**7001.1060 EFFLUENT ANALYSIS BY EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS.**

Subpart 1. **Requirement.** If the applicant is an existing manufacturing, commercial, mining, or silvicultural discharger, the applicant shall perform an analysis of a sample of its effluent from each of its outfalls, except that if the commissioner finds that two or more of such outfalls have substantially identical effluents, the commissioner shall allow the applicant to analyze a sample from one of the identical effluents. The applicant shall perform the analyses according to subparts 2 to 10.

Subp. 2. **Methods of sampling and analysis.** The sampling method for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform must be the grab sampling method. For all other pollutants the applicant shall use 24-hour composite samples unless otherwise approved by the commissioner. The applicant shall perform the analysis by using the appropriate analytical techniques in Code of Federal Regulations, title 40, part 136, or by using techniques found by the commissioner to be appropriate considering the circumstances and the parameters which are to be analyzed.

Subp. 3. **Parameters.** The applicant shall analyze for the following parameters:

A. Unless the commissioner grants a written exemption to the applicant after making a finding that a given pollutant is not likely to be present in the effluent, the applicant shall analyze for biochemical oxygen demand, chemical oxygen demand, total organic carbon, total suspended solids, ammonia (as N), temperature (both winter and summer), and pH.

B. Except as provided in item F, an applicant who has processes in one or more of the primary industry categories shall:

(1) analyze, using the specified Gas Chromatograph/Mass Spectrometer (GC/MS) analysis for the organic toxic pollutants listed in subparts 4 to 7 for the applicable industry category indicated in part 7001.1061; and

(2) analyze for the pollutants listed in subparts 8 and 9.

C. Except as provided in item F, an applicant who has processes not included in one of the primary industry categories and who has reason to believe that the pollutants listed in subparts 4 to 9 may be present in the effluent shall identify these pollutants and shall analyze for these pollutants except those that are present in the effluent solely as the result of their presence in the intake water.

D. The applicant shall identify each pollutant listed in subpart 10 which the applicant knows or has reason to believe is present in the effluent and shall state the reason why the applicant knows or has reason to believe that the pollutant is present. The applicant shall analyze for each identified pollutant except those that are present in the effluent solely as the result of their presence in the intake water.

E. The applicant shall analyze, using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin if:

(1) the applicant uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP); 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloroproprionate (Erbon); 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or

(2) the applicant knows or has reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin is or may be present in an effluent.

F. An applicant is exempt from the requirements of items B and C to analyze for the pollutants listed in subparts 4 to 7 if the facility which is the subject of the application has gross total annual sales averaging less than $100,000 per year (in second quarter 1980 dollars) for the three-year period prior to submittal of the application.

Subp. 4. **Volatile substances.** The following volatile substances must be analyzed under subpart 3, items B and C;

A. acrolein;

B. acrylonitrile;

C. benzene;

D. bis(chloromethyl)ether;

E. bromoform;

F. carbon tetrachloride;

G. chlorobenzene;

H. chlorodibromomethane;

I. chloroethane;

J. 2-chloroethylvinyl ether;

K. chloroform;

L. dichlorobromomethane;

M. dichlorodifluoromethane;

N. 1,1-dichloroethane;

O. 1,2-dichloroethane;

P. 1,1-dichlorethylene;

Q. 1,2-dichloropropane;

R. 1,2-dichloropropylene;

S. ethylbenzene;

T. methyl bromide;

U. methyl chloride;

V. methylene chloride;

W. 1,1,2,2-tetrachloroethane;

X. tetrachloroethylene;

Y. toluene;

Z. 1,2-trans-dichloroethylene;

AA. 1,1,1-trichloroethane;

BB. 1,1,2-trichloroethane;

CC. trichloroethylene;

DD. trichlorofluoromethane; and

EE. vinyl chloride.

Subp. 5. **Acid compounds.** The following acid compounds must be analyzed under subpart 3, items B and C:

A. 2-chlorophenol;

B. 2,4-dichlorophenol;

C. 2,4-dimethylphenol;

D. 4,6-dinitro-o-cresol;

E. 2,4-dinitrophenol;

F. 2-nitrophenol;

G. 4-nitrophenol;

H. p-chloro-m-cresol;

I. pentachlorophenol;

J. phenol; and

K. 2,4,6-trichlorophenol.

Subp. 6. **Base/neutral substances.** The following base/neutral substances must be analyzed under subpart 3, items B and C:

A. acenaphthene;

B. acenaphthylene;

C. anthracene;

D. benzidine;

E. benzo(a)anthracene;

F. benzo(a)pyrene;

G. 3,4-benzofluoranthene;

H. benzo(ghi)perylene;

I. benzo(k)fluoroanthene;

J. bis(2-chloroethoxy)methane;

K. bis(2-chloroethyl)ether;

L. bis(2-chloroisopropyl)ether;

M. bis(2-ethylhexyl)phthalate;

N. 4-bromophenyl phenyl ether;

O. butylbenzyl phthalate;

P. 2-chloronaphthalene;

Q. 4-chlorophenyl phenyl ether;

R. chrysene;

S. dibenzo(a,h)anthracene;

T. 1,2-dichlorobenzene;

U. 1,3-dichlorobenzene;

V. 1,4-dichlorobenzene;

W. 3,3'-dichlorobenzidine;

X. diethyl phthalate;

Y. dimethyl phthalate;

Z. di-n-butyl phthalate;

AA. 2,4-dinitrotoluene;

BB. 2,6-dinitrotoluene;

CC. di-n-octyl phthalate;

DD. 1,2-diphenylhydrazine (as azobenzene);

EE. fluoranthene;

FF. fluorene;

GG. hexachlorobenzene;

HH. hexachlorobutadiene;

II. hexachlorocyclopentadiene;

JJ. hexachloroethane;

KK. indeno(1,2,3-cd)pyrene;

LL. isophorone;

MM. naphthalene;

NN. nitrobenzene;

OO. N-nitrosodimethylamine;

PP. N-nitrosodi-n-propylamine;

QQ. N-nitrosodiphenylamine;

RR. phenanthrene;

SS. pyrene; and

TT. 1,2,4-trichlorobenzene.

Subp. 7. **Pesticides.** The following pesticides must be analyzed under subpart 3, items B and C:

A. aldrin;

B. α-BHC;

C. β-BHC;

D. γ-BHC;

E. δ-BHC;

F. chlordane;

G. 4,4'-DDT;

H. 4,4'-DDD;

I. 4,4'-DDE;

J. dieldrin;

K. α-endosulfan;

L. β-endosulfan;

M. endosulfan sulfate;

N. endrin;

O. endrin aldehyde;

P. heptachlor;

Q. heptachlor epoxide;

R. PCB-1242;

S. PCB-1254;

T. PCB-1221;

U. PCB-1232;

V. PCB-1248;

W. PCB-1260;

X. PCB-1016; and

Y. toxaphene.

Subp. 8. **Metals, cyanides, and phenols.** The following metals, cyanide, and phenols must be analyzed for quantity present under subpart 3, items B and C:

A. antimony;

B. arsenic;

C. beryllium;

D. cadmium;

E. chromium;

F. copper;

G. lead;

H. mercury;

I. nickel;

J. selenium;

K. silver;

L. thallium;

M. zinc;

N. total cyanide; and

O. total phenols.

Subp. 9. **Conventional and nonconventional pollutants.** The following conventional and nonconventional pollutants must be analyzed under subpart 3, items B and C:

A. aluminum;

B. barium;

C. boron;

D. bromide;

E. total residual chlorine;

F. cobalt;

G. color;

H. fecal coliform;

I. fluoride;

J. iron;

K. magnesium;

L. manganese;

M. molybdenum;

N. nitrate-nitrite;

O. total organic nitrogen;

P. oil and grease;

Q. total phosphorus;

R. radioactivity;

S. sulfate;

T. sulfide;

U. sulfite;

V. surfactants;

W. total tin; and

X. total titanium.

Subp. 10. **Toxic pollutants and hazardous substances.** The following toxic pollutants and hazardous substances must be analyzed under subpart 3, item D:

A. asbestos;

B. acetaldehyde;

C. allyl alcohol;

D. allyl chloride;

E. amyl acetate;

F. aniline;

G. benzonitrile;

H. benzyl chloride;

I. butyl acetate;

J. butylamine;

K. captan;

L. carbaryl;

M. carbofuran;

N. carbon disulfide;

O. chlorpyrifos;

P. coumaphos;

Q. cresol;

R. crotonaldehyde;

S. cyclohexane;

T. 2,4-D (2,4-dichlorophenoxy acetic acid);

U. diazinon;

V. dicamba;

W. dichlobenil;

X. dichlone;

Y. 2,2-dichloropropionic acid;

Z. dichlorvos;

AA. diethyl amine;

BB. dimethyl amine;

CC. dinitrobenzene;

DD. diquat;

EE. disulfoton;

FF. diuron;

GG. epichlorohydrin;

HH. ethanolamine;

II. ethion;

JJ. ethylene diamine;

KK. ethylene dibromide;

LL. formaldehyde;

MM. furfural;

NN. guthion;

OO. isoprene;

PP. isopropanolamine;

QQ. kelthane;

RR. kepone;

SS. malathion;

TT. mercaptodimethur;

UU. methoxychlor;

VV. methyl mercaptan;

WW. methyl methacrylate;

XX. methyl parathion;

YY. mevinphos;

ZZ. mexacarbate;

AAA. monoethyl amine;

BBB. monomethyl amine;

CCC. naled;

DDD. napthenic acid;

EEE. nitrotoluene;

FFF. parathion;

GGG. phenolsulfanate;

HHH. phosgene;

III. propargite;

JJJ. propylene oxide;

KKK. pyrethrins;

LLL. quinoline;

MMM. resorcinol;

NNN. strontium;

OOO. strychnine;

PPP. styrene;

QQQ. 2,4,5-T (2,4,5-trichlorophenoxy acetic acid);

RRR. TDE (tetrachlorodiphenylethane);

SSS. 2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid];

TTT. trichlorofon;

UUU. triethylamine;

VVV. trimethylamine;

WWW. uranium;

XXX. vanadium;

YYY. vinyl acetate;

ZZZ. xylene;

AAAA. xylenol; and

BBBB. zirconium.

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