pollution prevention and control:	
Blue Ridge Power Project; effect on water quality.....	4015	Public participation in.....	5038, 22757
Citizen suits against violators of Federal Water Pollution Control Act, prior notice of.....	6908, 15040	Reports:	
Effluent limitations guidelines, performance and pretreatment standards for new sources:		Availability:	
Categories, proposed rules:		Construction activity, controlling pollution from.....	28968
Asbestos manufacturing.....	29947	Hydrographic modifications, control of pollution from.....	28968
Canned and preserved fruits and processing industry.....	31080	Mining activities, controlling pollution from.....	29523
Cement manufacturing.....	24464	Nonpoint sources of pollutants, nature and extent of, methods for identifying and evaluating.....	29524
Chemicals:		Salt water intrusion, identification and control pollution from.....	27549
Inorganic.....	28180	Silvicultural activities, controlling pollution from.....	29109
Organic.....	34711	Subsurface excavations, ground water, pollution from.....	28968
Dairy products processing industry.....	34958	Persons whose alleged activities result in discharges causing water pollution, revocation of Part.....	31173
Electroplating.....	27698, 29818	Sources of pollutants, categories:	
Feedlots.....	24468, 28947	See also under Reports.	
Ferroalloy manufacturing.....	29013	Agricultural nonpoint sources.....	28968
Fertilizer manufacturing.....	33856	Effluent Standards and Water Quality Information Advisory Committee, hearings.....	9179, 15868, 19070
Glass manufacturing.....	22609, 28908	Existing sources.....	1624
Grain mills.....	33441	State continuing planning process.....	8035, 13375
Leather tanning and finishing industry.....	33863	Treatment works:	
Meat products.....	29860	Cost-effectiveness analysis.....	17736, 24639
Nonferrous metals.....	33180	Grants for construction, State and local assistance:	
Petroleum refining.....	34546	Waste treatment.....	5329, 6390, 9666
Phosphate manufacturing.....	24474	Bonding, insurance, etc., proposed rules.....	21343
Plastics and synthetics.....	28199, 30282	User charges and industrial cost recovery.....	13524, 22525
Rubber tires.....	28224	Wastewater treatment:	
Slaughterhouse and packinghouse.....	29860	Reimbursement grants:	
Soap and detergent manufacturing.....	35262	Eligibility requirements; proposed rules.....	16826, 26882, 28572
Sugar processing.....	22613, 28081, 28707, 33850	Priority of payment of funds, proposed rules.....	28572
Cooling water intake structures; proposed rules.....	34412	Loan assistance from Environmental Financing Authority, proposed rules.....	22635
Definitions, etc.; proposed rules.....	22608	Pretreatment of pollutants in publicly owned treatment works:	
Public review procedures; inquiry.....	21202, 22506	Guidelines, availability.....	22429, 23557
Toxic pollutants (benzidine, cyanide, DDT, etc.), effluent standards; proposed rules.....	24344, 35389	Standards.....	19237, 24398, 30983
Employee protection hearings, proposed rules.....	32268	Secondary treatment information.....	10642, 10968, 22298
Grants, State and local assistance:		Wastewater treatment:	
See also under Treatment works, below.		Lead—Deadwood Sanitation District Project; hearing.....	31864
Program grant awards, administration of water pollution control programs.....	17218, 26358	See also under Treatment works, above.	
Hearings, public, under Federal Water Pollution Control Act; revocation of Part.....	31173	Violators of water quality standards, alleged, conferences, hearings, etc.; revocation of Part.....	31173
Information and guidelines, publication as required by Federal Water Pollution Control Act, availability of report.....	27236, 29836	Waste treatment:	
Lakes, freshwater, restoration and enhancement; availability of report.....	18582	See also under Treatment works, above.	
Nuclear facilities, discharge from, understanding of certain complementary responsibilities between EPA and Atomic Energy Commission.....	2713	Planning areas and responsible planning agencies for problem areas.....	14230, 25681
Ocean dumping:		Water Pollution Control Act, administration of; Federal contracts, grants, and loans (Executive Order 11738).....	25161
Applications:		WATER QUALITY:	
Action on.....	8727, 10154, 28615	Criteria, maximum limits of acceptability for constituents in Nation's waters; availability.....	29646
Evaluation, criteria for.....	12872, 28618	Information to be published on integrity of Nation's waters, fish and wildlife and human protection, etc.....	29836
Fees, information required, etc.....	8727, 28614	Interstate standards proposed or adopted for navigable waters; applicability to certain States:	
Definitions, etc.....	8726, 28613	California, 26359.	
Enforcement.....	8730, 28617	Florida, 26359.	
Engineers Corps permits.....	8729, 28617	Hawaii, 26359.	
Permits, contents of.....	8729, 28616	Illinois, 32822.	
Records.....	8729, 28617	Maryland, 26360.	
Oil pollution. See Oil pollution prevention, above.		Mississippi, 26360.	
Pollutant Discharge Elimination System, national.....	1362, 13528, 14168, 19895	Missouri, 26360.	
Point source guidelines:		New Jersey, 34895.	
Agricultural and silvicultural activities, discharges from.....	10963, 12416, 18002, 29109	New York, 34896.	
Information from owners and operators, acquisition of.....	5279, 9741, 19894	Ohio, 35529.	
State participation.....	19895	Puerto Rico, 26463.	
State programs approved:		South Carolina, 26360.	
Connecticut, 22058.		Vermont, 35529.	
Delaware, 31333.		West Virginia, 26210.	
Michigan, 21446.			
Nebraska, 30773.			
Washington, 27107.			
Wisconsin, 31333.			
Pollutants:			
Analysis, test procedures.....	17318, 28758		
Toxic:			
Effluent standards for; proposed rules.....	35389		
List.....	18044, 19070, 24344		

CCR 000036414

ENVIRONMENTAL PROTECTION AGENCY—

Page

Continued**WATER QUALITY—Continued**

Management plans, preparation guidelines for States; proposed rules.....	13567
Programs and implementation plans, agreement with Secretaries of Agriculture, Army and Interior.....	18405, 32288
Standards, revision of; revocation of Part.....	22893
Violators, alleged, conferences, hearings, etc.; revocation of Part.....	31173
WETLAND ECOSYSTEMS, protection of; policy statement	10834

Environmental Quality, Citizen's Advisory Committee on:

MEETINGS	7137, 16416, 24252
-----------------------	--------------------

ENVIRONMENTAL QUALITY COUNCIL:**ENVIRONMENTAL STATEMENTS:**

Availability. <i>See list at end of this agency.</i>	
Continental shelf and Gulf of Alaska, oil and gas development; hearings.....	21956, 24398
Preparation guidelines.....	10861, 20550, 21265
MEETINGS, advisory committee:	
Alternative Automotive Power Systems, 13598, 30576.	

POLLUTION:

Oil discharge removal, functions (Executive Order 11735).....	21244
Oil and hazardous substances pollution contingency plan, National.....	21888

ENVIRONMENTAL STATEMENTS, AVAILABILITY:

Agriculture Department, 75, 1078, 1660, 2491, 3111, 3541, 4285, 5008, 5362, 6425, 7275, 7837, 9113, 9682, 10754, 10996, 11366, 12436, 13049, 14703, 15101, 15649, 17266, 18053, 18579, 19066, 19448, 19984, 20638, 21523, 22817, 23820, 24680, 26018, 26960, 27644, 28322, 28965, 29642, 30133, 30906, 32283, 33118, 33632, 34487, 34904.	
Air Force Department, 1078, 5674, 10754, 24681.	
Architect of Capitol, 5363.	
Army Department, 14703, 15101, 15650, 18053, 18580, 27644.	
Atomic Energy Commission, 1078, 1660, 2491, 3111, 3541, 4285, 5363, 5674, 6426, 7837, 9114, 10754, 11366, 13050, 14703, 15101, 17266, 18053, 18580, 19066, 19449, 21523, 22180, 22817, 23820, 28966, 29642, 30133, 32284, 33118, 34904.	
Bonneville Power Administration, 27645.	
Coal Research Office, 5364.	
Coast Guard, 5365, 5676, 10757, 11368, 19068, 22182, 30135, 31862, 32286, 33635.	
Commerce Department, 1661, 4285, 5363, 5674, 7838, 11367, 13050, 14703, 15649, 17266, 18054, 13580, 19066, 19449, 19984, 23821, 26020, 33632.	
Defense Department, 76, 1078, 3541, 4285, 5008, 5363, 5674, 6426, 7276, 7838, 8299, 9114, 9682, 10754, 10996, 11367, 13050, 14703, 15101, 15650, 18053, 18580, 19066, 19449, 19450, 19984, 20637, 21523, 21524, 22181, 22818, 23821, 24681, 26018, 26960, 27644, 28322, 28966, 29642, 30133, 30907, 31860, 32284, 33118, 33632, 34487, 34904.	
Defense Supply Agency, 18580.	
Delaware River Basin Commission, 5363, 13051, 15649, 19984, 31860.	
Economic Development Administration, 11367, 13050, 14703, 18054, 19984.	
Energy Policy Office, 31861.	
Engineers Corps, 76, 1079, 2491, 3541, 4285, 5008, 5363, 5674, 6426, 7276, 7838, 8300, 9114, 9682, 10754, 10996, 11367, 13050, 19066, 21523, 22181, 22818, 23821, 24681, 26018, 26960, 27645, 28322, 28966, 29642, 30133, 30907, 31860, 32284, 33118, 33632, 34487, 34904.	
Environmental Protection Agency, 1079, 1661, 2491, 5675, 6427, 7276, 9115, 11367, 13051, 14704, 15101, 15650, 18580, 19067, 19450, 26019, 26402, 26961, 27645, 28323, 28966, 29643, 30134.	
Federal Aviation Administration, 76, 1079, 1661, 3112, 3542, 4285, 5364, 5675, 6477, 7277, 8300, 9115, 9683, 10756, 10997, 11368, 12436, 15101, 15651, 18581, 19067, 21525, 22818, 26019, 27645, 28967, 29643, 30908, 31861, 32285, 33119, 33634, 34488, 34906.	
Federal Highway Administration, 76, 1079, 1661, 2492, 3112, 3542, 4285, 5009, 5365, 5676, 6427, 7277, 7839, 8300, 9115, 9683, 10756, 10997, 11368, 12436, 13052, 15101, 15651, 18053, 18581, 19067, 19450, 19985, 20638, 21525, 22181, 22818, 23822, 24682, 26019, 26402, 26961, 27646, 28324, 28967, 29644, 30134, 30908, 31861, 32285, 33119, 33634, 34488, 34906.	

Federal Power Commission, 1079, 7276, 10996, 11367, 13051, 18053, 21524, 22181, 24682, 26019, 26961, 29643, 30907, 31861, 34905.	
Fish and Wildlife Service, 2492, 5364, 10755, 13051, 14705, 15101, 18053, 19985, 20638, 21525, 22818, 23821, 24682, 27645, 28323, 29643, 32285, 34905.	
Forest Service, 75, 2491, 3111, 3541, 5008, 5362, 5674, 6425, 7275, 7837, 9113, 9682, 10754, 10996, 11366, 12436, 13050, 14703, 15101, 15649, 17268, 18053, 19984, 22180, 22817, 23820, 24680, 26018, 26950, 27644, 28322, 28965, 29642, 30906, 32283, 33118, 33632, 34487, 34904.	
General Services Administration, 2492, 3111, 5363, 7838, 10755, 10997, 11368, 13051, 15101, 15649, 17266, 18053, 18581, 19067, 19985, 20638, 22817, 26019, 28323, 30134, 30907, 31861, 33634.	
Geological Survey, 20638, 30134, 34488.	
Health, Education, and Welfare Department, 76, 5008, 5364, 7276, 12436, 19450, 22817, 34905.	
Housing and Urban Development Department, 1079, 3112, 4285, 5675, 7276, 9114, 9682, 10755, 10997, 11368, 14704, 15101, 17266, 19450, 22817, 26019, 29643, 31861.	
Interior Department, 76, 2492, 3112, 3541, 5009, 5364, 6427, 7277, 7839, 9114, 9682, 10755, 10997, 11368, 13051, 14704, 15101, 15649, 17266, 18053, 18581, 19067, 19450, 19985, 20638, 22818, 23821, 24682, 26019, 27645, 28323, 28324, 28966, 29643, 30134, 30907, 31861, 32285, 33119, 33634, 34488, 34905.	
International Boundary and Water Commission, 17266, 30907.	
Interstate Commerce Commission, 8300.	
Justice Department, 19985, 34906.	
Labor Department, 12436, 15649, 17266, 28324, 34488.	
Land Management Bureau, 76, 3541, 10755, 10997, 19067, 20638, 29643, 30907, 34905.	
Law Enforcement Assistance Administration, 19985, 34906.	
Maritime Administration, 15649, 18054, 34905.	
National Aeronautics and Space Administration, 3541, 10755, 18053, 19985, 23822.	
National Capitol Planning Commission, 5364, 9683, 13052, 17266, 22181, 28324.	
National Park Service, 6427, 7539, 3112, 5009, 5364, 9114, 9682, 10755, 10997, 11368, 13051, 14705, 15650, 17266, 20638, 21524, 22818, 23822, 28323, 28966, 29643, 30907, 33634, 34905.	
National Science Foundation, 10755, 24682.	
Navy Department, 7838, 9114, 13051, 15649, 18053, 19985, 21524, 24681, 26961, 28323, 29643, 34888.	
Occupational Safety and Health Administration, 12436.	
Outdoor Recreation Bureau, 3541, 9682, 14705, 17266, 18053, 18581, 19067, 20638, 21524, 33119, 34905.	
Postal Service, 30908.	
Reclamation Bureau, 3541, 5009, 6427, 7277, 7839, 15101, 15650, 17266, 21524, 23821, 28323, 30134, 31861, 34488, 34905.	
Rural Electrification Administration, 6426, 7837, 9113, 13050, 18053, 18579, 21523, 24680, 28322, 28966, 30133, 34487.	
Saline Water Office, 5364.	
Soil Conservation Service, 1660, 2491, 4285, 5363, 6426, 7276, 7838, 9682, 10996, 11366, 15101, 18579, 19449, 19984, 20637, 22817, 23820, 24681, 26018, 26960, 28322, 29642, 30133, 30906, 32284, 33632, 34487, 34904.	
Souris-Red-Rainy River Basins Commission, 15649.	
State Department, 76, 27645.	
Tennessee Valley Authority, 3542, 4285, 7839, 9683, 15649.	
Transportation Department, 76, 1079, 1661, 2492, 3112, 3542, 4285, 5009, 5364, 6427, 7277, 7839, 8300, 9115, 9683, 10756, 10997, 11368, 12436, 13052, 14705, 15101, 15651, 17266, 18053, 18581, 19067, 19450, 19985, 20638, 22181, 23822, 24682, 26019, 26402, 26961, 27645, 28324, 28967, 29643, 30134, 30908, 31861, 32285, 33119, 33634, 34488, 34906.	
Treasury Department, 5009, 9115.	
Upper Mississippi River Basin Commission, 10997.	
Urban Mass Transportation Administration, 1662, 3543, 4286, 10756, 26962, 28324.	
Veterans Administration, 10997, 24682, 28324.	
Water Resources Council, 26020, 31862.	

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION:**PROCEDURE REGULATIONS:**

CFR correction.....	34810
Referrals to State and local authorities, provisional	
706 and provisional notice agencies.....	16640, 20829
706 agencies, new; proposed designation....	16672, 20829

CCR 000036415

MONDAY, DECEMBER 17, 1973
WASHINGTON, D.C.

Volume 38 # Number 241

PART II



ENVIRONMENTAL PROTECTION AGENCY

PROPOSED EFFLUENT LIMITATIONS GUIDELINES

Organic Chemicals Manufacturing
Industry

CCR 000036416

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 414]

EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES FOR THE ORGANIC CHEMICALS MANUFACTURING INDUSTRY POINT SOURCE CATEGORY

Notice of Proposed Rule-Making

Notice is hereby given that effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources set forth in tentative form below are proposed by the Environmental Protection Agency (EPA) for the nonaqueous processes subcategory (Subpart A), processes with process water contact as steam diluent or absorbent subcategory (Subpart B), aqueous liquid phase reaction systems subcategory (Subpart C), and batch and semicontinuous processes subcategory (Subpart D) of the organic chemicals manufacturing category pursuant to sections 301, 304(b), 304(c), 306(b) and 307(c) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314(b) and (c), 1316(b) and 1317(c); 86 Stat. 816 et seq.; Pub. L. 92-500) (the "Act").

(a) *Legal authority* — (1) Existing point sources. Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) of the Act.

(2) Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods and other alternatives. The regulations proposed herein set forth effluent limitations guidelines, pursuant to section 304(b) of the Act, for the nonaqueous processes subcategory (Subpart A); processes with process water contact as steam diluent or absorbent subcategory (Subpart B), aqueous liquid phase reaction systems subcategory (Subpart C), and batch and semicontinuous processes subcategory (Subpart D) of the organic chemicals manufacturing category.

esses subcategory (Subpart D) of the organic chemicals manufacturing category.

(3) New sources. Section 306 of the Act requires the achievement by new sources of a Federal standard of performance providing for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives including where practicable, a standard permitting no discharge of pollutants.

Section 306(b)(1)(B) of the Act requires the Administrator to propose regulations establishing Federal standards of performance for categories of new sources for the nonaqueous processes subcategory (Subpart A), processes Act. The Administrator published in the Federal Register of January 16, 1973, (38 FR 1624) a list of 27 source categories, including the organic chemicals manufacturing category. The regulations proposed herein set forth the standards of performance applicable to new sources for the nonaqueous processes subcategory (Subpart A), processes with process water contact as steam diluent or absorbent subcategory (Subpart B), aqueous liquid phase reaction systems subcategory (Subpart C), and batch and semicontinuous processes subcategory (Subpart D) of the organic chemicals manufacturing category.

Section 307(c) of the Act requires the Administrator to promulgate pretreatment standards for new sources at the same time that standards of performance for new sources are promulgated pursuant to section 306. Sections 414.15, 414.25, 414.35 and 414.45 proposed below provide pretreatment standards for new sources within the nonaqueous processes subcategory (Subpart A), processes with process water contact as steam diluent or absorbent subcategory (Subpart B), aqueous liquid phase reaction systems subcategory (Subpart C), and batch and semicontinuous processes subcategory (Subpart D) of the organic chemicals manufacturing category.

Section 304(c) of the Act requires the Administrator to issue to the States and appropriate water pollution control agencies information on the processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants, to implement standards of performance under section 306 of the Act. The Development Document referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures, or operating methods.

(b) *Summary and basis of proposed effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources*—(1) General methodology. The effluent limitations guidelines and standards of performance proposed herein were developed in the following manner. The point sources category was

first studied for the purpose of determining whether separate limitations and standards are appropriate for different segments within the category. This analysis included a determination of whether differences in raw material used, product produced, manufacturing process employed, age, size, waste water constituents and other factors require development of separate limitations and standards for different segments of the point source category. The raw waste characteristics for each such segment were then identified. This included an analysis of (1) the source, flow and volume of water used in the process employed and the sources of waste and waste waters in the operation; and (2) the constituents of the waste which should be subject to effluent limitations guidelines and standards of performance were identified.

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both in-plant and end-of-process technologies, which are existent or capable of being designed for each segment. It also included an identification of, in terms of the amount of constituents and the chemical, physical, and biological characteristics of pollutants, the effluent level resulting from the application of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the nonwater quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, noise and radiation, was identified. The energy requirements of each control and treatment technology were determined, as well as the cost of the application of such technologies.

The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the "best practicable control technology currently available," "best available technology economically achievable" and the "best available demonstrated control technology, processes, operating methods, or other alternatives." In identifying such technologies, various factors were considered. These included the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, nonwater quality environmental impact including energy requirements and other factors.

The data on which the above analysis was performed included EPA permit applications, EPA sampling and inspections, consultant reports, and the industry submissions.

The pretreatment standards proposed herein are intended to be complementary to the pretreatment standard proposed for existing sources under of 40 CFR

Part 123. The basis for such standards is set forth in the Federal Register of July 19, 1973, 38 FR 19226. The provisions of Part 123 are equally applicable to sources which would constitute "new sources," under section 306 if they were to discharge pollutants directly to navigable waters except for § 123.133. That section provides a pretreatment standard for "incompatible pollutants" and requires application of the "best practicable control technology currently available," subject to an adjustment for amounts of pollutants removed by the publicly owned treatment works. Since the pretreatment standards proposed herein apply to new sources, §§ 414.15, 414.25, 414.35 and 414.45 below amend § 123.133 to require application of the standard of performance for new sources rather than the "best practicable" standard applicable to existing sources under sections 301 and 301(b) of the Act.

(2) Summary of conclusions with respect to the nonaqueous processes subcategory (Subpart A), processes with process water contact as steam diluent or absorbent subcategory (Subpart B), aqueous liquid phase reaction systems subcategory (Subpart C), and batch and semicontinuous processes subcategory (Subpart D) of the organic chemicals manufacturing category.

(d) Industry description. The organic chemical industry in the United States is a complex matrix in which interrelated chemicals compete for raw materials and markets via increasingly competitive technologies. The water use and subsequent waste water discharges within the industry are closely related to this mix of products and manufacturing processes.

The structure of the industry can be studied by several approaches. There are some companies which specialize in making products for use by another industry, while other firms specialize in the production of compounds having common chemical functional groups or compounds made by similar unit processes.

The concept of horizontal integration is a strong motivating force in the behavior of many companies which produce several products with a common end use. By maintaining a position in each of these products, a company protects itself against intrusion into these common end use markets. Another major influence has been the need for vertical integration. Firms that until recently were content to produce intermediate or end products, have been under constant pressure either to integrate backwards by acquiring their own sources of raw materials or to integrate forward by gaining control of their customers.

Backward integration within the industry has in turn been affected by the changing availability of economical raw materials. Prior to World War II, the organic chemicals industry relied primarily on feedstocks derived from coal. After World War II, more readily processed feedstocks were introduced in the form of refinery dry gas and olefins. These became available through the growth of catalytic cracking installations

for gasoline manufacture in refinery operations.

This kind of feedstock was in turn replaced, starting in the early 1950's, by a low priced liquid petroleum gas (LPG) by-product (ethane and propane) from a rapidly expanding natural gas industry based on the Gulf Coast.

During the decade of the 1960's the rapid growth of the industry was twice that of the source of its feedstock supply, natural gas. This situation has led to the increased use of distillates derived from crude oil (naphtha) as feedstocks. Currently, there is sharp competition within the industry for both of these feedstocks. The competition has been intensified by alternate uses for them outside the organic chemicals industry.

In the past, the natural gas industry has found advantages in selling ethane and propane for chemical usage. However, the drastically increased demand for pollution free sources of fuel has completely changed this picture.

Light liquid distillates derived from crude oil have an alternative use and value in gasoline. This has led to sharp competition between chemical producers and oil refiners for the same barrel of crude oil.

A given set of feedstocks, intermediates, and products associated with the operation of any specific facility represents the sum of these considerations as they relate to an individual company. Each plant's set of process operations and production is a unique contribution to a profitable operation.

The term "production" must be accurately defined when applied to a chemical plant. It is erroneous to base production only on those commodities which are finally shipped across plant boundaries for sale. The true production associated with any given plant must include the captive utilization of feedstocks and intermediate processing steps between the initial feedstock (e.g. LPG, naphtha) and final products.

Each process is itself a series of unit operations which effect chemical and physical changes in the feedstock or products. In the commercial synthesis of a simple product from a single feedstock, there are normally sections of the process associated with the preparation of the feedstock, the chemical reaction, the separation of reaction products, and the final purification of the desired product. Each unit operation may have drastically different water usages associated with it. The type and quantity of waste water produced by a given facility is therefore directly related to the nature of the various processes within its boundaries.

The production from a given process module is related to the design capacities of the individual unit operations within it. In many cases, some unit operations such as the central reaction, are carried out in several small reactors operating in parallel.

The flow of material between unit operations within a process may be either a continuous stream or through a series of batch transfers. Both types of processes normally have an associated design

capacity, which can be expressed as millions of pounds of product per year.

The actual rate at which a product is produced may be higher or lower than the rated capacity, depending on such factors as down time (for maintenance, catalyst regeneration, etc.), process "debottlenecking", variations in feedstock availability, and product demand.

To insure the smooth operation of the different segments within a producing facility, manufacturers maintain inventories of the amounts of feedstock, intermediate products, and final products available for subsequent reaction or shipment from the plant. Depending on the nature of the operation, these inventories are updated on a monthly, weekly, or even daily basis. The examination of historical production inventories and associated manufacturing processes for a given facility provides the most meaningful picture of the activities within its boundaries. This is directly related to the type and quantity of wastes which are generated.

(ii) Categorization. The organic chemicals manufacturing category consists of approximately 260 product commodities listed under the Government's Standard Industrial Classifications (SIC) 2665 (formerly SIC 2815), Cyclic Intermediates, Dyes, Organic Pigments and Coal Tar Crudes, and SIC 2869 (formerly SIC 2818), Industrial Organic Chemicals not elsewhere classified. Of these 260 product commodities listed under SIC 2363 and SIC 2869, 210 significant product commodities, which are manufactured by 269 processes, were identified. These product-process segments are estimated to comprise greater than 99 percent of the industry's production capacity. From the list of 269 significant product-process segments, 41 major product-process segments were selected, as they represent approximately 75 percent of the industry's production capacity. These product-process segments are presented in Table I. Effluent limitations, as set forth in these regulations (Part 414), are applicable to the product-process segments shown in Table I.

TABLE I

SUBCATEGORY A NONAQUEOUS PROCESSES

MAJOR PRODUCTS AND PROCESSES

Product	Process
Cyclohexane -----	Hydrogenation of Benzene.
Ethyl Benzene ----	Alkylation of Benzene with Ethylene.
Vinyl Chloride ----	Addition of Hydrochloric Acid to Acetylene.
BTX Aromatics ---	Hydrotreatment of Pyrolysis Gasoline.
BTX Aromatics ---	Solvent Extraction from Reformate.

SUBCATEGORY B PROCESSES WITH PROCESS WATER CONTACT AS STEAM DILUENT OR ABSORBENT

MAJOR PRODUCTS AND PROCESSES

Product	Process
Ethylene and Propylene.	Pyrolysis of Naphtha or Liquid Petroleum Gas.
Butadiene -----	Co-Product of Ethylene.

Product	Process
Butadiene-----	Oxidative Dehydrogenation of n-Butane.
Butadiene-----	Dehydrogenation of n-Butane.
Methanol-----	Steam Reforming of Natural Gas.
Acetone-----	Dehydrogenation of Isopropanol.
Acetaldehyde-----	Oxidative Dehydrogenation of Ethanol.
Vinyl Acetate-----	Synthesis of Ethylene and Acetic Acid.
Acetylene-----	Partial Oxidation of Methane.
Ethylene Oxide-----	Catalytic Oxidation of Ethylene.
Formaldehyde-----	Oxidation of Methanol.
Ethylene Dichloride-----	Direct Chlorination of Ethylene.
Vinyl Chloride-----	Cracking of Ethylene Dichloride.
Styrene-----	Dehydrogenation of Ethyl Benzene.
Methyl Amines-----	Addition of Ammonia to Methanol.

SUBCATEGORY C AQUEOUS LIQUID REACTION SYSTEMS MAJOR PRODUCTS AND PROCESSES

Product	Process
Phenol-----	Chlorobenzene Process.
Phenol and Acetone-----	Cumene Oxidation and Cleavage.
Oxo Chemicals-----	Carbonylation and Condensation.
Acetaldehyde-----	Oxidation of Ethylene.
Acetic Acid-----	Oxidation of Acetaldehyde.
Methyl Methacrylate-----	Acetone Cyanohydrin Process.
Ethylene Glycol-----	Hydration of Ethylene Oxide.
Acrylic Acid-----	Synthesis with Carbon Monoxide and Acetylene.
Acrylates-----	Esterification of Acrylic Acid.
Terephthalic Acid (TPA).-----	Nitric Acid Oxidation of p-Xylene Catalytic.
Terephthalic Acid (TPA).-----	Catalytic Oxidation of p-Xylene.
Polymer Grade TPA.-----	Purification of Crude Terephthalic Acid.
Dimethyl Terephthalate.-----	Esterification of Terephthalic Acid.
p-Cresol-----	Sulfonation of Toluene.
Aniline-----	Hydrogenation of Nitrobenzene.
Bisphenol A-----	Condensation of Phenol and Acetone.
Caprolactam-----	Oxidation of Cyclohexane.
Tetraethyl Lead-----	Addition of Ethyl Chloride to Lead Amalgam.
Coal Tar Products.-----	Coal Tar Distillation. Pitch Forming.

SUBCATEGORY D BATCH AND SEMICONTINUOUS PROCESSES MAJOR PRODUCTS AND PROCESSES

Organic Dye Products:

Azoic Dyes and Components.

The organic chemicals manufacturing category was subcategorized by the identification of four major process related subcategories in which all 269 product-process segments were classified. Subcategories A, B, and C are comprised of continuously operated processes. Subcategory D is comprised of batch and semicontinuous processes. Each subcategory is defined on the basis of manufacturing process technology and process waste water generated. These subcategories are defined as follows:

(1) **Subpart A—Nonaqueous processes subcategory:** These processes have minimal contact between water and reactants or products within the process.

Water is not required as a reactant or diluent and is not formed as a reaction product. The only water usage stems from periodic washes of working fluids or catalyst hydration.

(2) **Subpart B—Processes with process water contact as steam diluent or absorbent subcategory:** Process water usage is in the form of dilution steam, direct contact quench, or as an absorbent for reactor effluent gases. Reactions are all vapor-phase and carried out over solid catalysts. Most processes have an absorber coupled with steam stripping of chemicals for purification and recycle.

(3) **Subpart C—Aqueous liquid-phase reaction systems subcategory:** These are liquid-phase reactions where the catalyst is generally in aqueous media such as dissolved or emulsified mineral salt, or acid and caustic solutions. Continuous regeneration of catalyst system requires extensive water usage. Substantial removal of spent inorganic salt by-products may also be required. Working aqueous catalyst solution is normally corrosive. Additional process water is required in final purification or neutralization of products.

(4) **Subpart D—Batch and semicontinuous processes subcategory:** Processes are carried out in reaction kettles equipped with agitators, scrapers, reflux condensers, etc. depending on the nature of the operation. Many reactions are liquid-phase with aqueous catalyst systems. Reactants are transferred to batch reactors by gravity flow, pumping, or pressurization with air or inert gas. Much of the material handling is manual, and there is limited use of automatic process control. Filter presses and centrifuges are commonly used to separate solid products from liquid. Where drying is required, air or vacuum ovens are used. Cleaning of noncontinuous production equipment constitutes a major source of process waste water.

Due to the large range of raw waste loads for product-process segments in subcategories B and C, it was necessary to establish effluent limitations within each of these subcategories. This was accomplished by determining the median raw waste loads of product-process segments in each subcategory. Product-process segments with raw waste loads below the median value were subsequently designated B1 and C1 respectively. Those product-process segments with raw waste loads above the median value were designated B2 and C2 respectively.

(iii) **Constituents of waste water pollutants.** In determining the major pollutants and effectiveness of various treatment alternatives, the following pollutant parameters were measured: biochemical oxygen demand (BOD₅), chemical oxygen demand (COD), total organic carbon (TOC), total suspended solids (TSS), phenols, pH, cyanide (CN), ammonia (NH₃), total Kjeldahl nitrogen (TKN), extractable oils, sulfate, total

phosphorus (TP), zinc (Zn), copper (Cu), iron (Fe), chromium (Cr), and cadmium (Cd).

It was determined that dissolved organic chemicals constitute the major pollutant source in this industry. The following pollutant parameters were selected on this basis: Biochemical oxygen demand (BOD₅), chemical oxygen demand (COD), total suspended solids (TSS), and phenols. Other pollutant parameters were found to be less significant in the raw waste loads or treated effluent.

Effluent limitations have not been established for cyanide (CN) and cadmium (Cd) although trace quantities of these pollutants were found in certain process waste streams. Significant reductions of these pollutants are expected to occur after end-of-process treatment by best practicable control technology currently available.

(iv) **Cost and energy requirements.** Capital and annual end-of-process treatment costs have been estimated for each level of technology and are presented in the Development Document. These costs were also estimated by treatment plant size with treated effluent flows: 0.072, 0.36, 0.72, and 2.16 million gallons per day. Annual costs were also calculated per 1000 gal treated effluent and per pound of BOD₅ removed.

Total industry cost for best practicable control technology currently available is estimated at \$1,030 million ("Economic Impact of Water Pollution Control on the Organic Chemicals Industry," Arthur D. Little, Inc., Cambridge, Mass., 1973). This cost includes a substantial portion of capital (approximately 25 percent) which has been invested as of 1973.

Annual energy requirements for best practicable control technology currently available (BPCTCA) treatment and control are estimated to be 2 trillion BTU (600 million Kwh) for the entire industry. This is relatively insignificant (less than 1 percent) when compared to the total energy requirements for this industry.

(v) **Nonwater quality environmental impact.** The major nonwater quality consideration which may be associated with in-process control measures is the use of alternate means of ultimate disposal. As process raw waste loads are reduced in volume using water conservation and reuse, industry may wish to decide on alternate disposal technologies such as incineration, ocean discharge, deep well injection, and land disposal. Each of these alternatives must be evaluated on a case by case basis within EPA's policy and statutory requirements for air quality, ocean, deep well, and land disposal.

No increased air pollution problems should develop as a result of water treatment processes.

Solid wastes will increase as a result of the removal of suspended solids from process waste water. Best practicable control technology and best available control technology as they are known today, require disposal of the pollutants removed from waste waters in this industry in the form of solid wastes and

liquid concentrates. In most cases these are nonhazardous substances requiring only minimal custodial care. However, some constituents may be hazardous and may require special consideration in order to ensure long term protection of the environment from these hazardous or harmful constituents, special consideration of disposal after use must be made. All landfill sites where such hazardous wastes are disposed should be selected so as to prevent horizontal and vertical migration of these contaminants to ground or surface waters. In cases where geologic conditions may not reasonably ensure this, adequate legal and mechanical precautions (e.g. impervious liners) should be taken to ensure long term protection to the environment from hazardous materials. Where appropriate the location of solid hazardous materials disposal sites should be permanently recorded in the appropriate office of legal jurisdiction.

Thermal pollution is not considered significant for this industry. However, specific situations may require compliance with thermal discharge regulations as water quality considerations dictate.

(vi) Control and treatment technologies. The best practicable control technology currently available (BPTCA) has been uniformly defined for all four major substrate series in the organic chemicals manufacturing industry as biological waste treatment. In determining this technology, it was first necessary to determine the performance of exemplary biological waste treatment systems. These systems consist of various combinations of biological processes: activated sludge, activated sludge preceded by trickling filters, aerated lagoons, anaerobic and aerobic lagoons, and activated sludge followed by aerated lagoons. The following model system was used for cost estimating purposes and does not limit the BPTCA solely to these processes: equalization with pH control and oil separation, activated sludge with chemical addition of coagulants to aid in clarification of suspended solids. Effluent limitations based upon the application of BPTCA biological treatment systems do not preclude the use of equivalent chemical-physical or other treatment systems wherever applicable.

Determining the best available demonstrated control technology (BADCT) for new organic chemical manufacturing sources involved the evaluation of the best in-process control measures and end-of-process technologies. Some in-process controls which would involve the most exemplary practice are as follows:

(a) The substitution of nonprocess contact heat exchangers (using air, water or refrigerants) for direct contact water cooling (barometric condensers);

(b) The use of nonaqueous quench media (e.g. hydrocarbons such as furnace oil) as a substitute for water, where direct contact quench is required;

(c) The recycle of process water, such as between absorber and stripper;

(d) The reuse of process water (after treatment) as make-up to evaporative cooling towers through which noncontact cooling water is circulated;

(e) The use of process water to produce low pressure steam by noncontact heat exchangers in reboil condensers or distillation columns;

(f) The recovery of spent acid or caustic solutions for reuse;

(g) The recovery and reuse of spent catalyst solutions;

(h) The use of nonaqueous solvents for extraction of products.

End-of-process waste treatment systems consist of biological waste treatment with additional suspended solids removal by such processes as flotation, sedimentation, flocculation, coagulation, sand filtration and dual media filtration.

Although biological treatment has been described as the basis for the BADCT, it is recognized that chemical-physical systems such as activated carbon may also be employed as an end-of-process technology or as an in-process recovery system. It may also be necessary to remove certain wastes which are harmful to or interfere with biological waste treatment systems by in-process chemical-physical control processes.

In determining the best available technology economically achievable for all sources by 1983, it was necessary to evaluate the best control and treatment technologies. This analysis was focused on the reduction of the major pollutant, dissolved organic chemicals as measured by the chemical oxygen demand (COD) analysis. Applicable in-process controls as previously described for the BADCT maximize the reductions of raw wastes, particularly from harmful and bio-refractory sources. The model end-of-process system for all four subcategories involves addition of activated carbon to the biological waste treatment model for BADCT. As previously emphasized, this model does not preclude the use of equivalent systems. It has been recognized that in-process controls are frequently used to recover products or by-products and remove substances which interfere with biological treatment systems. These in-process systems may preclude the need for additional end-of-process activated carbon treatment.

(vii) Effluent limitations are based upon the median raw waste load data for each subcategory and the degree of reduction attainable by each treatment and control technology. The following pollutant parameters were limited by application of BPTCA: biochemical oxygen demand, 5 day, total suspended solids (TSS), and phenols. The same pollutant parameters are limited for the new sources (BADCT) and best available technology economically achievable (BATEA) with the addition of a limitation for chemical oxygen demand (COD).

The report entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Major Organic Products Segment of the Organic Chemicals Manufacturing Point Source Category," which details the analysis undertaken in support of the regulations being proposed herein, is available for inspection in the EPA Information Center, Room 227, West

Tower, Waterside Mall, Washington, D.C., at all EPA regional offices, and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the proposed regulations is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions selected by the proposed regulations, or who have placed themselves on a mailing list for this purpose (see EPA's advance notice of public review procedures, 38 FR 21202, Aug. 6, 1973.) An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman.

(c) Summary of public participation.

Prior to the publication, the agencies and groups listed below were consulted and given an opportunity to participate in the development of the effluent limitations guidelines and standards of performance for the organic chemicals manufacturing industry. All participating agencies have been informed of project developments. An initial draft of the Development Document was sent to all participants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) All States and U.S. Territorial Pollution Control Agencies; (3) New England Interstate Water Pollution Control Commission; (4) Ohio River Valley Sanitation Commission; (5) Delaware River Basin Commission; (6) The American Society of Civil Engineers; (7) The American Society of Mechanical Engineers; (8) Hudson River Sloop Restoration, Inc.; (9) The Conservation Foundation; (10) Environmental Defense Fund, Inc.; (11) National Resources Defense Fund, Inc.; (12) National Resources Defense Council; (13) Water Pollution Control Federation; (14) The National Wildlife Federation; (15) The New York Scientists Committee for Public Information; (16) Department of the Interior; (17) Department of Commerce; (18) Water Resources Council; (19) Department of the Treasury; (20) Department of Defense; (21) Atomic Energy Commission; (22) Department of Health, Education, and Welfare; (23) Manufacturing Chemists Association; and (24) Synthetic Organic Chemical Manufacturers Association.

The following organizations responded with comments: Effluent Standards and Water Quality Information Advisory Committee; State of Arizona; State of California; State of Colorado; State of Georgia; State of Hawaii; State of Illinois; State of Kentucky; State of Maine; State of Michigan; State of Missouri; State of New York; State of North Carolina; State of Ohio; State of Washington; Delaware River Basin Commission; American Society of Civil Engineers; Environmental Defense Fund, Inc.; National Resources Defense Council; United States Water Resources Council; Atomic

Energy Commission; Department of Commerce; Department of Defense; Department of Health, Education, and Welfare; Department of the Interior; Monsanto Company; Union Carbide Corporation; and the Manufacturing Chemists Association.

The primary issues raised from those who responded in the development of these proposed effluent limitations guidelines and standards of performance and the treatment of these issues herein are as follows. Public comments on all these suggestions are solicited.

(1) Most commenters expressed general agreement that the process oriented categorization system is reasonable, explains raw waste load variations to a reasonable extent, and is useful in simplifying what is universally understood to be a complex industry. Some commenters questioned the lack of consideration for factors such as age, size of plants, location, waste load variations within categories, and waste load treatability.

The analysis used in categorizing the industry shows that the subcategories adequately characterize the industry as to process technology and raw waste load variations. Hence, this approach will be followed. Additionally, the subcategories also explain to a large extent factors such as age, location, size, treatability, and raw waste load variations. Age of plant is generally not considered to be a relevant factor for most chemical plants since the industry is constantly in the state of technological change. Subcategory A and B product-processes are common to large petrochemical plants located in the South and Gulf Coast areas. These plants are characteristically large volume operations employing the latest control technology. Subcategory C product-processes comprise a large mixture of processes (aqueous phase reactions) and raw waste loads. The higher waste load product-processes (C2) are sometimes characterized of older and less competitive processes; for example, the nitric acid TPA process. Subcategory D product-processes comprise a large variety of specialty organic chemicals manufactured by batch and semicontinuous processes as compared to the continuously separated A, B, and C Subcategories. Effluent limitations are specified for organic dyes and organic pigments in Subcategory D. Subcategory D plants are relatively small in size, tend to employ less efficient process technologies and are generally located in large metropolitan areas in the Northeast. These plants are also most likely to discharge their effluent to municipal waste treatment plants.

(2) Most commenters questioned the contractor's approach in determining effluent limitations for industry segments within subcategories which are based solely on process waste water flow.

This approach did not adequately consider raw waste loads as a factor in determining effluent limitations. Inequities would also occur for plants that practice water conservation and reuse since simi-

lar plants that utilize excessive quantities of water would receive higher effluent load allocations. In developing the effluent limitations that are presented in this document (Part 414) median raw waste loads were determined for each subcategory. Due to the large raw waste load variations within Subcategories B and C, product-process segments within each subcategory were further subcategorized into two groups and the median raw waste load value for each calculated. Finally, effluent limitations were determined from reductions of raw waste loads achievable by the application of EPCOA end-of-process waste treatment systems.

(3) Some commenters expressed the view that the organic chemicals manufacturing industry is too complex for effluent limitations and standards and that the intent of the law would be fulfilled by publishing only guidelines.

Section 301 requires the achievement by July 1, 1977 of "effluent limitations" for point sources. Data obtained for major segments of this industry has indicated that a "range" of achievable limitations is not necessary. In developing effluent limitations and standards, the organic chemicals industry was first categorized. These factors were also evaluated: age, size of plant, location, process, raw waste, treatability, the full range of control and treatment technologies and treatment process variability. Industry categorization and subsequent effluent limitations contained in Part 414 do not require further consideration and variance as a result of these factors. Daily maximum and monthly maximum limitations were based upon normal treatment variations resulting from temperature, wasteload, operations, testing and other factors which were observed from properly designed and operated waste treatment facilities.

(4) Many commenters disagreed with the contractor's recommendation of BOD5, TOC and COD limitations for the best practicable control technology currently available.

The biochemical oxygen demand parameter (BOD5) was determined to be the more appropriate oxygen demand pollutant parameter for biological waste treatment systems as recommended for EPCOA. Other pollutant parameters such as chemical oxygen demand (COD) and total organic carbon (TOC) measure the non-biodegradable as well as the biodegradable pollutants in waste streams. It is not possible, at this time, to establish a direct relationship between BOD5, COD, and TOC that would be appropriate for the various mixtures of pollutants in the treated effluent from biological treatment systems. However, such a correlation may often be determined for a particular waste stream. For such cases, either the COD or TOC pollutant parameters could be specified in lieu of or in addition to the BOD5 parameter.

(5) Some commenters expressed disagreement with the use of activated carbon treatment technology for new sources (BADCT) as well as BATEA.

The best available demonstrated control technology (BADCT) for new sources has been defined as biological treatment with additional suspended solids removal. Best available technology economically achievable (BATEA) which is applicable by July 1, 1983, is defined as biological with activated carbon end-of-process treatment. Although activated carbon waste treatment systems are presently utilized in certain applications, this technology is not universally applicable to all organic chemical waste effluents at this time. It is expected that activated carbon waste treatment systems will be fully developed and available industry-wide by the effective date for the best available technology economically achievable.

(6) Many commenters disagreed with the contractor's cost data.

These costs were reviewed and modifications made where appropriate.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which is available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data is essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing an effluent limitation guideline or standard of performance, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304(b), 306 and 307 of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street SW., Washington, D.C. A copy of preliminary draft contractor reports, the Development Document and economic study referred to above and certain supplementary materials supporting the study of the industry concerned will also be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

All comments received on or before January 16, 1974, will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202).

Dated: December 4, 1973.

JOHN QUARLES,
Acting Administrator.

PART 414—EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES FOR THE ORGANIC CHEMICALS MANUFACTURING INDUSTRY POINT SOURCE CATEGORY

Subpart A—Nonaqueous Processes Subcategory

- Sec.
414.10 Applicability: Description of non-aqueous processes subcategory.
414.11 Special definitions.
414.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.
414.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best available technology economically achievable.
414.14 Standards of performance for new sources.
414.15 Pretreatment standards for new sources.

Subpart B—Processes With Process Water Contact as Steam Diluent or Absorbent Subcategory

- 414.20 Applicability: Definition of processes with process water contact as steam diluent or absorbent subcategory.
414.21 Special definitions.
414.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.
414.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best available technology economically achievable.
414.24 Standards of performance for new sources.
414.25 Pretreatment standards for new sources.

Subpart C—Aqueous Liquid Phase Reaction Systems Subcategory

- 414.30 Applicability: Definition of aqueous liquid phase reaction systems subcategory.
414.31 Special definitions.
414.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.
414.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best available technology economically achievable.
414.34 Standards of performance for new sources.
414.35 Pretreatment standards for new sources.

Subpart D—Batch and Semicontinuous Process Subcategory

- 414.40 Applicability: Description of batch and semi-continuous processes subcategory.
414.41 Special definitions.
414.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.
414.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best available technology economically achievable.
414.44 Standards of performance for new sources.
414.45 Pretreatment standards for new sources.

Subpart A—Nonaqueous Processes Subcategory

§ 414.10 Applicability: Description of the nonaqueous processes subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the manufacture of the following products:

Products	Process descriptions
Cyclohexane.....	Hydrogenation of benzene.
Ethyl benzene.....	Alkylation of benzene with ethylene.
Vinyl Chloride.....	Addition of hydrochloric acid to acetylene.
BTX Aromatics.....	Hydrotreatment of pyrolysis gasoline.
BTX Aromatics.....	Solvent extraction from reformate.

§ 414.11 Special definitions for purposes of this subpart.

(a) The term "phenols" shall mean those components of a waste water amenable to measurement by the method described in 1972 Annual Book of ASTM Standards, Part 23, 1972, Standard D1783-70, pg. 415.

(b) The following abbreviations shall mean: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "COD" shall mean chemical oxygen demand; (iii) "TSS" shall mean total suspended non-filterable solids; (iv) "kg" shall mean kilogram(s); (v) "kgg" shall mean 1000 kilograms; and (vi) "lb" shall mean pound(s).

§ 414.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart:

Effluent characteristics	Effluent limitation
BOD5	Maximum for any one day 0.045 kg/kg of product (0.045 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.025 kg/kg of product (0.025 lb/1000 lb).
TSS	Maximum for any one day 0.038 kg/kg of product (0.038 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.023 kg/kg of product (0.023 lb/1000 lb).
Phenols	Maximum for any one day 0.0005 kg/kg of product (0.0005 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00025 kg/kg of product (0.00025 lb/1000 lb).
pH	Within the range of 6.0 to 9.0.

§ 414.13 Effluent limitations guidelines representing the degree of reduction attainable by the application of best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

Effluent characteristics	Effluent limitation
COD	Maximum for any one day 0.04 kg/kg of product (0.04 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.02 kg/kg of product (0.02 lb/1000 lb).
BOD5	Maximum for any one day 0.004 kg/kg of product (0.004 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.002 kg/kg of product (0.002 lb/1000 lb).
TSS	Maximum for any one day 0.006 kg/kg of product (0.006 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.004 kg/kg of product (0.004 lb/1000 lb).
Phenols	Maximum for any one day 0.00005 kg/kg of product (0.00005 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.000025 kg/kg of product (0.000025 lb/1000 lb).
pH	Within the range of 6.0 to 9.0.

§ 414.14 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

Effluent characteristics	Effluent limitation
BOD5	Maximum for any one day 0.02 kg/kg of product (0.02 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.012 kg/kg of product (0.012 lb/1000 lb).
COD	Maximum for any one day 0.15 kg/kg of product (0.15 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.10 kg/kg of product (0.10 lb/1000 lb).

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
TSS-----	Maximum for any one day: 0.012 kg/kg of product (0.012 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.0075 kg/kg of product (0.0075 lb/1000 lb).
Phenols-----	Maximum for any one day: 0.00010 kg/kg of product (0.00010 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.00005 kg/kg of product (0.00005 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.15 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the nonaqueous processes subcategory, which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standards set forth in 40 CFR, Part 136, except that for the purposes of this section, 40 CFR 123.133, shall read as follows: "In addition to the prohibitions set forth in § 123.133, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 414.14: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart B--Processes With Process Water Contact as Steam Diluent or Absorbent Subcategory

§ 414.20 Applicability: Description of the processes with process contact as steam diluent or absorbent subcategory.

The provisions of this subpart are applicable to the process waste water discharges resulting from the manufacture of the following products:

<i>B1 products</i>	<i>B1 process descriptions</i>
Ethylene and propylene-----	Pyrolysis of naphtha or liquid petroleum gas.
Butadiene-----	Co-product of ethylene.
Methanol-----	Steam reforming of natural gas.
Acetone-----	Dehydrogenation of isopropanol.
Acetaldehyde-----	Dehydrogenation of ethanol.
Vinyl acetate-----	Synthesis of ethylene and acetic acid.
<i>B2 products</i>	<i>B2 process descriptions</i>
Butadiene-----	Dehydrogenation of n-butane.
Butadiene-----	Oxidative dehydrogenation of n-butane.
Acetylene-----	Partial oxidation of methane.
Ethylene oxide-----	Catalytic oxidation of ethylene.

<i>B2 products</i>	<i>B2 process descriptions</i>
Formaldehyde-----	Oxidation of methanol.
Ethylene dichloride-----	Direct chlorination of ethylene.
Vinyl chloride-----	Cracking of ethylene dichloride.
Styrene-----	Dehydrochlorination of vinyl chloride.
Methyl amines-----	Aldition of ammonia to methanol.

§ 414.21 Special definitions.

For purposes of this subpart:

(a) The term "phenols" shall mean those components of a waste water amenable to measurement by the method described in 1972 Annual Book of ASTM Standards, Part 23, 1972, Standard D 173-70, pp. 445.

(b) The following abbreviations shall mean: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "COD" shall mean chemical oxygen demand; (iii) "TSS" shall mean total suspended non-filterable solids; (iv) "kg" shall mean kilogram(s); (v) "lb" shall mean pound(s).

§ 414.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for ethylene, propylene, butadiene (co-product of ethylene), methanol, acetone, acetaldehyde (dehydrogenation of ethanol), and vinyl acetate manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day: 0.10 kg/kg of product (0.10 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.06 kg/kg of product (0.06 lb/1000 lb).
TSS-----	Maximum for any one day: 0.10 kg/kg of product (0.10 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.06 kg/kg of product (0.06 lb/1000 lb).
Phenols-----	Maximum for any one day: 0.0013 kg/kg of product (0.0013 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.00066 kg/kg of product (0.00066 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for butadiene (dehydrogenation or oxidative dehydrogenation of n-butane), acetylene, ethylene oxide, formaldehyde, ethylene dichloride, vinyl chloride, sty-

rene and methyl amines manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day: 0.80 kg/kg of product (0.80 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.17 kg/kg of product (0.17 lb/1000 lb).
TSS-----	Maximum for any one day: 0.27 kg/kg of product (0.27 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.16 kg/kg of product (0.16 lb/1000 lb).
Phenols-----	Maximum for any one day: 0.0034 kg/kg of product (0.0034 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.0017 kg/kg of product (0.0017 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for ethylene, propylene, butadiene (co-product of ethylene), methanol, acetone, acetaldehyde (dehydrogenation of ethanol), and vinyl acetate manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
COD-----	Maximum for any one day: 0.13 kg/kg of product (0.13 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.065 kg/kg of product (0.065 lb/1000 lb).
BOD5-----	Maximum for any one day: 0.008 kg/kg of product (0.008 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.004 kg/kg of product (0.004 lb/1000 lb).
TSS-----	Maximum for any one day: 0.017 kg/kg of product (0.017 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.010 kg/kg of product (0.010 lb/1000 lb).
Phenols-----	Maximum for any one day: 0.00013 kg/kg of product (0.00013 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days: 0.000065 kg/kg of product (0.000065 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for butadiene (dehydrogenation or oxidative chlorination of *n*-butane), acetylene, ethylene oxide, formaldehyde, ethylene dichloride, vinyl chloride, styrene, and methyl amines manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
COD-----	Maximum for any one day 0.74 kg/kg of product (0.74 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.37 kg/kg of product (0.37 lb/1000 lb).
BOD5-----	Maximum for any one day 0.02 kg/kg of product (0.02 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.01 kg/kg of product (0.01 lb/1000 lb).
TSS-----	Maximum for any one day 0.0043 kg/kg of product (0.0043 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.0025 kg/kg of product (0.0025 lb/1000 lb).
Phenols-----	Maximum for any one day 0.00034 kg/kg of product (0.00034 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00017 kg/kg of product (0.00017 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.21 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for ethylene, propylene, butadiene (coproduct of ethylene), methanol, acetone, acetaldehyde (dehydrogenation of ethanol), and vinyl acetate manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 0.06 kg/kg of product (0.06 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.035 kg/kg of product (0.035 lb/1000 lb).
COD-----	Maximum for any one day 0.55 kg/kg of product (0.55 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.40 kg/kg of product (0.40 lb/1000 lb).

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
TSS-----	Maximum for any one day 0.033 kg/kg of product (0.033 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.02 kg/kg of product (0.02 lb/1000 lb).
Phenols-----	Maximum for any one day 0.00025 kg/kg of product (0.00025 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00013 kg/kg of product (0.00013 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for butadiene (dehydrogenation of *n*-butane), acetylene, ethylene oxide, formaldehyde, ethylene dichloride, vinyl chloride, styrene, and methyl amines manufacturing on the basis of production.

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 0.15 kg/kg of product (0.15 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.085 kg/kg of product (0.085 lb/1000 lb).
COD-----	Maximum for any one day 3.0 kg/kg of product (3.0 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 2.2 kg/kg of product (2.2 lb/1000 lb).
TSS-----	Maximum for any one day 0.033 kg/kg of product (0.033 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.05 kg/kg of product (0.05 lb/1000 lb).
Phenols-----	Maximum for any one day 0.00068 kg/kg of product (0.00068 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00034 kg/kg of product (0.00034 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.25 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the processes with process water contact as steam diluent or absorbent subcategory, which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standards set forth in 40 CFR Part 128, except that for the purposes of this section, 40 CFR 128.133, shall read as follows: "In addition to the prohibitions set forth in § 128.133, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major con-

tributing industry shall be the standard of performance for new sources specified in 40 CFR 414.21: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart C—Aqueous Liquid Phase Reaction Systems Subcategory

§ 414.30 Applicability: Description of the aqueous liquid phase reaction systems subcategory.

The provisions of this subpart are applicable to the process waste water discharges resulting from the manufacturing of the following products:

<i>C1 products</i>	<i>C1 process descriptions</i>
Acetaldehyde-----	Oxidation of ethylene with air.
Acetaldehyde-----	Oxidation of ethylene with oxygen.
Acetic acid-----	Oxidation of acetaldehyde.
Acrylic acid-----	Synthesis with carbon monoxide and acetylene.
Aniline-----	Nitration and hydrogenation of benzene.
Bisphenol A-----	Condensation of phenol and acetone.
Coal tar-----	Pitch forming.
Coal tar-----	Distillation.
Dimethyl terephthalate.	Esterification of terephthalic acid.
Ethylene glycol----	Hydrogenation of ethylene oxide.
Oxo chemicals-----	Carbonylation and condensation.
Terephthalic acid--	Catalytic oxidation of <i>p</i> -xylene.
Terephthalic acid-- (polymer grade).	Purification of crude terephthalic acid.
<i>C2 products</i>	<i>C2 process descriptions</i>
Acrylates-----	Esterification of acrylic acids.
<i>p</i> -Cresol-----	Sulfonation of toluene.
Methyl methacrylate.	Acetone cyanohydrin process.
Terephthalic acid--	Nitric acid process.
Tetraethyl lead----	Addition of ethyl chloride to lead amalgam.

§ 414.31 Special definitions.

For purposes of this subpart:

(a) The term "phenols" shall mean those components of a waste water amenable to measurement by the method described in "1972 Annual Book of ASTM Standards", Part 23, 1972, Standard D1783-70, page 445.

(b) The following abbreviations shall mean: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "COD" shall mean chemical oxygen demand; (iii) "TSS" shall mean total suspended non-filterable solids; (iv) "kg" shall mean kilogram(s); (v) "kkg" shall mean 1000 kilograms; and (vi) "lb" shall mean pound(s).

§ 414.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for acetaldehyde (oxidation of ethylene with air or oxygen), acetic acid, acrylic acid, aniline, bisphenol A, coal tar, dimethyl terephthalate, ethylene glycol, oxo chemicals, terephthalic acid (oxidation of p-xylene), and polymer grade terephthalic acid manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5 -----	Maximum for any one day 0.30 kg/kg of product (0.30 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.17 kg/kg of product (0.17 lb/1000 lb).
TSS -----	Maximum for any one day 0.27 kg/kg of product (0.27 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kg of product (0.16 lb/1000 lb).
Phenols -----	Maximum for any one day 0.0034 kg/kg of product (0.0034 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.0017 kg/kg of product (0.0017 lb/1000 lb).
pH -----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for acrylates, p-cresol, methyl methacrylate, terephthalic acid (nitric acid process) and tetraethyl lead manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5 -----	Maximum for any one day 1.5 kg/kg of product (1.5 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.9 kg/kg of product (0.9 lb/1000 lb).
TSS -----	Maximum for any one day 0.80 kg/kg of product (0.80 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.49 kg/kg of product (0.49 lb/1000 lb).
Phenols -----	Maximum for any one day 0.011 kg/kg of product (0.011 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.005 kg/kg of product (0.005 lb/1000 lb).
pH -----	Within the range of 6.0 to 9.0.

§ 414.33 Effluent limitations guidelines representing the degree of reduction attainable by the application of best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for acetaldehyde (oxidation of ethylene with air or oxygen), acetic acid, acrylic acid, aniline, bisphenol A, coal tar, dimethyl terephthalate, ethylene glycol, oxo chemicals, terephthalic acid (oxidation of p-xylene), and polymer grade terephthalic acid manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
COD -----	Maximum for any one day 0.78 kg/kg of product (0.78 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.39 kg/kg of product (0.39 lb/1000 lb).
BOD5 -----	Maximum for any one day 0.62 kg/kg of product (0.62 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.01 kg/kg of product (0.01 lb/1000 lb).
TSS -----	Maximum for any one day 0.0083 kg/kg of product (0.0083 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.005 kg/kg of product (0.005 lb/1000 lb).
Phenols -----	Maximum for any one day 0.00068 kg/kg of product (0.00068 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00034 kg/kg of product (0.00034 lb/1000 lb).
pH -----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for acrylates, p-cresol, methyl methacrylate, terephthalic acid (nitric acid process) and tetraethyl lead manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
COD -----	Maximum for any one day 14.4 kg/kg of product (14.4 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 7.2 kg/kg of product (7.2 lb/1000 lb).
BOD5 -----	Maximum for any one day 0.4 kg/kg of product (0.4 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.2 kg/kg of product (0.2 lb/1000 lb).

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
TSS -----	Maximum for any one day 0.27 kg/kg of product (0.27 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kg of product (0.16 lb/1000 lb).
Phenols -----	Maximum for any one day 0.0022 kg/kg of product (0.0022 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.0011 kg/kg of product (0.0011 lb/1000 lb).
pH -----	Within the range of 6.0 to 9.0.

§ 414.34 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

(a) The following limitations constitute the maximum permissible discharge for acetaldehyde (oxidation of ethylene with air or oxygen), acetic acid, acrylic acid, aniline, bisphenol A, coal tar, dimethyl terephthalate, ethylene glycol, oxo chemicals, terephthalic acid (oxidation of p-xylene), and polymer grade terephthalic acid manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5 -----	Maximum for any one day 0.15 kg/kg of product (0.15 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.035 kg/kg of product (0.035 lb/1000 lb).
COD -----	Maximum for any one day 3.3 kg/kg of product (3.3 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 2.3 kg/kg of product (2.3 lb/1000 lb).
TSS -----	Maximum for any one day 0.083 kg/kg of product (0.083 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.05 kg/kg of product (0.05 lb/1000 lb).
Phenols -----	Maximum for any one day 0.00068 kg/kg of product (0.00068 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.00034 kg/kg of product (0.00034 lb/1000 lb).
pH -----	Within the range of 6.0 to 9.0.

(b) The following limitations constitute the maximum permissible discharge for acrylates, p-cresol, methyl methacrylate, terephthalic acid (nitric acid

process) and tetraethyl lead manufacturing on the basis of production:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 0.75 kg/kg of product (0.75 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.40 kg/kg of product (0.40 lb/1000 lb).
COD-----	Maximum for any one day 60 kg/kg of product (60 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 40 kg/kg of product (40 lb/1000 lb).
TSS-----	Maximum for any one day 0.27 kg/kg of product (0.27 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.16 kg/kg of product (0.16 lb/1000 lb).
Phenols-----	Maximum for any one day 0.0023 kg/kg of product (0.0023 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.0011 kg/kg of product (0.0011 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.35 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the aqueous liquid phase reaction systems subcategory, which is an industrial user of a publicly owned treatment works, (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standards set forth in 40 CFR Part 128, except that for purposes of this section 40 CFR 128.133, shall read as follows: "In addition to the prohibitions set forth in § 128.133, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR 414.34: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart D—Batch and Semicontinuous Process Subcategory

§ 414.40 Applicability: Description of the batch and semicontinuous processes subcategory.

The provisions of this subpart are applicable to process waste water discharges resulting from the manufacture of the following products:

<i>Products</i>	<i>Process description</i>
Organic dyes: Azole Dyes and Compounds	Batch and semicontinuous processes.

§ 414.41 Special definitions.

For the purposes of this subpart:

(a) The term "phenols" shall mean those components of a waste water discharge to measurement by the method described in 1972 Annual Book of ASTM Standards, Part 23, 1972, Standard D1783-70, page 413.

(b) The following abbreviations shall mean: (i) "BOD5" shall mean five day biochemical oxygen demand; (ii) "COD" shall mean chemical oxygen demand; (iii) "TSS" shall mean total suspended non-filterable solids; (iv) "kg" shall mean kilogram(s); (v) "kgkg" shall mean 1000 kilograms; and (vi) "lb" shall mean pound(s).

§ 414.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 15.0 kg/kg of product (15.0 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 9.0 kg/kg of product (9.0 lb/1000 lb).
TSS-----	Maximum for any one day 13.0 kg/kg of product (13.0 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 7.88 kg/kg of product (7.88 lb/1000 lb).
Phenols-----	Maximum for any one day 0.17 kg/kg of product (0.17 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.088 kg/kg of product (0.088 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.43 Effluent limitations guidelines representing the degree of reduction attainable by the application of best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
COD-----	Maximum for any one day 130.0 kg/kg of product (130.0 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 65.0 kg/kg of product (65.0 lb/1000 lb).

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 0.80 kg/kg of product (0.80 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.40 kg/kg of product (0.40 lb/1000 lb).
TSS-----	Maximum for any one day 2.19 kg/kg of product (2.19 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 1.30 kg/kg of product (1.30 lb/1000 lb).
Phenols-----	Maximum for any one day 0.017 kg/kg of product (0.017 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.0085 kg/kg of product (0.0085 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.44 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

<i>Effluent characteristics</i>	<i>Effluent limitation</i>
BOD5-----	Maximum for any one day 1.5 kg/kg of product (1.5 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.85 kg/kg of product (0.85 lb/1000 lb).
COD-----	Maximum for any one day 540 kg/kg of product (540 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 390 kg/kg of product (390 lb/1000 lb).
TSS-----	Maximum for any one day 4.38 kg/kg of product (4.38 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 2.60 kg/kg of product (2.60 lb/1000 lb).
Phenols-----	Maximum for any one day 0.034 kg/kg of product (0.034 lb/1000 lb). Maximum average of daily values for any period of thirty consecutive days 0.017 kg/kg of product (0.017 lb/1000 lb).
pH-----	Within the range of 6.0 to 9.0.

§ 414.45 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the batch and semicontinuous processes

subcategory, which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 303 of the Act, if it were to discharge pollutants to navigable waters), shall be the standards set forth in 40 CFR Part 122 except that for the purposes of this section, 40 CFR 122.133 shall read as follows: "In addition to the

prohibitions set forth in § 122.133, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in 40 CFR § 14.40. Provided, That, if the publicly owned treatment works which

receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant.

[FR Doc. 73-25115 Filed 12-14-73; 8:45 am]

CCR 000036427

ENVIRONMENTAL PROTECTION AGENCY

INORGANIC CHEMICALS
MANUFACTURING
POINT SOURCE
CATEGORY

Effluent Limitations Guidelines and Proposed Guidelines for Existing Sources to Pretreatment Standards for Incompatible Pollutants

Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL
PROTECTION AGENCYSUBCHAPTER N—EFFLUENT GUIDELINES AND
STANDARDSPART 415—INORGANIC CHEMICALS
MANUFACTURING POINT SOURCE
CATEGORY

On October 11, 1973 notice was published in the FEDERAL REGISTER, (38 FR 28174), that the Environmental Protection Agency (EPA or Agency) was proposing effluent limitations guidelines for existing sources and standards for new sources within the aluminum chloride production subcategory, aluminum sulfate production subcategory, calcium carbide production subcategory, calcium chloride production subcategory, calcium oxide and hydroxide production subcategory, chlorine and sodium or potassium hydroxide production subcategory, hydrochloric acid production subcategory, hydrofluoric acid production subcategory, hydrogen peroxide production subcategory, nitric acid production subcategory, potassium metal production subcategory, potassium dichromate production subcategory, potassium sulfate production subcategory, sodium bicarbonate production subcategory, sodium carbonate production subcategory, sodium chloride production subcategory, sodium dichromate and sodium sulfate production subcategory, sodium metal production subcategory, sodium silicate production subcategory, sodium sulfite production subcategory, sulfuric acid production subcategory, and titanium dioxide production subcategory of the inorganic chemicals manufacturing category of point sources.

The purpose of this notice is to establish final effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources in the inorganic chemicals manufacturing category of point sources, by amending 40 CFR Chapter I, Subchapter N, to add a new part 415. This final rulemaking is promulgated pursuant to sections 301, 304(b) and (c), 305(b) and (c) and 307(c) of the Federal Water Pollution Control Act, as amended, (the Act); 33 U.S.C. 1251, 1311, 1314(b) and (c), 1316(b) and (c) and 1317(c); 86 Stat. 815 et seq.; Pub. L. 92-500. Regulations regarding cooling water intake structures for all categories of point sources under section 316(b) of the Act will be promulgated in 40 CFR Part 402.

In addition, the EPA is simultaneously proposing a separate provision which appears in the proposed rules section of the FEDERAL REGISTER, stating the application of the limitations and standards set forth below to users of publicly owned treatment works which are subject to pretreatment standards under section 307(b) of the Act. The basis of that proposed regulation is set forth in the associated notice of proposed rulemaking.

The legal basis, methodology and factual conclusions which support promul-

gation of this regulation were set forth in substantial detail in the notice of public review procedures, published August 6, 1973 (38 FR 21202) and in the notice of proposed rulemaking for the aluminum chloride production subcategory, aluminum sulfate production subcategory, calcium carbide production subcategory, calcium chloride production subcategory, calcium oxide and hydroxide production subcategory, chlorine and sodium or potassium hydroxide production subcategory, hydrochloric acid production subcategory, hydrofluoric acid production subcategory, hydrogen peroxide production subcategory, nitric acid production subcategory, potassium metal production subcategory, potassium dichromate production subcategory, potassium sulfate production subcategory, sodium bicarbonate production subcategory, sodium carbonate production subcategory, sodium chloride production subcategory, sodium dichromate and sodium sulfate production subcategory, sodium metal production subcategory, sodium silicate production subcategory, sodium sulfite production subcategory, sulfuric acid production subcategory, and titanium dioxide production subcategory. In addition, the regulations as proposed were supported by two other documents: (1) The document entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the major inorganic products Segment of the Inorganic Chemicals Manufacturing Point Source Category" (August 1973) and (2) the document entitled "Economic Analysis of Proposed Effluent Guidelines. Inorganic Chemicals, Alkali and Chlorine Industries (Major Products)" (August, 1973). Both of these documents were made available to the public and circulated to interested persons at approximately the time of publication of the notice of proposed rulemaking.

Interested persons were invited to participate in the rulemaking by submitting written comments within 30 days from the date of publication. Prior public participation in the form of solicited comments and responses from the States, Federal agencies, and other interested parties were described in the preamble to the proposed regulation. The EPA has considered carefully all of the comments received and a discussion of these comments with the Agency's response thereto follows. The regulation as promulgated contains some significant departures from the proposed regulation. The following discussion outlines the reasons why these changes were made and why other suggested changes were not made.

SUMMARY OF MAJOR COMMENTS

The following responded to the request for written comments which was contained in the preamble to the proposed regulation: Airco Carbide, Allied Chemical Corporation, American Cyanamid Company, American Smelting & Refining Company, Atomic Energy Commission, BASF Wyandotte Corporation, B. F. Goodrich Chemical Company, Califor-

nia—State Water Resources Control Board, Chemetron Corporation, County Sanitation Districts of L.A. County, Detrex Chemical Industries, Diamond Shamrock Chemical Company, Dow Chemicals USA, E. I. DuPont de Nemours & Company, EPA Region VIII, Ferroalloys Association, Georgia-Pacific Corporation, Great Salt Lake Minerals & Chemicals Corporation, Hooker-Industrial Chemical Division, Kaiser Aluminum & Chemical Corporation, Kerr-McGee Chemical Corporation, Leslie Salt Company, Lowry Associates, Manufacturing Chemists Association, Michigan Chemical Corporation, Midwest Carbide Corporation, Monsanto, National Paint & Coating Association, NL Industries, Titanium Pigments Operations, N.J. Zinc Company (Bethlehem, Pa.), N.J. Zinc Company (Gloucester, N.J.), Olin Chemicals, Pacific Carbide & Alloys Company, Pennwalt Corporation, Philadelphia Quartz Company, Pittsburgh Plate Glass Industries, Salt Institute, San Francisco Bay Conservation & Development Commission, SMC Glidden-Durkee, State of Michigan—Department of Natural Resources, State of N. Y. Department of Environmental Conservation, State of Utah—Attorney General, State of Utah—Department of Natural Resources, State of Utah—Department of Social Services, Stauffer Chemical Company, The Chlorine Institute, Inc., Texas Chemical; Union Carbide Corporation, U.S. Department of Commerce, U.S. Department of the Interior, Vulcan Materials Company, Water Pollution Control Federation and Western Salt Company. The following is a summary of the significant comments and the Agency's response to those comments.

(1) Because of wide variations in plant age and size, product mix, manufacturing processes, and raw materials, the guidelines should be expressed as ranges. Many commenters recommended adoption of ESWQIAC's proposed methodology.

The approach taken in developing effluent limitations guidelines and standards of performance for the inorganic chemicals manufacturing industry was to examine all variables and segment the industry into workable subcategories consistent with these variations. Twenty-two subcategories have been established based on the chemical product manufactured. In cases where two dissimilar processes are used to manufacture the same product, separate limitations have been established within the subcategory. Thus, ranges are provided for, as are other factors, by segmenting the inorganic chemicals manufacturing point source category into discrete subcategories, each with its own limitation. ESWQIAC's proposal is under evaluation as a contribution toward future refinements on guidelines for some industries. The committee has indicated that their proposed methodology could not be developed in sufficient time to be available for the current phase of guideline promulgation, which is proceeding according to a court-ordered schedule. Its present state of development does not provide sufficient

evidence to warrant the Agency's delaying issuance of any standard in hopes that an alternative approach might be preferable.

(2) Many commenters stated that a guideline requiring "no discharge of process waste water pollutants" is ambiguous. Also, they stated that the definition of "pollutant" should clearly exclude innocuous dissolved solids, such as chlorides and sulfates.

The terms "process waste water", "process waste water pollutants", and "discharge of pollutant(s)" are clearly defined in 40 CFR Part 401. Reference to these definitions is included whenever these terms are used. "No" discharge of process waste water pollutants to navigable waters means that process waste water pollutants may not be discharged to navigable water in quantities greater than the detectable limits using the test methods presented in 40 CFR 136 "Guidelines establishing test procedures for the analysis of pollutants" published in the FEDERAL REGISTER, October 16, 1973. The term "pollutant(s)" as defined in 40 CFR Part 401 includes all dissolved materials, such as chlorides and sulfate. Where a discharge of process waste water pollutants has been allowed for chemical subcategories, it was concluded that only the selected pollutant parameters could be economically limited by technology-based standards. In some cases, however, where total recycle, sale, recovery, or reuse of process waste water is technically and economically feasible, the discharge of all process waste water pollutants has been limited.

(3) Some comments stated that the proposed pretreatment standards preclude industrial use of public treatment works.

The methodology for applying effluent limitation guidelines to discharges from point sources to municipal treatment systems has been given further consideration by the Agency. The pollutants present in the waste water generated by the manufacture of inorganic chemicals have been identified. Discharge of these pollutants to municipal treatment systems is allowed in limited quantities so as to ensure adequate treatment and to prevent interference with the performance of such a system. These pretreatment standards for existing point sources are being proposed as an amendment to 40 CFR Part 415.

(4) Many commenters stated that the cost estimates were low and did not include costs for auxiliary equipment, land acquisitions, sludge disposal, or research and development work. Additionally, it was said that the impact of these costs has been understated.

Cost information was obtained directly from industry during plant visits, from engineering firms and equipment suppliers, and from available literature. This data has been obtained from the best sources available to the Agency and is believed to be representative of actual capital and operating costs.

In cases where commenters have supplied additional cost data, satisfactorily documented and detailed, to indicate

that the initial estimates are low, the figures have been revised and the proposed guidelines altered accordingly. Consideration has also been given to comments questioning the magnitude of the projected economic impact. Specific comments are summarized for the chemical subcategory to which they apply.

(5) Some commenters questioned the use of a factor of two to relate daily maximums to 30-day averages.

Extensive, long-term data is not available for each of the 22 chemical subcategories. It was necessary, therefore, to rely on data from other segments of the inorganic chemicals industry, as well as data from other industrial categories. Based on this information and using good engineering judgement on the performance reliability of recommended treatment systems, a factor of two appears generous.

(6) Many commenters said that limitations should be clearly defined as representing the net pollutant contributions as a result of the specific manufacturing process being limited. They question whether allowances should be made for pollutants present in the intake water.

If not otherwise specified, the effluent limitation numbers in this regulation will be applied as absolute discharge limitations. The use of such absolute limitations is generally appropriate since the concentration of a pollutant remaining after the application of a given treatment technology is relatively independent of minor variations in the pollutant concentration in the waste or the source of the pollutant. EPA intends to amend the NPDES regulations to take into account, when appropriate, pollutants already existing in the stream, so that in certain cases an effluent limitation may be adjusted to take into account pollutants entering with a discharger's supply providing the water is withdrawn from the same source into which it is discharged. If the source is other than the receiving waterbody, the effluent standards will be applied as absolute limitations without adjustment.

(7) Aluminum chloride. Some commenters said that a market may not exist for the scrubber water (a 28 percent aluminum chloride solution) and that costs to purify and concentrate the solution may be prohibitive. They recommend a discharge allowance be made for the scrubber waste water effluent.

Only "yellow grade" aluminum chloride, made with an excess of chlorine, requires wet scrubbing techniques on the gaseous waste stream. Two plants, representing approximately 40 percent of the total annual production of aluminum chloride, currently are able to sell their dilute scrubber solution. A re-evaluation of the costs to concentrate the dilute scrubber solution indicates that costs for concentration are approximately 0.4 percent of the selling price of aluminum chloride.

(8) Aluminum sulfate. Some commenters stated that recycle of leaks and spills may contaminate high purity grades of product. Also, aluminum clays may be used as the raw material in

place of bauxite which significantly effects the raw waste load. The commenters said that area for ponds may not be available at all locations. Also, net rainfall will preclude the use of ponds. When a dry product is produced, some commenters questioned whether recycling water increases the evaporative load on equipment, increasing energy requirements.

The wastes generated in refining bauxite to produce an iron-free hydrated alumina material are not considered to be process waste water pollutants resulting from the manufacture of iron-free aluminum sulfate. Process waste water pollutants generated by the refinement of bauxite ore are subject to the effluent guidelines to be promulgated in 40 CFR 421. If these wastes are segregated from leaks and spills, contamination preventing recycle is not a problem. Other raw materials than bauxite, including clays and aluminum hydrate, generate greater quantities of raw waste because of impurities, but the waste water constituents are similar and the process is the same. Thus, although the use of different raw materials affects the raw waste load, it does not preclude the use of settling, clarification, and reuse of process waste water as recommended. The guidelines do not require plants to use large ponds to achieve no discharge of process waste water pollutants. Clarifiers may be used in locations where land is not available for funding. The costs for clarifiers are similar to the costs for ponding. A provision has been established to allow discharge from impoundments under some conditions of high rainfall.

(9) Calcium carbide. Calcium carbide manufacturers stated that it should be considered a ferroalloy because: (a) air standards consider it a ferroalloy; (b) all plants are members of Ferroalloy Assoc.; (c) it is usually made in complexes with ferroalloys; (d) it uses similar processes in similar ovens. Commenters also expressed concern that the only two plants achieving the proposed guidelines are unique, using an uncovered furnace. Other plants recover gaseous carbon monoxide and must scrub the gas to remove impurities. Because of high temperatures dry bag collection of dust is not feasible.

A portion of calcium carbide is produced in both the ferroalloy industry and the inorganic chemicals industry. The regulation presented herein is applicable to discharges from calcium carbide production in open furnaces. Plants employing this manufacturing process are not located in ferroalloy complexes. Effluent limitations for waste water discharges from calcium carbide production in covered furnaces will be established in a forthcoming regulation as part of the ferroalloy industry. This distinction will accommodate differences in process waste water from plants using open furnaces and those using covered furnaces.

(10) Calcium oxide and calcium hydroxide. Many commenters mentioned that costs for converting to a dry bag house from a wet scrubber system are economically unjustified. They also state

that reuse of the water is not possible because of impurities.

The guidelines do not require conversion to a dry air pollution abatement system. An alternate treatment system consists of settling suspended solids and total recycle of the supernatant to the scrubbing system. At least one lime plant currently employs this treatment system to achieve the guidelines.

(11) Chlorine. Some commenters pointed out the fact that the proposed mercury limit for the mercury cell process is not achievable using the best practicable technology and that the location of mercury monitoring should be clearly specified as leaving the mercury treatment facility. They further state that no discharge of process waste water pollutants is not demonstrated in plants using either the diaphragm or mercury cell process and appears to be technically impossible. It should definitely not be required of new sources. Some commenters said that the lead limitation appears to be unachievable. They state that there is no rationale for having a more stringent TSS limitation on diaphragm cell plants than mercury cell plants.

While three plants are currently meeting the proposed guidelines, supplied data indicates that the proposed mercury limitation is not being achieved in certain plants employing the best practicable control technology currently available. The standard has been revised, considering the effluent reduction achieved by a greater number of plants. The limitation is intended to indicate mercury levels in the waste stream from the mercury treatment facility because mercury residuals may not be controllable. This is clearly stated in 40 CFR 415.61. The presence of lead in the effluent from diaphragm cell plants results from the development of cracks around protective resin seals which encase underlying lead mountings. Currently, one-third of the industry is using anodes which do not require lead mountings. Industry representatives state that another one-third are seriously considering conversion. The lead limitation is the average value discharged from three plants which have not converted to lead-free anodes. The new source performance standards of no discharge of process waste water pollutants is not presently demonstrated, and research and development may require several years. Therefore, new sources will be required to meet the best performance demonstrated in exemplary plants. The suspended solids limitation has been reevaluated for discharges from the diaphragm cell process.

(12) Many commenters stated that a provision should be established to allow for the discharge of leaks, spills, and washdown waste waters.

Spills, leaks, and washdown waste waters may be minimized or eliminated by good housekeeping, operation, and maintenance. The process waste water should be segregated from other waste streams and may be collected and fed back into the manufacturing process.

(13) Sulfuric acid. Some commenters stated that single adsorption plants can not eliminate their scrubber effluent, leaks and spills, or start-up and shutdown waste waters.

Good housekeeping, operation and equipment maintenance will minimize the volume of waste waters to a point where reuse or sale of the recovered acid product is feasible.

(14) Hydrogen peroxide—organic process. Some commenters said that total process waste water recycle is not possible because of organic impurities present in the waste streams.

The technology to achieve no discharge of process waste water pollutants is considered to be best available and best demonstrated technology. Organic solvents of the type used in the manufacturing process can be removed by skimming and carbon adsorption treatment. Best practicable technology consists of oil separation and clarification, treatments presently used in the industry to attain the required pollutant reductions.

(15) Potassium dichromate. Some commenters mentioned that replacement of barometric condensers with noncontact heat exchangers has not been demonstrated and should not be required by 1977. They also questioned whether reuse of sodium dichromate is possible in all plants.

Recycle of unreacted sodium dichromate is technically possible in all plants if segregation of waste streams and good housekeeping is practiced. Conversion to noncontact heat exchangers is being accomplished in the potassium dichromate industry. Noncontact heat exchangers are widely used and have been a proven technology in the chemical industry for many years.

(16) Sodium. Commenters stated that TSS removals to less than 50 mg/l have not been demonstrated in waste streams resulting from sodium manufacturing.

The technologies required to achieve the proposed TSS limitation are widely demonstrated. These alternatives include sedimentation, flocculation, and clarification. The suspended solids are primarily the decomposition products of the cells and alkaline salts.

(17) Sodium sulfite. Several commenters stated that no discharge of process waste water pollutants is based upon recovery of sodium sulfate which is not possible because of a limited market. Also, wastes contain impurities other than sulfates. Returning these impurities to the process is not possible. Some commenters said that the COD limitation is confusing.

The COD limitation is in the units recommended in Standard Methods for Waste Water Analysis. The guidelines do not require the sale of sodium sulfate. Satisfactory land disposal of the unused sodium sulfate would cost approximately two percent of the selling price of sodium sulfite. The waste waters may be segregated, treated and recycled to the process.

(18) Sodium carbonate. Some commenters stated that gravity sedimentation

will not reduce the suspended solids concentration to the recommended 25 mg/l concentration. They say particles are very fine and a filter precoat is required. A small suspended solids reduction is not justified by the cost. Various manufacturers recommend using a suspended solids concentration of 50 mg/l as it is compatible with actual settling pond performance and is a more "realistic and achievable level".

The treatment technologies required to attain the effluent pollutant reduction proposed are conventional and proven treatment systems. Treatment alternatives include sedimentation basins, flocculators and clarifiers.

(19) Sodium dichromate. Some commenters mentioned that technology has not been demonstrated to achieve no discharge of process waste water pollutants and that it is technically impossible. The 1977 standard is based on a plant which is only two years old. Commenters question whether existing plants can economically achieve its effluent quality.

The control technology used at the exemplary plant consists of leak and spill containment and pickle liquor treatment for chromium reduction followed by sedimentation to achieve the proposed guidelines. Another plant uses conventional sodium hydrosulfide treatment and lime to attain the proposed chromium levels. The proposed effluent limitations can be attained in existing facilities. The proposed new source performance standards were based on evaporation to attain no discharge of process waste water pollutants. Considering nonwater environmental aspects, the new source performance standards have been revised to require good water conservation and best practicable technology.

(20) Sodium chloride. Commenters stated that most plants return unused bitters to the source. They feel that discharges do not threaten aquatic life or contribute to water pollution and that recovery of potassium and magnesium salts is not economical.

Although some plants may have ample land to store waste bitters, this treatment is not universally applicable. Alternative means to achieve no discharge of process waste water pollutants are economically prohibitive. If no pollutants are added to the waste bitters, return of the unused salts to the source is a reasonable limitation for technology-based standards.

(21) Sodium Silicate. Some comments stated that sodium hydroxide, sodium sulfate, and silica should not be considered pollutants. Because of their natural occurrence in most waters, costs to achieve no discharge of these compounds are not justified. They further state that recycle is not possible because of turbidity problems and evaporation ponds are not universally applicable.

A reexamination of initial data and consideration of substantial comments indicate that cost of treatment to achieve no discharge of process waste water pollutants may not be justified for

1977 standard. Best practicable technology has been redefined as a well-designed and operated settling basin.

(22) Titanium dioxide. Several commenters stated that the costs to achieve the proposed limitations place a greater financial burden on titanium dioxide producers using the sulfate process than those using the chloride process. They say that this economic inequity may force some sulfate process plants to close down because of their inability to recover treatment costs while maintaining competitive prices. It was stated that polishing filtration is necessary to achieve the suspended solids limitations for discharges from the sulfate process. The commenters said that some of the pollutant parameters selected as the subject of effluent guidelines should be eliminated. Industry further stated that the flow basis of 100,000 l/kg for the sulfate process is not achievable. Several commenters question the use of "dissolved iron" as the means to limit iron. They feel "total iron" should be used so as to include the total quantities of iron being discharged regardless of its state.

(i) Chloride Process. A re-evaluation of the pollutant parameters selected indicates that effluent standards for metals other than iron are not necessary requirements to establish compliance with best practicable technology currently available. While monitoring aluminum, lead, etc., provides for stricter effluent control, these metals are present only in small quantities relative to the iron content. They are removed to acceptable levels if the iron limitation is maintained. The guidelines represent the quantities of pollutants which may be discharged based on treatment technology. The recommended treatment includes iron precipitation and clarification. The efficiency of this treatment may be best determined by measuring the total iron content of the effluent. Data from this type of treatment indicates that a effluent containing 4 mg/l total iron can be achieved.

(ii) Sulfate process. Inclusion of effluent limitations for suspended solids, pH, and iron are sufficient to ensure compliance with the effluent reduction attainable through the application of the required levels of treatment technology. Other waste water constituents appear in relatively minor quantities and are adequately removed when the iron limitation is achieved. The rationale presented above for using the parameter "total iron" is applicable to the sulfate process also. The process waste water flow basis of 100,000 l/kg has been re-examined. Based on initial data and comments received this basis has been revised. A total process waste water flow of 210,000 l/kg of product is achievable using recycle of scrubber water. Detailed data have been supplied subsequent to the publication of the proposed regulations. These data indicate the costs to reduce the TSS concentration to 25 mg/l are greater than initially estimated. Considering the nature of the solids and the expected performance from the recommended

treatment system a concentration basis of 50 mg/l is reasonable for a 1977 standard.

(23) Some commenters said that provisions should be established to allow for discharges from treatment or holding ponds in the event of catastrophic rain storms.

For chemicals subcategories which have a limitation of no discharge of process waste water pollutants to navigable waters and for which ponds may be part of the treatment system, an allowance has been provided to permit a discharge of process waste water from a plant located in an area where rainfall exceeds the evaporation rate or in the event of a catastrophic rainfall.

REVISION OF THE PROPOSED REGULATION PRIOR TO PROMULGATION

As a result of public comment and continuing review and evaluation of the proposed regulation by EPA, the following changes have been made in the regulation.

(1) The applicability of the proposed regulations for calcium carbide production has been amended to include only calcium carbide production in uncovered furnaces.

(2) The effluent limitation guidelines for sodium chloride production have been amended to allow for the return of unused salt wastes to the body of water from which the brine solution was initially obtained. No additional pollutants may be added to the waste salt solution prior to discharge.

(3) The effluent limitation for sodium silicate production based on the application of best practicable technology currently available has been revised to permit a discharge of small quantities of suspended solids.

(4) The new source performance standards for the sodium dichromate production subcategory and the sodium sulfate production subcategory have been revised to require good water conservation and implementation of the best practicable technology currently available.

(5) The new source performance standards for chlorine production have also been amended to allow for a waste water discharge from both diaphragm and mercury cell plants.

(6) The mercury limitation has been revised for mercury cell chlorine plants based on the effluent reduction attainable by the best practicable technology currently available.

(7) The effluent limitation of suspended solids has been revised for diaphragm cell chlorine plants.

(8) The effluent limitations for titanium dioxide production have been changed to exclude limitations on trace elements. The parameter "total dissolved iron" has been amended to "total iron" and the guideline has been altered accordingly.

(9) The effluent limitations for titanium dioxide production by the sulfate process have been changed. The flow basis has been increased resulting in less

stringent limitations on iron and suspended solids.

(10) Minor adjustments have been made to reflect the fact that an increased number of definitions and analytical methods have been included in 40 CFR 401 and are incorporated by reference where applicable.

(11) Section 304(b)(1)(B) of the Act provides for "guidelines" to implement the uniform national standards of section 301(b)(1)(A). Thus Congress recognized that some flexibility was necessary in order to take into account the complexity of the industrial world with respect to the practicability of pollution control technology. In conformity with the Congressional intent and in recognition of the possible failure of these regulations to account for all factors bearing on the practicability of control technology, it was concluded that some provision was needed to authorize flexibility in the strict application of the limitations contained in the regulation where required by special circumstances applicable to individual dischargers. Accordingly, a provision allowing flexibility in the application of the limitations representing best practicable control technology currently available has been added to each subpart, to account for special circumstances that may not have been adequately accounted for when these regulations were developed.

(12) An allowance has been provided to permit the discharge of process waste water pollutants from plants located in areas where precipitation exceeds evaporation. An allowance has also been provided for discharge in the event of a catastrophic rainfall. These allowances are applicable only to chemical subcategories which may utilize ponds to achieve no discharge of process waste water pollutants.

ECONOMIC IMPACT

The changes that were made to the proposed regulations for the inorganic chemicals manufacturing category do not substantially affect the initial economic analysis. The changes detailed above concern new sources and reflect a re-evaluation of the efficiency of various treatment systems. These revisions, however, do not affect the conclusions of the economic impact study.

COST-BENEFIT ANALYSIS

The detrimental effects of the constituents of waste waters now discharged by point sources within the major inorganic products segment of the inorganic chemicals manufacturing point source category are discussed in Section VI of the report entitled "Development Document for Effluent Limitations Guidelines for the major inorganic products segment of the Inorganic Chemicals Manufacturing Point Source Category" (August 1974). It is not feasible to quantify in economic terms, particularly on a national basis, the costs resulting from the discharge of these pollutants to our Nation's waterways. Nevertheless, as indicated in Section VI, the pollutants discharged have substantial and damaging

RULES AND REGULATIONS

impacts on the quality of water and therefore on its capacity to support healthy populations of wildlife, fish and other aquatic wildlife and on its suitability for industrial, recreational and drinking water supply uses.

The total cost of implementing the effluent limitations guidelines includes the direct capital and operating costs of the pollution control technology employed to achieve compliance and the indirect economic and environmental costs identified in Section VIII and in the supplementary report entitled "Economic Analysis of Proposed Effluent Guidelines Inorganic Chemicals, Alkali and Chlorine Industries (Major Products)" (August 1973). Implementing the effluent limitations guidelines will substantially reduce the environmental harm which would otherwise be attributable to the continued discharge of polluted waste waters from existing and newly constructed plants in the inorganic chemicals manufacturing industry. The Agency believes that the benefits of thus reducing the pollutants discharged justify the associated costs which, though substantial in absolute terms, represent a relatively small percentage of the total capital investment in the industry.

PUBLICATION OF INFORMATION ON PROCESSES, PROCEDURES, OR OPERATING METHODS WHICH RESULT IN THE ELIMINATION OR REDUCTION OF THE DISCHARGE OF POLLUTANTS

In conformance with the requirements of Section 304(c), a manual entitled, "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the MAJOR INORGANIC PRODUCTS Segment of the Inorganic Chemicals Manufacturing Point Source Category," has been published and is available for purchase from the Government Printing Office, Washington, D.C. 20401 for a nominal fee.

FINAL RULEMAKING

In consideration of the foregoing, 40 CFR Chapter I, Subchapter N is hereby amended by adding a new Part 415, Inorganic Chemicals Manufacturing Point Source Category, to read as set forth below. This final regulation is promulgated as set forth below and shall be effective on May 13, 1974.

Dated: March 4, 1974.

JOHN QUARLES,
Acting Administrator.

Subpart A—Aluminum Chloride Production Subcategory

- Sec.
415.10 Applicability; description of the aluminum chloride production subcategory.
415.11 Specialized definitions.
415.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

- Sec.
415.14 [Reserved]
415.15 Standards of performance for new sources.
415.16 Pretreatment standards for new sources.

Subpart B—Aluminum Sulfate Production Subcategory

- 415.20 Applicability; description of the aluminum sulfate production subcategory.
415.21 Specialized definitions.
415.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.24 [Reserved]
415.25 Standards of performance for new sources.
415.26 Pretreatment standards for new sources.

Subpart C—Calcium Carbide Production Subcategory

- 415.30 Applicability; description of the calcium carbide production subcategory.
415.31 Specialized definitions.
415.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.34 [Reserved]
415.35 Standards of performance for new sources.
415.36 Pretreatment standards for new sources.

Subpart D—Calcium Chloride Production Subcategory

- 415.40 Applicability; description of the calcium chloride production subcategory.
415.41 Specialized definitions.
415.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.44 [Reserved]
415.45 Standards of performance for new sources.
415.46 Pretreatment standards for new sources.

Subpart E—Calcium Oxide and Calcium Hydroxide Production Subcategory

- 415.50 Applicability; description of the calcium oxide and calcium hydroxide production subcategory.
415.51 Specialized definitions.
415.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

- Sec.
415.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

- 415.54 [Reserved]
415.55 Standards of performance for new sources.
415.56 Pretreatment standards for new sources.

Subpart F—Chlorine and Sodium or Potassium Hydroxide Production Subcategory

- 415.60 Applicability; description of the chlorine and sodium or potassium hydroxide production subcategory.
415.61 Specialized definitions.
415.62 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.63 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.64 [Reserved]
415.65 Standards of performance for new sources.
415.66 Pretreatment standards for new sources.

Subpart G—Hydrochloric Acid Production Subcategory

- 415.70 Applicability; description of the hydrochloric acid production subcategory.
415.71 Specialized definitions.
415.72 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.73 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.74 [Reserved]
415.75 Standards of performance for new sources.
415.76 Pretreatment standards for new sources.

Subpart H—Hydrofluoric Acid Production Subcategory

- 415.80 Applicability; description of the hydrofluoric acid production subcategory.
415.81 Specialized definitions.
415.82 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
415.83 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
415.84 [Reserved]
415.85 Standards of performance for new sources.
415.86 Pretreatment standards for new sources.

Subpart I—Hydrogen Peroxide Production Subcategory

- 415.90 Applicability; description of the hydrogen peroxide production subcategory.
415.91 Specialized definitions.

- Sec.
415.92 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.93 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.94 [Reserved]
- 415.95 Standards of performance for new sources.
- 415.96 Pretreatment standards for new sources.

Subpart J—Nitric Acid Production Subcategory

- 415.100 Applicability; description of the nitric acid production subcategory.
- 415.101 Specialized definitions.
- 415.102 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.103 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.104 [Reserved]
- 415.105 Standards of performance for new sources.
- 415.106 Pretreatment standards for new sources.

Subpart K—Potassium Metal Production Subcategory

- 415.110 Applicability; description of the potassium metal production subcategory.
- 415.111 Specialized definitions.
- 415.112 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.113 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.114 [Reserved]
- 415.115 Standards of performance for new sources.
- 415.116 Pretreatment standards for new sources.

Subpart L—Potassium Dichromate Production Subcategory

- 415.120 Applicability; description of the potassium dichromate production subcategory.
- 415.121 Specialized definitions.
- 415.122 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.123 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.124 [Reserved]
- 415.125 Standards of performance for new sources.
- 415.126 Pretreatment standards for new sources.

Subpart M—Potassium Sulfate Production Subcategory

- Sec.
415.130 Applicability; description of the potassium sulfate production subcategory.
- 415.131 Specialized definitions.
- 415.132 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.133 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.134 [Reserved]
- 415.135 Standards of performance for new sources.
- 415.136 Pretreatment standards for new sources.

Subpart N—Sodium Bicarbonate Production Subcategory

- 415.140 Applicability; description of the sodium bicarbonate production subcategory.
- 415.141 Specialized definitions.
- 415.142 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.143 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.144 [Reserved]
- 415.145 Standards of performance for new sources.
- 415.146 Pretreatment standards for new sources.

Subpart O—Sodium Carbonate Production Subcategory

- 415.150 Applicability; description of the sodium carbonate production subcategory.
- 415.151 Specialized definitions.
- 415.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.154 [Reserved]
- 415.155 Standards of performance for new sources.
- 415.156 Pretreatment standards for new sources.

Subpart P—Sodium Chloride Production Subcategory

- 415.160 Applicability; description of the sodium chloride production subcategory.
- 415.161 Specialized definitions.
- 415.162 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.163 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

- Sec.
415.164 [Reserved]
- 415.165 Standards of performance for new sources.
- 415.166 Pretreatment standards for new sources.

Subpart Q—Sodium Dichromate and Sodium Sulfate Production Subcategory

- 415.170 Applicability; description of the sodium dichromate and sodium sulfate production subcategory.
- 415.171 Specialized definitions.
- 415.172 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.173 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.174 [Reserved]
- 415.175 Standards of performance for new sources.
- 415.176 Pretreatment standards for new sources.

Subpart R—Sodium Metal Production Subcategory

- 415.180 Applicability; description of the sodium metal production subcategory.
- 415.181 Specialized definitions.
- 415.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.184 [Reserved]
- 415.185 Standards of performance for new sources.
- 415.186 Pretreatment standards for new sources.

Subpart S—Sodium Silicate Production Subcategory

- 415.190 Applicability; description of the sodium silicate production subcategory.
- 415.191 Specialized definitions.
- 415.192 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 415.193 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 415.194 [Reserved]
- 415.195 Standards of performance for new sources.
- 415.196 Pretreatment standards for new sources.

Subpart T—Sodium Sulfite Production Subcategory

- 415.200 Applicability; description of the sodium sulfite production subcategory.
- 415.201 Specialized definitions.
- 415.202 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Sec.

415.203 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

415.204 [Reserved]

415.205 Standards of performance for new sources.

415.206 Pretreatment standards for new sources.

Subpart U—Sulfuric Acid Production Subcategory

415.210 Applicability; description of the sulfuric acid production subcategory.

415.211 Specialized definitions.

415.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

415.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

415.214 [Reserved]

415.215 Standards of performance for new sources.

415.216 Pretreatment standards for new sources.

Subpart V—Titanium Dioxide Production Subcategory

415.220 Applicability; description of the titanium dioxide production subcategory.

415.221 Specialized definitions.

415.222 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

415.223 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

415.224 [Reserved]

415.225 Standards of performance for new sources.

415.226 Pretreatment standards for new sources.

Authority: Secs. 301, 304(b) and (c), 306(b) and (c), 307(c), Pub. L. 92-500; 86 Stat. 316 et seq.; (33 U.S.C. 1251, 1311, 1314(b) and (c), 1316(b) and (c), 1317(c)).

Subpart A—Aluminum Chloride Production Subcategory

§ 415.10 Applicability; description of the aluminum chloride production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of aluminum chloride.

§ 415.11 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into ac-

count all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.14 [Reserved]

§ 415.15 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the

provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.16 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the aluminum chloride production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.15; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart B—Aluminum Sulfate Production Subcategory

§ 415.20 Applicability; description of the aluminum sulfate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of aluminum sulfate.

§ 415.21 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines.

On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings, to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) Subject to the provisions of paragraphs (b), (c), and (d) of this section, there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10 year, 24 hour rainfall event, when such event occurs.

(c) During any calendar month there may be discharged from a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

(d) Any process waste water discharged pursuant to paragraph (c) of this section shall comply with each of the following requirements:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (milligrams per liter)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	
English units (parts per million)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	

§ 415.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.24 [Reserved]

§ 415.25 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that at-

tributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.26 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the aluminum sulfate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.25: *Provided, That*, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart C—Calcium Carbide Production Subcategory

§ 415.30 Applicability; description of the calcium carbide production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of calcium carbide in uncovered furnaces.

§ 415.31 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharge or other interested person may submit evidence to the Regional Administrator (or to the State, if the

CCR 000036436

State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharge are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.34 [Reserved]

§ 415.35 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.36 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the calcium chloride production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in part 128

of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.35: *Provided, That*, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart D—Calcium Chloride Production Subcategory

§ 415.40 Applicability; Description of the calcium chloride production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of calcium chloride by the brine extraction process.

§ 415.41 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean calcium chloride.

§ 415.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

tations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.010	0.0082
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.016	0.0082
pH.....	Within the range 6.0 to 9.0.	

§ 415.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.44 [Reserved]

§ 415.45 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.46 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the calcium chloride production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this Chapter, except that, for the purpose of this section, § 128.133 of this

Chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.45: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart E—Calcium Oxide and Calcium Hydroxide Production Subcategory

§ 415.50 Applicability; description of the calcium oxide and calcium hydroxide production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of calcium oxide and calcium hydroxide.

§ 415.51 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must

be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) Subject to the provisions of paragraphs (b), (c), and (d) of this section, there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed and operated so as to contain the precipitation from the 10 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10 year, 24 hour rainfall event, when such event occurs.

(c) During any calendar month there may be discharged from a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

(d) Any process waste water discharged pursuant to paragraph (c) of this section shall comply with each of the following requirements:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (milligrams per liter)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	
English units (parts per million)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	

§ 415.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pol-

lutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.54 [Reserved]

§ 415.55 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.56 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the calcium oxide and calcium hydroxide production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.55: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except

In the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart F—Chlorine and Sodium or Potassium Hydroxide Production Subcategory

§ 415.60 Applicability: description of the chlorine and sodium or potassium hydroxide production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of chlorine and sodium or potassium hydroxide by the diaphragm cell process and by the mercury cell process.

§ 415.61 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean chlorine.

(c) The term "mercury" shall mean the total mercury present in the process waste water stream exiting the mercury treatment system.

(d) The term "lead" shall mean total lead.

§ 415.62 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in this Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the

Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and potassium or sodium hydroxide manufacture by the mercury cell process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.64	0.32
Mercury.....	.00028	.00014
pH.....	Within the range 6.0 to 9.0	
English units (pounds per 1,000 lb of product)		
TSS.....	0.64	0.32
Mercury.....	.00028	.00014
pH.....	Within the range 6.0 to 9.0	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and sodium or potassium hydroxide manufacture by the diaphragm cell process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.64	0.32
Lead.....	.005	.0025
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.64	0.32
Lead.....	.005	.0025
pH.....	Within the range 6.0 to 9.0.	

§ 415.63 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable.

(a) The following limitations estab-

lish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and sodium or potassium hydroxide manufacture by the mercury cell process:

(1) Subject to the provisions of paragraph (a) (2) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(2) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and sodium or potassium hydroxide manufacture by the diaphragm cell process: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.64 [Reserved]

§ 415.65 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart:

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and sodium or potassium hydroxide manufacture by the mercury cell process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.64	0.32
Mercury.....	.00014	.00007
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.64	0.32
Mercury.....	.00014	.00007
pH.....	Within the range 6.0 to 9.0.	

(b) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from chlorine and sodium or potassium

hydroxide manufacture by the diaphragm cell process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed--
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.64	0.32
Lead.....	.0008	.0004
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.64	0.32
Lead.....	.0008	.0004
pH.....	Within the range 6.0 to 9.0.	

§ 415.66 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the chlorine and sodium or potassium hydroxide production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.65; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart G—Hydrochloric Acid Production Subcategory

§ 415.70 Applicability; description of the hydrochloric acid production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of hydrochloric acid by direct reaction of chlorine and hydrogen.

§ 415.71 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.72 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and

costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.73 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.74 [Reserved]

§ 415.75 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.76 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source

within the hydrochloric acid production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.75; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart H—Hydrofluoric Acid Production Subcategory

§ 415.80 Applicability; description of the hydrofluoric acid production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of hydrofluoric acid.

§ 415.81 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.82 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger

effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) Subject to the provisions of paragraphs (b), (c), and (d) of this section, there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed and operated so as to contain the precipitation from the 10 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10 year, 24 hour rainfall event, when such event occurs.

(c) During any calendar month there may be discharged from a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

(d) Any process waste water discharged pursuant to paragraph (c) of this section shall comply with each of the following requirements:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (milligrams per liter)		
Fluoride.....	30	15
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	
English units (parts per million)		
Fluoride.....	30	15
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	

§ 415.83 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations established the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.84 [Reserved]

§ 415.85 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.86 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the hydrofluoric acid production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 123.131, the pretreatment standard

for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.85; *Provided, That*, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart I—Hydrogen Peroxide Production Subcategory

§ 415.90 Applicability; description of the hydrogen peroxide production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of hydrogen peroxide by the electrolytic process and by the oxidation of alkyl hydroanthraquinones.

§ 415.91 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean hydrogen peroxide as a one hundred percent hydrogen peroxide solution.

(c) The term "CyanideA" shall mean those cyanides amenable to chlorination as described in 1972 *Annual Book of ASTM Standards*, 1972, Standard D2036-72, Method B, page 553.

§ 415.92 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional

Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the oxidation of alkyl hydroanthraquinones.

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed--
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.8	0.4
TOC.....	.44	.22
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.8	0.4
TOC.....	.44	.22
pH.....	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the electrolytic process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.005	0.0025
Cyanide A.....	.0004	.0002
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.005	0.0025
Cyanide A.....	.0004	.0002
pH.....	Within the range 6.0 to 9.0.	

§ 415.93 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be dis-

charged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the oxidation of alkyl hydroanthraquinones: there shall be no discharge of process waste water pollutants to navigable waters.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the electrolytic process:

(1) Subject to the provisions of paragraph (b) (2) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(2) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.94 [Reserved]

§ 415.95 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart:

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the oxidation of alkyl hydroanthraquinones: there shall be no discharge of process waste water pollutants to navigable waters.

(b) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from hydrogen peroxide manufacture by the electrolytic process:

(1) Subject to the provisions of paragraph (b) (2) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(2) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process

waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.96 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the hydrogen peroxide production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.95: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart J—Nitric Acid Production Subcategory

§ 415.100 Applicability; description of the nitric acid production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of nitric acid in concentrations up to 68 percent.

§ 415.101 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.102 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equip-

ment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.103 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.104 [Reserved]

§ 415.105 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.106 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the nitric acid production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section,

§ 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.105: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart K—Potassium Metal Production Subcategory

§ 415.110 Applicability: description of the potassium metal production subcategory.

The provisions of this subpart are applicable to discharges of pollutants resulting from the production of potassium metal.

§ 415.111 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.112 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally

different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.113 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.114 [Reserved]

§ 415.115 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.116 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the potassium metal production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this Chapter, except that, for the purpose of this section, § 128.133 of this Chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.115: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart L—Potassium Dichromate Production Subcategory

§ 415.120 Applicability; description of the potassium dichromate production subcategory.

The provisions of this subpart are applicable to discharges of pollutants resulting from the production of potassium dichromate.

§ 415.121 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.122 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.123 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.124 [Reserved]

§ 415.125 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.126 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the potassium dichromate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this Chapter, except that, for the purpose of this section, § 128.133 of this Chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.125: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart M—Potassium Sulfate Production Subcategory

§ 415.130 Applicability; description of the potassium sulfate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of potassium sulfate.

§ 415.131 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.132 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) Subject to the provisions of paragraphs (b), (c), and (d) of this section, there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed and operated so as to contain the precipitation from the 10 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 10 year, 24 hour rainfall event, when such event occurs.

RULES AND REGULATIONS

(c) During any calendar month there may be discharged from a process waste water impoundment either a volume of process waste water equal to the difference between the precipitation for that month that falls within the impoundment and the evaporation for that month, or, if greater, a volume of process waste water equal to the difference between the mean precipitation for that month that falls within the impoundment and the mean evaporation for that month as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located (or as otherwise determined if no monthly data have been established by the National Climatic Center).

(d) Any process waste water discharged pursuant to paragraph (c) of this section shall comply with each of the following requirements:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (milligrams per liter)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	
English units (parts per million)		
TSS.....	50	25
pH.....	Within the range 6.0 to 9.0.	

§ 415.133 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.134 [Reserved]

§ 415.135 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, con-

trolled by this section, which may be discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.136 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the potassium sulfate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.135; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart N—Sodium Bicarbonate Production Subcategory

§ 415.140 Applicability; description of the sodium bicarbonate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium bicarbonate.

§ 415.141 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.142 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available,

energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.143 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.144 [Reserved]

§ 415.145 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.146 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium bicarbonate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.155; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart O—Sodium Carbonate Production Subcategory

§ 415.150 Applicability; description of the sodium carbonate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium carbonate by the Solvay Process.

§ 415.151 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium carbonate.

§ 415.152 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are funda-

mentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.20	0.10
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.20	0.10
pH.....	Within the range 6.0 to 9.0.	

§ 415.153 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.34	0.17
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.34	0.17
pH.....	Within the range 6.0 to 9.0.	

§ 415.154 [Reserved]

§ 415.155 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.156 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium carbonate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.155; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart P—Sodium Chloride Production Subcategory

§ 415.160 Applicability; description of the sodium chloride production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium chloride by the solution brine-mining process and by the solar evaporation process.

§ 415.161 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium chloride.

(c) The term "bitterns" shall mean the saturated brine solution remaining after precipitation of sodium chloride in the solar evaporation process.

§ 415.162 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available,

RULES AND REGULATIONS

energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solar evaporation process: there shall be no discharge of process waste water pollutants to navigable waters, except that unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn, provided no additional pollutants are added to the bitterns during the production of sodium chloride.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solution brine-mining process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.34	0.17
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.34	0.17
pH.....	Within the range 6.0 to 9.0.	

§ 415.163 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solar evaporation process: there shall be no discharge of process waste water pollutants to navigable waters, except that unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn, provided no additional pollutants are added to the bitterns during the production of sodium chloride.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solution brine-mining process: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.164 [Reserved]

§ 415.165 Standards of performance for new sources.

The following standards of performance established the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart:

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solar evaporation process: there shall be no discharge of process waste water pollutants to navigable waters, except that unused bitterns may be returned to the body of water from which the process brine solution was originally withdrawn, provided no additional pollutants are

added to the bitterns during the production of sodium chloride.

(b) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from sodium chloride manufacture by the solution brine-mining process: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.166 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium chloride production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.165; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart Q—Sodium Dichromate and Sodium Sulfate Production Subcategory

§ 415.170 Applicability; description of the sodium dichromate and sodium sulfate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium dichromate and by-product sodium sulfate.

§ 415.171 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium dichromate.

(c) The term "Cr(T)" shall mean total chromium.

(d) The term "Cr(+6)" shall mean hexavalent chromium.

§ 415.172 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available,

energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.44	0.22
Cr (+6).....	.009	.0005
Cr (T).....	.0088	.0044
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.44	0.22
Cr (+6).....	.009	.0005
Cr (T).....	.0088	.0044
pH.....	Within the range 6.0 to 9.0.	

§ 415.173 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best

available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.174 [Reserved]

§ 415.175 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed —
Metric units (kg/kg of product)		
TSS -----	0.30	0.15
Cr (+6) -----	0.009	0.0005
Cr (T) -----	0.0088	0.0044
pH -----	Within the range 6.0 to 9.0.	
English units (lb/1000 lb of product)		
TSS -----	0.30	0.15
Cr (+6) -----	0.009	0.0005
Cr (T) -----	0.0088	0.0044
pH -----	Within the range 6.0 to 9.0.	

§ 415.176 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium dichromate and sodium sulfate production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.175; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart R—Sodium Metal Production Subcategory

§ 415.180 Applicability; description of the sodium metal production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium metal by the Downs cell process.

§ 415.181 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium metal.

§ 415.182 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent Limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	0.46	0.23
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	0.46	0.23
pH.....	Within the range 6.0 to 9.0.	

§ 415.183 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.184 [Reserved]

§ 415.185 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.186 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source

within the sodium metal production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 123 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.185; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart S—Sodium Silicate Production Subcategory

§ 415.190 Applicability; description of the sodium silicate production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium silicate.

§ 415.191 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium silicate.

§ 415.192 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the De-

velopment Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed--
Metric units (kilograms per 1,000 kg of product)		
TSS-----	0.01	0.005
pH-----	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS-----	0.01	0.005
pH-----	Within the range 6.0 to 9.0.	

§ 415.193 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 years, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.194 [Reserved]

§ 415.195 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be

discharged by a new source subject to the provisions of this subpart:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.196 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium sulfite production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this Chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.195; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart T—Sodium Sulfite Production Subcategory

§ 415.200 Applicability; description of the sodium sulfite production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sodium sulfite by reacting sulfur dioxide with sodium carbonate.

§ 415.201 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean sodium sulfite.

§ 415.202 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant,

raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
TSS.....	0.032	0.016
COD.....	3.4	1.7
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per 1,000 lb of product)	
TSS.....	0.032	0.016
COD.....	3.4	1.7
pH.....	Within the range 6.0 to 9.0.	

§ 415.203 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the

best available technology economically achievable:

(a) Subject to the provisions of paragraph (b) of this section there shall be no discharge of process waste water pollutants into navigable waters.

(b) A process waste water impoundment which is designed, constructed, and operated so as to contain the precipitation from the 25 year, 24 hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the area in which such impoundment is located may discharge that volume of process waste water which is equivalent to the volume of precipitation that falls within the impoundment in excess of that attributable to the 25 year, 24 hour rainfall event, when such event occurs.

§ 415.201 [Reserved]

§ 415.205 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.206 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sodium sulfite production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.205; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart U—Sulfuric Acid Production Subcategory

§ 415.210 Applicability; description of the sulfuric acid production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of sulfuric acid in single and double adsorption plants. The provisions are not applicable to discharges from plants recovering waste sulfuric acid.

§ 415.211 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and

methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

§ 415.212 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available; there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.213 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge

of process waste water pollutants to navigable waters.

§ 415.214 [Reserved]

§ 415.215 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: there shall be no discharge of process waste water pollutants to navigable waters.

§ 415.216 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the sulfuric acid production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this Chapter, except that, for the purpose of this section, § 128.133 of this Chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.215: *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart V—Titanium Dioxide Production Subcategory

§ 415.220 Applicability; description of the titanium dioxide production subcategory.

The provisions of this subpart are applicable to discharges resulting from the production of titanium dioxide by the sulfate process and by the chloride process.

§ 415.221 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "product" shall mean titanium dioxide.

(c) The term "iron" shall mean total iron.

§ 415.222 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant,

raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The following limitations establish the quantity or quality of pollutants or pollutant properties, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide manufacture by the chloride process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
	Metric units (kilograms per 1,000 kg of product)	
TSS.....	4.6	2.3
Iron.....	.72	.36
pH.....	Within the range 6.0 to 9.0.	
	English units (pounds per 1,000 lb of product)	
TSS.....	4.6	2.3
Iron.....	.72	.36
pH.....	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide manufacture by the sulfate process:

Effluent characteristic	Effluent limitations	
	Maximum for Any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS	21.0	10.5
Iron	1.7	.84
pH	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS	21.0	10.5
Iron	1.7	.84
pH	Within the range 6.0 to 9.0.	

§ 415.223 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide production by the chloride process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	2.6	1.3
Iron.....	.36	.18
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	2.6	1.3
Iron.....	.36	.18
pH.....	Within the range 6.0 to 9.0.	

(b) The following limitations establish the quantity or quality of pollutants

or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide manufacture by the sulfate process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed--
Metric units (kilograms per 1,000 kg of product)		
TSS.....	10.6	5.3
Iron.....	.84	.42
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	10.6	5.3
Iron.....	.84	.42
pH.....	Within the range 6.0 to 9.0.	

§ 415.224 [Reserved]

§ 415.225 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart:

(a) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide manufacture by the chloride process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	2.6	1.3
Iron.....	.36	.18
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	2.6	1.3
Iron.....	.36	.18
pH.....	Within the range 6.0 to 9.0.	

(b) The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this paragraph, which may be discharged in process waste water from titanium dioxide manufacture by the sulfate process:

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Metric units (kilograms per 1,000 kg of product)		
TSS.....	10.6	5.3
Iron.....	.84	.42
pH.....	Within the range 6.0 to 9.0.	
English units (pounds per 1,000 lb of product)		
TSS.....	10.6	5.3
Iron.....	.84	.42
pH.....	Within the range 6.0 to 9.0.	

§ 415.226 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the titanium dioxide production subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in Part 128 of this chapter, except that, for the purpose of this section, § 128.133 of this chapter shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 415.225; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

[FR Doc.74-5591 Filed 3-11-74; 8:45 am]

CCR 000036452

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 415]

APPLICATION OF EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING SOURCES TO PRETREATMENT STANDARDS

Inorganic Chemicals Manufacturing Point Source Category

Notice is hereby given pursuant to sections 301, 304 and 307(b) of the Federal Water Pollution Control Act, as amended (the Act) 33 U.S.C. 1251, 1311, 1314 and 1317(b); 86 Stat. 816 et seq.; Pub. L. 92-500, that the proposed regulation set forth below concerns the application of effluent limitations guidelines for existing sources to pretreatment standards for incompatible pollutants. The proposal will amend 40 CFR Part 415—Inorganic Chemicals Manufacturing Point Source Category, establishing for each subcategory therein the extent of application of effluent limitations guidelines to existing sources which discharge to publicly owned treatment works. The regulation is intended to be complementary to the general regulation for pretreatment standards set forth at 40 CFR Part 128. The general regulation was proposed July 19, 1973 (38 FR 19236), and published in final form on November 8, 1973 (38 FR 30982).

The proposed regulation is also intended to supplement a final regulation being simultaneously promulgated by the Environmental Protection Agency (EPA or Agency) which provides effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the aluminum chloride production subcategory, aluminum sulfate production subcategory, calcium carbide production subcategory, calcium chloride production subcategory, calcium oxide and hydroxide production subcategory, chlorine and sodium or potassium hydroxide production subcategory, hydrochloric acid production subcategory, hydrofluoric acid production subcategory, hydrogen peroxide production subcategory, nitric acid production subcategory, potassium metal production subcategory, potassium dichromate production subcategory, potassium sulfate production subcategory, sodium bicarbonate production subcategory, sodium carbonate production subcategory, sodium chloride production subcategory, sodium dichromate and sodium sulfate production subcategory, sodium metal production subcategory, sodium silicate production subcategory, sodium sulfite production subcategory, sulfuric acid production subcategory, and titanium dioxide production subcategory of the inorganic chemicals manufacturing point source category. The latter regulation applies to the portion of a discharge which is directed to the navigable waters. The regulation proposed below applies to users of publicly owned treatment works which fall within the description of the point source category to which the guidelines and standards (40 CFR 415) promulgated simultaneously apply. How-

ever, the proposed regulation applies to the introduction of incompatible pollutants which are directed into a publicly owned treatment works, rather than to discharges of pollutants to navigable waters.

The general pretreatment standard divides pollutants discharged by users of publicly owned treatment works into two broad categories: "compatible" and "incompatible." Compatible pollutants are generally not subject to pretreatment standards. (See 40 CFR 128.110 (State or local law) and 40 CFR 128.131 (Prohibited wastes) for requirements which may be applicable to compatible pollutants). Incompatible pollutants are subject to pretreatment standards as provided in 40 CFR 128.133, which provides as follows:

In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry not subject to Section 307(c) of the Act shall be, for sources within the corresponding industrial or commercial category, that established by a promulgated effluent limitations guidelines defining best practicable control technology currently available pursuant to sections 301(b) and 304(b) of the Act; *Provided*, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant; and provided further that when the effluent limitations guidelines for each industry is promulgated, a separate provision will be proposed concerning the application of such guidelines to pretreatment.

The regulation proposed below is intended to implement that portion of section 128.133, above, requiring that a separate provision be made stating the application to pretreatment standards of effluent limitations guidelines based upon best practicable control technology currently available.

Questions were raised during the public comment period on the proposed general pretreatment standard (40 CFR Part 128) about the propriety of applying a standard based upon best practicable control technology currently available to all plants subject to pretreatment standards. In general, EPA believes the analysis supporting the effluent limitations guidelines is appropriate to support the application of those standards to users of publicly owned treatment works. However, to ensure that those standards are appropriate in all cases, EPA now seeks additional comments focusing upon the application of effluent limitations guidelines to users of publicly owned treatment works. Specifically, the Agency is seeking information pertaining to technical or economic problems associated with those subcategories of the inorganic chemicals manufacturing point source category for which the effluent limitation guidelines based on best practicable control technology currently available require no discharge of process waste water pollutants to navigable waters. In addition, information is so-

licit regarding detrimental effects of dissolved salts discharged into joint treatment systems.

The proposed regulation (October 11, 1973; 38 FR 21230) for point sources within § 415.15 of the aluminum chloride production subcategory, § 415.25 of the aluminum sulfate production subcategory, § 415.35 of the calcium carbide production subcategory, § 415.45 of the calcium chloride production subcategory, § 415.55 of the calcium oxide and hydroxide production subcategory, § 415.65 of the chlorine and sodium or potassium hydroxide production subcategory, § 415.75 of the hydrochloric acid production subcategory, § 415.85 of the hydrofluoric acid production subcategory, § 415.95 of the hydrogen peroxide production subcategory, § 415.105 of the nitric acid production subcategory, § 415.115 of the potassium metal production subcategory, § 415.125 of the potassium dichromate production subcategory, § 415.135 of the potassium sulfate production subcategory, § 415.145 of the sodium bicarbonate production subcategory, § 415.155 of the sodium carbonate production subcategory, § 415.165 of the sodium chloride production subcategory, § 415.175 of the sodium dichromate and sodium sulfate production subcategory, § 415.185 of the sodium metal production subcategory, § 415.195 of the sodium silicate production subcategory, § 415.205 of the sodium sulfite production subcategory, § 415.215 of the sulfuric acid production, subcategory, and § 415.225 of the titanium dioxide production subcategory, contained the proposed pretreatment standard for new sources. The regulation promulgated simultaneously herewith contains §§ 415.16, 415.26, 415.36, 415.46, 415.56, 415.66, 415.76, 415.86, 415.96, 415.106, 415.116, 415.126, 415.136, 415.146, 415.156, 415.166, 415.176, 415.186, 415.196, 415.206, 415.216 and 415.226 which state the applicability of standards of performance for purposes of pretreatment standard for new sources.

A preliminary Development Document was made available to the public at approximately the time of publication of the notice of proposed rulemaking and the final Development Document entitled "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the MAJOR INORGANIC PRODUCTS Segment of the Inorganic Chemicals Manufacturing Point Source Category" is now being published. The economic analysis report entitled "Economic Analysis of Proposed Effluent Guidelines, Inorganic Chemicals and Chlor-Alkali Industries (major products)", (August 1973) was made available at the time of proposal. Copies of the final Development Document and economic analysis report will continue to be maintained for inspection and copying during the comment period at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. Copies will also be available for inspection at EPA regional offices and at State water pollution control agency offices. Copies of

the Development Document may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. Copies of the economic analysis report will be available for purchase through the National Technical Information Service, Springfield, Virginia, 22151.

On June 14, 1973, the Agency published procedures designed to insure that, when certain major standards, regulations, and guidelines are proposed, an explanation of their basis, purpose and environmental effects is made available to the public. (38 FR 15653). The procedures are applicable to major standards, regulations and guidelines which are proposed on or after December 31, 1973, and which either prescribe national standards of environmental quality or require national emission, effluent or performance standards or limitations.

The Agency determined to implement these procedures in order to insure that the public was provided with background information to assist it in commenting on the merits of a proposed action. In brief, the procedures call for the Agency to make public the information available to it delineating the major environmental effects of a proposed action, to discuss the pertinent nonenvironmental factors affecting the decision, and to explain the viable options available to it and the reasons for the option selected.

The procedures contemplate publication of this information in the *FEDERAL REGISTER*, where this is practicable. They provide, however, that where such publication is impracticable because of the length of these materials, the material may be made available in an alternate format.

The Development Document referred to above contains information available to the Agency concerning the major environmental effects of the regulation proposed below. The information includes: (1) the identification of pollutants present in waste waters resulting from the manufacture of aluminum chloride, aluminum sulfate, calcium carbide, calcium chloride, calcium oxide and hydroxide, chlorine and sodium or potassium hydroxide, hydrochloric acid, hydrofluoric acid, hydrogen peroxide, nitric acid, potassium metal, potassium dichromate, potassium sulfate, sodium bicarbonate, sodium carbonate, sodium chloride, sodium dichromate and sodium sulfate, sodium metal, sodium silicate, sodium sulfite, sulfuric acid, and titanium dioxide, the characteristics of these pollutants, and the degree of pollutant reduction obtainable through implementation of the proposed standard; and (2) the anticipated effects on other aspects of the environment (including air, subsurface waters, solid waste disposal and land use, and noise) of the treatment technologies available to meet the standard proposed.

The Development Document and the economic analysis report referred to above also contain information available to the Agency regarding the estimated

cost and energy consumption implications of those treatment technologies and the potential effects of those costs on the price and production of aluminum chloride, aluminum sulfate, calcium carbide, calcium chloride, calcium oxide and hydroxide, chlorine and sodium or potassium hydroxide, hydrochloric acid, hydrofluoric acid, hydrogen peroxide, nitric acid, potassium metal, potassium dichromate, potassium sulfate, sodium bicarbonate, sodium carbonate, sodium chloride, sodium dichromate and sodium sulfate, sodium metal, sodium silicate, sodium sulfite, sulfuric acid and titanium dioxide. The two reports exceed, in the aggregate, 100 pages in length and contain a substantial number of charts, diagrams and tables. It is clearly impracticable to publish the material contained in these documents in the *FEDERAL REGISTER*. To the extent possible, significant aspects of the material have been presented in summary form in the preamble to the proposed regulation containing effluent limitations guidelines, new source performance standards and pretreatment standards for new sources within the inorganic chemicals manufacturing category (38 FR 28174: October 11, 1973). Additional discussion is contained in the analysis of public comments on the proposed regulation and the Agency's response to those comments. This discussion appears in the preamble to the promulgated regulation (40 CFR Part 415) which currently is being published in the rules and regulations section of the *FEDERAL REGISTER*.

The options available to the Agency in establishing the level of pollutant reduction obtainable through the best practicable control technology currently available, and the reasons for the particular level of reduction selected are discussed in the documents described above. In applying the effluent limitations guidelines to pretreatment standards for the introduction of incompatible pollutants into municipal systems by existing sources in the aluminum chloride production subcategory, aluminum sulfate production subcategory, calcium carbide production subcategory, calcium chloride production subcategory, calcium oxide and hydroxide production subcategory, chlorine and sodium or potassium hydroxide production subcategory, hydrochloric acid production subcategory, hydrofluoric acid production subcategory, hydrogen peroxide production subcategory, nitric acid production subcategory, potassium metal production subcategory, potassium dichromate production subcategory, potassium sulfate production subcategory, sodium bicarbonate production subcategory, sodium carbonate production subcategory, sodium chloride production subcategory, sodium dichromate and sodium sulfate production subcategory, sodium metal production subcategory, sodium silicate production subcategory, sodium sulfite production subcategory, sulfuric acid production subcategory, and titanium dioxide production subcategory, the Agency has, essentially, three options.

The first is to declare that the guidelines do not apply. The second is to apply the guidelines unchanged. The third is to modify the guidelines to reflect: (1) differences between direct dischargers and plants utilizing municipal systems which affect the practicability of the latter employing the technology available to achieve the effluent limitations guidelines; or (2) characteristics of the relevant pollutants which require higher levels of reduction (or permit less stringent levels) in order to insure that the pollutants do not interfere with the treatment works or pass through them untreated.

The first option, which would leave the introduction of incompatible pollutants unregulated by a national pretreatment standard, is inappropriate in view of the information available to the Agency concerning the effects of those pollutants generated by the inorganic chemicals manufacturing category and the available treatment technologies. The Agency believes that treatment levels required of plants utilizing municipal treatment systems should be comparable to those applicable to direct discharges, so that use of such systems does not result in higher levels of ultimate pollutant discharge to navigable waters or in any unjustified economic advantage.

The process waste waters in the inorganic chemicals industry generally contain high concentrations of dissolved solids. These solids could interfere with the operation of publicly owned treatment works, pass through such works untreated or inadequately treated, or otherwise be incompatible with such treatment works. The information available to the Agency does not indicate differences between plants which discharge directly to navigable waters and those which use municipal treatment systems significant enough to warrant varying the effluent limitation guidelines. Accordingly, it is the opinion of the Agency that these incompatible process waste water constituents should be treated to the level required by the application of the best practicable control technology currently available before discharge of these waste water constituents to publicly owned treatment works. In those cases where the effluent limitation guidelines based on best practicable control technology currently available are not defined for an incompatible pollutant, such as dissolved solids, no pretreatment will be required for such incompatible pollutants unless, pursuant to 40 CFR 128, Section 128.131, the wastes interfere with the operation or performance of the publicly owned treatment works, or pretreatment is required by local or State law, as provided for in 307(b)(4) of the Act.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations are solicited. In the event

comments are in the nature of criticisms as to the adequacy of data which is available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data is essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing pretreatment standards for existing sources, EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304 and 307(b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460. The EPA information regulation, 40 CFR 2, provides that a reasonable fee may be charged for copying.

In consideration of the foregoing, it is hereby proposed that 40 CFR 415 be amended to add §§ 415.14, 415.24, 415.34, 415.44, 415.54, 415.64, 415.74, 415.84, 415.94, 415.104, 415.114, 415.124, 415.134, 415.144, 415.154, 415.164, 415.174, 415.184, 415.194, 415.204, 415.214 and 415.224. All comments received on or before April 11, 1974 will be considered.

Dated: March 4, 1974.

JOHN QUARLES,
Acting Administrator.

It is proposed to add the following sections, which are currently reserved, to 40 CFR Part 415:

§ 415.14 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.12 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.24 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.22 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.34 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.32 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a

publicly owned treatment works, except in compliance with such limitations.

§ 415.44 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.42 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.54 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.52 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.64 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.62 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.74 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.62 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.84 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.82 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.94 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.92 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this sub-

category may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.104 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.102 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.114 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.112 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.124 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.122 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.134 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.132 shall apply and subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.144 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.142 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.154 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants

established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.152 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.164 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.162 shall apply, and subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.174 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.172 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.181 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.182 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.194 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.192 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.204 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.202 shall apply and, subject to the provisions of 40 CFR Part 128 con-

cerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.214 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.212 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

§ 415.224 Pretreatment standards for existing sources.

For the purpose of pretreatment standards for incompatible pollutants established under 40 CFR 128.133, the effluent limitations guidelines set forth in § 415.222 shall apply and, subject to the provisions of 40 CFR Part 128 concerning pretreatment, process waste water from this subcategory may not be introduced into a publicly owned treatment works, except in compliance with such limitations.

[FR Doc.74-5592 Filed 3-11-74;8:45 am]

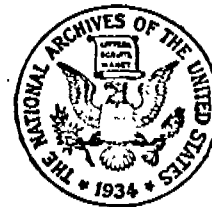
CCR 000036456

Federal Register

FRIDAY, FEBRUARY 8, 1974
WASHINGTON, D.C.

Volume 39 ■ Number 28

PART II



DEPARTMENT OF THE TREASURY

Office of the Secretary

ENVIRONMENTAL IMPACT STATEMENTS

Proposed Procedures for Preparation
and Coordination

CCR 000036457

DEPARTMENT OF THE TREASURY

Office of the Secretary

ENVIRONMENTAL IMPACT STATEMENTS

Proposed Procedures for Preparation and Coordination

On July 30, 1971, the Department of the Treasury issued Procedures for Preparation and Coordination of Environmental Impact Statements (36 FR 14221) under section 102(2)(C) of the National Environmental Policy Act (NEPA) (42 U.S.C., section 4332(2)(C)) pursuant to guidelines established by the Council on Environmental Quality on April 23, 1971 (36 FR 7724-9).

It is now proposed, as required by § 1500.3(a) of the amended guidelines promulgated by the Council on August 1, 1973 (38 FR 20550), to issue revised procedures, as set forth below. Comments on the proposed procedures are invited. Any such comments should be sent in duplicate to the Assistant Secretary for Administration, Department of the Treasury, Washington, D.C. 20220, on or before March 29, 1974.

After consideration of all comments received, the Department will make any revisions which appear appropriate and will publish the resultant definitive procedures in the FEDERAL REGISTER.

WARREN F. BRECHT,
Assistant Secretary
for Administration.

FEBRUARY 4, 1974.

The Departmental Procedures for Preparation and Coordination of Environmental Impact Statements under section 102(2)(C) of the National Environmental Policy Act of 1969, which were issued on July 30, 1971 (36 FR 14221), are amended as follows:

Authority. The following procedures are established, after consultation with the Council on Environmental Quality, in accordance with the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969, Public Law 91-190 (42 U.S.C. 4332(2)(C)), hereinafter referred to as NEPA; section 2 of Executive Order 11514 (42 U.S.C. 4321 note); and § 1500.3 of the Guidelines for Preparation of Environmental Impact Statements promulgated by the Council on Environmental Quality, 40 CFR, Part 1500 (38 FR 20550), hereby incorporated by reference and hereafter referred to as the CEQ Guidelines. Since these procedures constitute a general statement of policy, notice and public procedure under 5 U.S.C. 553 are unnecessary.

Scope. These procedures apply to the recognition of the need for environmental impact statements with respect to proposals for legislation and other major actions significantly affecting the quality of the human environment, to the preparation of such statements, and to their circulation and review within and outside the Department of the Treasury. The procedures also provide for appropriate action with respect to environmental impact statements submitted to the De-

partment for comment. All bureaus, offices, and other components of the Department, hereafter referred to as bureaus, are required to follow these procedures in dealing with environmental impact statements. These procedures are to be applied in the light of the definitions and instructions in the CEQ Guidelines. They relate to all steps in the preparation and circulation of environmental impact statements occurring subsequent to -----, 1974. After that date, the procedures published in 36 FR 14221 are superseded without affecting the sufficiency of any action taken previously.

Content. These procedures provide for:

(a) Designation of the officials responsible for environmental impact statements.

(b) Identification of the proposed actions within the Department requiring environmental impact statements, the pertinent departmental review process, and the time scheduling for consultations required by section 102(2)(C) of NEPA.

(c) Obtaining of the information required in the preparation of environmental impact statements.

(d) Consultation with and taking account of the comments of appropriate Federal, State, and local agencies, including the Administrator of the Environmental Protection Agency as to the environmental impact of matters under section 309 of the Clean Air Act, as amended (42 U.S.C. 1857h-7), and § 1500.9(b) of the CEQ Guidelines.

(e) Making suitable arrangements as required by section 2(b) of Executive Order 11514 and § 1500.6(e) of the CEQ Guidelines, for timely public information on departmental plans and programs with environmental impact, including procedures relating to (i) the use of environmental impact statements in departmental policy and action review processes, (ii) the appropriate distribution of environmental impact statements, and (iii) the availability to the public of environmental impact statements and comments received thereon.

TABLE OF CONTENTS

- Sec.
- 1 Designation of responsible officials.
 - 2 Identification of actions requiring environmental impact statements.
 - 3 Time scheduling.
 - 4 General considerations as to utilization of impact statements.
 - 5 EPA procedures under the Clean Air Act.
 - 6 Securing information required in preparation of environmental impact statements.
 - 7 Obtaining of comments on draft statements.
 - 8 Content of environmental impact statements.
 - 9 Filing and distribution of environmental impact statements.
 - 10 Availability of environmental impact statements to the public.
 - 11 Utilization of final impact statements in decisional process.
 - 12 Treasury comments on statements of other agencies.

1. Designation of responsible officials.

(a) There shall be in the Office of the Secretary a Departmental Environmen-

tal Quality Officer (EQO), designated the Secretary, who shall (i) be the liaison official for the Department with the Council on Environmental Quality, the Environmental Protection Agency, and other departments and agencies concerning environmental matters, (ii) insure that the actions of the bureaus with respect to the fulfillment of NEPA are coordinated, (iii) provide guidance to the bureaus on environmental policy requirements, (iv) assist bureaus in viewing and assessing the environmental impact of proposed Treasury actions, (v) provide guidance in the preparation and processing of environmental impact statements, (vi) receive for clearance all environmental impact statements, draft and final, originating from the Department, (vii) receive all environmental impact statements submitted by other agencies to the Department and coordinate the appropriate review and reply, (viii) perform such other functions as are specified in these procedures or are appropriate under the CEQ Guidelines or other instructions and recommendations of CEQ.

(b) Responsibility for the preparation and appropriate circulation of environmental impact statements shall rest with the head of the bureau with jurisdiction over the action or policy area in question.

(c) Each bureau is directed to designate a Bureau Environmental Quality Officer (EQO), and alternate, with continuing staff responsibility for (i) identifying bureau actions requiring an environmental impact statement; (ii) making sure that each required statement is prepared timely and with the prescribed content by appropriate staff members; (iii) ensuring the bureau's compliance with the requirements of NEPA, the CEQ Guidelines, and these Departmental procedures, in particular by coordinating the review within the bureau of such statements, and (iv) maintaining compliance with all applicable scheduling, consultation, circulation, and public information requirements. The Bureau EQO will also be expected to maintain effective communication and consultation with the Departmental EQO and to keep key officials in his bureau informed of current developments in environmental policy and program, particularly under NEPA.

The fulfillment of these duties will require constant and active attention from the Environmental Quality Officer to start operations of his bureau to insure that the possible applicability of NEPA is timely taken into account in all relevant cases and that, if an impact statement may be needed, the requirements of the Act, the CEQ Guidelines, these procedures, and any other instructions of the Department and the supplemental procedures, if any, issued by the bureau are promptly and fully followed.

(d) Letters transmitting environmental impact statements to the CEQ (section 9(a), below), as well as any reports or other communications to the Council, shall be addressed to its Chairman and shall be signed by the Departmental EQO. Unless special circumstances indicate that a different officer should act as

communications announcing decisions to prepare environmental impact statements (section 2(e), below), requesting comments on draft statements (section 7, below), or transmitting final statements for the information of agencies or persons commenting on draft statements (section 9(c), below), shall also be signed by the Departmental EQO and, in the case of a Federal agency, shall be addressed to its Departmental Environmental Quality Officer or equivalent official. In addition to the above, all Departmental contacts with CEQ, EPA, and

other governmental agencies, or with nongovernmental organizations or individuals, on environmental matters shall be through or coordinated with the Departmental EQO.

(e) The assessment of the environmental impact of actions concerning various areas of Treasury policy and operations specified below and the preparation of environmental impact statements relating thereto shall be coordinated, in consultation with the Departmental EQO, with the officer having primary responsibility as follows:

Action area	Officer with coordinating responsibility
Administration of facilities, physical operations, procurement, contracts, leases, etc.	Assistant Secretary for Administration.
Tax policy recommendations, legislation, and regulations.	Assistant Secretary for Tax Policy.
Nontax legislative recommendations and reports.	General Counsel.
International environmental matters-----	Assistant Secretary for International Affairs.
Energy and natural resource matters-----	Special Assistant to the Deputy Secretary.

(f) The heads of bureaus having operations which are affected by special considerations are hereby authorized to issue supplementary procedures consistent with these Departmental procedures for the implementation of NEPA. Any such procedures, or amendments thereof, issued after _____, 1974 shall be submitted for review and concurrence by the Departmental EQO, and any procedures in existence at such date shall, with similar review and concurrence, be revised in accordance with the CEQ Guidelines and these Departmental procedures. Such procedures, unless relating purely to the internal administration of the bureau, shall be published in the FEDERAL REGISTER.

(g) The Departmental EQO, and at his request, the respective bureau or bureaus, shall be responsive to requests from the CEQ for reports or other information in connection with the implementation of NEPA and for the preparation and circulation of environmental impact statements, as required by § 1500.11(f) of the Guidelines.

2. *Identification of actions requiring environmental impact statements.* (a) Each bureau shall insure that all employees with responsibility for actions potentially affecting the environment are informed of the requirements of this Departmental procedure.

(b) Whenever it appears that any matter, including the continuance of any action or program already initiated, is likely to fall within the requirements of section 102(2)(C) of NEPA as constituting a proposal for legislation or other major Federal action significantly affecting the quality of the human environment, whether beneficially or adversely, the environmental implications are to be explored promptly and in all events prior to the decision to take or to continue the action (See CEQ Guidelines, §§ 1500.2 and 1500.7). In all such cases early notification shall be given by the responsible bureau official to the Bureau EQO, who shall obtain the views of the Departmental EQO, and a determination as to

the potential environmental effects of the action and the consequent need or absence of need to submit an impact statement in connection with it shall be made by the bureau and, in the case of a negative determination in accordance with subsection (1), below, appropriately documented. If it appears appropriate in making such a determination, agencies outside the Department having expertise in matters involved should also be consulted. Agencies with special environmental expertise are listed in Appendix II of the CEQ Guidelines. Non-governmental organizations or individuals believed to have special knowledge should also be consulted when it appears appropriate. The appraisal provided for in this paragraph shall take place as early in the bureau's consideration of the proposed action as possible (Guidelines, § 1500.2 (a)).

(c) A basic guide to the wide range of actions, including the establishment or continuance of programs, with respect to which an environmental impact statement may be appropriate and general criteria for determining which actions constitute major Federal actions and involve a significant impact on the environment are provided in § 1500.6 of the CEQ Guidelines. The underlying national environmental policy considerations are set forth in section 101 of NEPA and Executive Order 11514. It should be clearly understood that impact statements are not intended to be justification documents for proposed actions but are to be objective assessments of actions and their alternatives in the light of all reasonably pertinent environmental considerations (Guidelines, § 1500.7(a)).

(d) Because of the Department of the Treasury does not, in general, have responsibility for programs or activities under which each operation will normally affect the quality of the human environment, it is difficult to establish detailed criteria for determining what proposed actions within the Department should be the subject of an impact statement. For this reason, it is especially im-

portant that each bureau use careful judgment in determining when an environmental impact statement might be required pursuant to the criteria established in NEPA and in the CEQ Guidelines, including the indications of types of environmental impact presented by the subject headings in Appendix II of the Guidelines. It should be noted that, as set forth more fully in § 1500.5 of the CEQ Guidelines, actions on which a statement may be required include but are not limited to (i) recommendations or favorable reports relating to legislation, including requests for appropriations, (ii) new and continuing projects or program activities, including those supported in whole or in part through Federal contracts, grants, subsidies, loans, or other forms of funding assistance (except under such legislation as the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221 et seq.), (iii) the making or modification of regulations rules, procedures, and policy.

Examples of possible Treasury actions within the respective categories might be (1) proposals of legislation relating to taxation bearing on the utilization of natural resources or affecting the depreciation of structures, (2) major building projects under the sponsorship of the Department and (3) revenue rulings to be published under existing tax law relating to depreciation allowances or other actions which might affect natural resource development and consumption or rulings under the legislation relating to alcohol which might result in the utilization of new substances for packaging.

In order to facilitate compliance as far as possible with the requirements of § 1500.6(c) of the CEQ Guidelines that each agency shall develop specific criteria and methods for identifying those actions likely to require environmental statements, each bureau shall submit to the Departmental EQO on or before May 31, 1974 a list of the actions, if any, within its jurisdiction which it considers would normally require impact statements and a list of those which may require statements depending on the circumstances. Pursuant to § 1500.7(d) of the Guidelines, the lists should indicate any types of action which would appear to require public hearings as to environmental aspects.

In view of the nature of Treasury activities referred to above, no effort need be made to list actions which normally would not require statements, unless the bureau believes that there is some special reason to do so as to a particular category. Since legislative matters will be subject to Department-wide criteria, they may be omitted unless the bureau considers that there is some particular need to set forth types of legislation with which it is concerned.

(e) When a decision to prepare an environmental impact statement on a proposed administrative action is made, it shall promptly be announced in the FEDERAL REGISTER. The Departmental EQO will provide the Bureau EQO with

a sample of such an announcement. In addition, whenever an announcement is published, letters transmitting a copy shall be sent to each agency or person, public or private, believed to have a special interest in or knowledge of the matter (see CEQ Guidelines, § 1500.6(e)).

(f) The Departmental EQO shall cause to be maintained for public inspection a list of all matters in the Department as to which it has been decided to prepare an impact statement, shall consolidate the list quarterly, and as it is so revised, shall transmit it to the Council (see CEQ Guidelines, § 1500.6(e)).

(g) Each impact statement shall first be issued in draft, for comment by government agencies and the public as appropriate. A final statement responsive to comments received shall then be issued. The requirements for the preparation and circulation of the draft and final statements are indicated in sections 3-10 below.

(h) Whenever under the normal policies or procedures of a bureau a hearing would be held on a matter requiring the preparation of an environmental impact statement, the environmental aspects should be included in the hearing. In other cases the question of whether a hearing should be held with respect to an environmental matter shall be determined in accordance with the criteria set forth in § 1500.3(d) of the Guidelines. Normally, all hearings contemplated in this paragraph should be based on a draft environmental impact statement, which should in any event be made available to the public at least 15 days before the hearing.

(i) If as the result of the consideration of a proposed action as provided for by (b) above it is determined that no environmental impact statement is required under section 102(2)(C) of NEPA, a succinct but complete negative statement describing the action, the environmental impacts considered and the reasons why it has been concluded that an impact statement need not be filed shall be prepared by the head of the bureau having jurisdiction over the matter or by an officer specifically designated by him for the purpose. The Bureau EQO shall participate as appropriate in the preparation of such statements, which shall be submitted for the review and approval of the Departmental EQO. A file of such negative statements, available for public inspection, shall be maintained by the Bureau EQO (see CEQ Guidelines, § 1500.6(e)).

3. *Time scheduling.* (a) The timing of the preparation, circulation, submission, and public availability of environmental impact statements is of vital importance, and the minimum time schedules set forth in §§ 1500.9(f) and 1500.11(b) and (c), and, when pertinent, § 1500.7(d) of the CEQ Guidelines shall be carefully followed.

(b) In general, these time schedules require observance of the following time periods:

(i) Not less than 45 days for comment on draft statements, subject to a

possible extension of up to 15 days (see CEQ Guidelines, § 1500.9(f));

(ii) Not less than 90-day and 30-day periods, respectively, which may run concurrently, for public availability of draft and final statements prior to administrative actions (CEQ Guidelines, § 1500.11(b));

(iii) Not less than 15 days for public availability of draft statements prior to any relevant hearings on proposed administrative actions (CEQ Guidelines, § 1500.7(d)).

(c) The periods specified in the preceding subsection are to be calculated from the date on which the CEQ has published in the FEDERAL REGISTER a weekly list in which the respective statement is included (CEQ Guidelines, § 1500.11(c)).

(d) In case the scheduling of Congressional hearings with respect to legislative proposals does not permit fulfillment of the normal time periods and related procedures, a draft statement may be furnished to the Congress and made available to the public pending transmittal of the comments as received and the final text (CEQ Guidelines, § 1500.12(b)).

(e) In the event of emergencies or overriding considerations of expense, the CEQ may be consulted, through the Departmental EQO, on possible variations of the specified periods (CEQ Guidelines, § 1500.11(e)).

4. *General considerations as to utilization of impact statements.* (a) Environmental impact statements are to be utilized with the greatest effectiveness possible in the process of assessing and reviewing proposed departmental policies, programs, and projects. All bureaus should take special care in determining at what stage or stages of a series of actions relating to a particular matter the environmental impact statement procedures covered by this directive shall be applied. As already indicated (section 2(b) above), the preparation of a requisite impact statement should be undertaken as early as possible in the bureau's process of considering the respective proposal. The normal process of the bureau for consideration and review of actions shall be followed, with such adjustment, particularly as to time periods, as may be necessary to permit ample fulfillment of the requirements of NEPA, the CEQ Guidelines, and these procedures (see CEQ Guidelines, §§ 1500.3(a) and 1500.11(b)).

(b) As indicated in § 1500.9(a) of the CEQ Guidelines and contemplated in section 2(b) above, a general principle to be applied is to obtain the views of other agencies at the earliest feasible time in the development of program or project proposals. Duplication in the clearance process should be avoided, but significant changes or redirections of a proposal may call for further environmental analysis and comment (CEQ Guidelines, § 1500.11(b)).

(c) If the action to be dealt with in an impact statement involves an applicant, the bureau should, if any interim activity

of such person is otherwise permitted under the requirements normally applicable, establish limitations thereon pending completion and review of the statement relating to the matter, so as to prevent any prejudice to the full consideration of the environmental aspect.

5. *EPA procedures under the Clean Air Act.* (a) The attention of all bureaus bureau EQOs are specifically directed to § 1500.9(b) of the CEQ Guidelines which, pursuant to section 309 of the Clean Air Act (42 U.S.C. 1857h-7), requires comment from the Environmental Protection Agency (EPA) is to be required on the environmental impact of proposed legislation and regulations and of construction projects and any major action significantly affecting the quality of the human environment, in areas of responsibility, which include: Air or water quality, noise abatement and control, pesticide regulation, solid waste disposal, and generally applicable environmental radiation criteria and standards.

(b) Where an environmental impact statement is being filed with EPA, comment, no special additional procedure is required. However, proposed legislation or regulations in areas of EPA responsibility must be referred to that agency comment, even if no environmental impact statement under section 102(C) of NEPA is to be filed.

6. *Securing information required for preparation of environmental impact statements.* (a) The full resources of the Department should be tapped in developing the factual and analytic information and reference sources required for the preparation of an environmental impact statement. Further, in the majority of instances, the assistance of other agencies with jurisdiction or special expertise concerning the environmental impacts involved should be sought. See section 2(b) above, § 1500.9(a) and Appendixes II and III of the CEQ Guidelines, which list agencies to be consulted.

(b) If Bureau EQOs have difficulty in securing requisite information or guidance in making the necessary analysis, they should consult with the Department EQO, who will assist in locating needed information through appropriate staff members of the Council on Environmental Quality, the Office of Management and Budget, and the Environmental Protection Agency, or other personnel.

7. *Obtaining of comments on impact statements.* (a) With respect to environmental impact statements, it is essential that the bureaus consult and take account of the comments of appropriate Federal, state, and local agencies. Initially this consultation should take the form of informal fact finding and analytical advice in the preparation of impact statements, as contemplated in sections 2 and 6 above, but in event, consultation shall involve formal solicitation of review and comment on the draft statement (CEQ Guidelines § 1500.9(a)-(b)). When appropriate

es set forth in Office of Management and Budget Circular No. A-95 for lining state and local comments. Such clearing houses shall be utilized (CEQ Guidelines, § 1500.9(c)).

(b) Comments should also be received from private organizations or persons which appear to have a special interest in some significant environmental aspect of the proposed action (CEQ Guidelines, § 1500.9(d)).

Content of environmental impact statements. (a) Environmental impact statements are to provide adequate, meaningful, and factual information and analysis to permit an evaluation of the action from the environmental standpoint. Perfunctory generalities are not acceptable, but, on the other hand, information should be conveyed as succinctly and understandably as the subject permit. Quantitative information about the proposed action, including actual or estimated data on its probable effects, should be included to the fullest extent practicable. Where a cost-benefit analysis of the proposed action has been prepared, this analysis should be attached to the environmental impact statement sent to the commenting agencies and to the Council on Environmental Quality and made available to the public. (b) The basic content requirements for a draft statement are set forth in § 1500.8 of the CEQ Guidelines and those for a final statement in § 1500.10. Appendix I of the Guidelines provides the format for a summary sheet which must accompany each draft and final statement. Statements by all bureaus shall follow the prescribed outline and content requirements as closely as is feasible in particular case.

All reasonable alternatives and environmental impacts are to be considered, regardless of whether or not they are within the authority of the Department (CEQ Guidelines, § 1500.8(a)).

(c) Any substantial points of view in opposition to the proposed action on environmental grounds which are known to the agency shall be described in the draft statement as well as in the final statement. So far as possible, quotations of salient passages from expressions of such points of view should be included to make sure there is no doubt that they have been accurately presented. As to final statements, CEQ has directed (Guidelines, § 1500.10(a)) that all substantive comments (or if any is exceptionally voluminous, a summary thereof) received on the statement should be attached to each copy, whether or not each such comment is worthy of merit individual discussion in the text of the statement.

Each draft and final statement should refer to the underlying studies, reports, and other documents considered in preparing the statement and should indicate how such documents may be obtained. In general, with the exception of reference documents such as background materials, the bureau should maintain a file of the respective documents which may be consulted by

interested persons. Even if especially significant documents are attached to the statement, care should be taken to insure that it remains an essentially self-contained instrument easily understood by the reader without the need for undue cross reference (CEQ Guidelines, § 1500.8(b)).

(f) Environmental impact statements should, to the extent possible, include statements or findings concerning environmental impact required by other statutes, such as section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Section 470f), with a view to the issuance of a single document meeting all applicable requirements. Any procedures or instructions issued by the Federal agency having jurisdiction with regard to such a statute should, of course, be consulted in the preparation of the combined statement.

9. Filing and distribution of environmental impact statements. (a) Ten copies of each draft or final statement are to be filed with CEQ (Guidelines, § 1500.11(a)).

(b) At the same time that each draft statement is filed with the Council, copies should also be sent to all pertinent entities, i.e., Federal, state, and local agencies, and private organizations and individuals (CEQ Guidelines, § 1500.9).

(c) At the same time that each final statement is filed with the Council, copies should also be sent to all entities which made substantive comments on the draft statement, or requested a copy, so that they may be appropriately informed (CEQ Guidelines, § 1500.10(b)).

10. Availability of environmental impact statements to the public. (a) Environmental impact statements, both draft and final, and any substantive comments thereon shall be made available to the public pursuant to the Freedom of Information Act (5 U.S.C. 552), the Department's regulations thereunder (31 CFR Part 1), and the disclosure regulations of the bureau. These documents are to be placed in the public reading room in the Treasury Library in the Main Treasury Building in Washington, D.C., and the public reading rooms of the bureau if any are maintained, and may be read or copied during working hours. When appropriate, copies of each statement shall also be made available through State, regional, and metropolitan clearinghouses, or such alternate point as the Governor of the respective State may designate to CEQ (Guidelines, § 1500.11(d)).

(b) A notice of the filing and availability of each environmental impact statement, draft and final, shall be inserted in the FEDERAL REGISTER by the responsible bureau. The Departmental EQO will supply a sample outline of such notices. Whenever appropriate, bureaus should also utilize, in coordination with the Departmental EQO, other methods for publicizing the existence of draft statements, such as, for example, supplying information to local newspapers or sending notice direct to nongovernmental groups or persons believed to be interested (CEQ Guidelines, § 1500.9(d)).

(c) The initial printing of each statement should be sufficient to meet the anticipated demand, not only of agencies, organizations, and individuals who must receive copies as required by section 9 above (§§ 1500.9 and 1500.10(b) of the CEQ Guidelines), but also for a reasonable number of additional requests. Copies to be made available to the public shall normally be provided without charge, but when costs are significant, the bureau may, with the approval of the Departmental EQO, establish a fee which shall not exceed the actual cost of reproducing the copies additional to those required to be sent to other governmental agencies (CEQ Guidelines, § 1500.9(d)).

(d) If the supply of copies of a statement provided for in the preceding paragraph has been exhausted, or a requestor seeks more than one copy without an appropriate reason, attention should be directed to the publication service of the National Technical Information Service of the Department of Commerce, which has been designated as the long-term "publisher" of environmental impact statements, and which offers for sale to the public the environmental impact statements of all Federal agencies. Orders should be placed with the Ordering Department, National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

11. Utilization of final impact statements in decisional process. (a) Section 102(2)(C) of NEPA requires that the final environmental impact statement shall accompany the proposal to which it relates through the agency review process.

(b) In this process pertinent non-environmental factors are to be considered and balanced with those relating to the environment. It is requisite that the entire process be based on an administrative record in which the statement is included and fully taken into account together with the relevant non-environmental factors presented in the record. At each level of the review process an appropriate document of findings, conclusion, and decision carefully weighing the environmental considerations and the other relevant factors appearing in the record should be prepared by the responsible officer. In the initial stages this document may take the form of a recommendation to higher authority. Although no significant factor should be neglected, the document should give particular attention to any appreciable adverse environmental effects set forth in the impact statement and should closely, though succinctly, balance them with any other relevant interests and considerations of Federal policy set forth in the record, including particularly an analysis of the alternatives to the proposed action and their relationship to the non-environmental factors. The final decision may of course rely on the recommendations of subordinate officers, but if there is any variation it should contain sufficient analysis to make clear the essential bases of the determination.

12. Treasury comments on statements of other agencies. (a) As set forth in sec-

tion 1(a)(vii) above and pursuant to Appendix III of the CEQ Guidelines, the Departmental EQO shall receive all environmental impact statements submitted by other agencies for comment and coordinate the appropriate review and reply. If any bureau receives a request for comment direct from another agency, it shall consult with the Departmental EQO.

(b) Comments should of course be confined to matters within the jurisdiction or expertise of the Department. How-

ever, comments need not be limited to environmental aspects but may relate to fiscal, economic, and other non-environmental matters of concern to the Department.

(c) At the time comments are sent to the agency responsible for a statement, five copies shall be forwarded to the five copies shall be forwarded to the CEQ by the Departmental EQO (CEQ Guidelines, §1500.11(a)). Copies of replies indicating that the Department has no comment on an impact statement should not be forwarded to the CEQ.

(d) With regard to requests for comment on statements relating to proposal for legislation, close coordination shall be maintained between the office of the Departmental EQO and Office of the General Counsel in relation to the latter's normal responsibility concerning departmental comments on legislative proposals themselves.

Effective date. These procedures are effective as of _____, 1974.

WARREN F. BRECHT

[FR Doc.74-3128 Filed 2-7-74; 8:45 am]

CCR 000036462