§ 122.6 Continuation of expiring permits.

- (a) *EPA permits*. When EPA is the permit-issuing authority, the conditions of an expired permit continue in force under 5 U.S.C. 558(c) until the effective date of a new permit (see § 124.15) if:
- (1) The permittee has submitted a timely application under §122.21 which is a complete (under §122.21(e)) application for a new permit; and
- (2) The Regional Administrator, through no fault of the permittee does not issue a new permit with an effective date under §124.15 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints).
- (b) Effect. Permits continued under this section remain fully effective and enforceable.
- (c) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Regional Administrator may choose to do any or all of the following:
- (1) Initiate enforcement action based upon the permit which has been continued:
- (2) Issue a notice of intent to deny the new permit under § 124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
- (3) Issue a new permit under part 124 with appropriate conditions; or
- (4) Take other actions authorized by these regulations.
- (d) State continuation. (1) An EPA-issued permit does not continue in force beyond its expiration date under Federal law if at that time a State is the permitting authority. States authorized to administer the NPDES program may continue either EPA or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit.

[48 FR 14153, Apr. 1, 1983, as amended at 50 FR 6940, Feb. 19, 1985]

§ 122.7 Confidentiality of information.

- (a) In accordance with 40 CFR part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR part 2 (Public Information).
- (b) Applicable to State programs, see §123.25. Claims of confidentiality for the following information will be denied:
- (1) The name and address of any permit applicant or permittee;
- (2) Permit applications, permits, and effluent data.
- (c) Applicable to State programs, see §123.25. Information required by NPDES application forms provided by the Director under §122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

Subpart B—Permit Application and Special NPDES Program Requirements

§122.21 Application for a permit (applicable to State programs, see §123.25).

(a) Duty to apply. (1) Any person who discharges or proposes to discharge pollutants or who owns or operates a "sludge-only facility" whose sewage sludge use or disposal practice is regulated by part 503 of this chapter, and who does not have an effective permit, except persons covered by general permits under §122.28, excluded under §122.3, or a user of a privately owned treatment works unless the Director requires otherwise under §122.44(m), must submit a complete application to the Director in accordance with this

section and part 124 of this chapter. The requirements for concentrated animal feeding operations are described in §122.23(d).

- (2) Application Forms: (i) All applicants for EPA-issued permits must submit applications on EPA permit application forms. More than one application form may be required from a facility depending on the number and types of discharges or outfalls found there. Application forms may be obtained by contacting: U.S. EPA, Mail Code 4203M, 1200 Pennsylvania Ave. NW, Washington, DC 20460 or by visiting http://www.epa.gov/npdes. Applications for EPA-issued permits must be submitted as follows:
- (A) All applicants, other than POTWs, TWTDS, vessels, and pesticide applicators must submit Form 1.
- (B) Applicants for new and existing POTWs must submit the information contained in paragraph (j) of this section using Form 2A or other form provided by the director.
- (C) Applicants for concentrated animal feeding operations or aquatic animal production facilities must submit Form 2B.
- (D) Applicants for existing industrial facilities (including manufacturing facilities, commercial facilities, mining activities, and silvicultural activities), must submit Form 2C.
- (E) Applicants for new industrial facilities that discharge process wastewater must submit Form 2D.
- (F) Applicants for new and existing industrial facilities that discharge only nonprocess wastewater must submit Form 2E.
- (G) Applicants for new and existing facilities whose discharge is composed entirely of storm water associated with industrial activity must submit Form 2F, unless exempted by §122.26(c)(1)(ii). If the discharge is composed of storm water and non-storm water, the applicant must also submit, Forms 2C, 2D, and/or 2E, as appropriate (in addition to Form 2F).
- (H) Applicants for new and existing TWTDS, subject to paragraph (e)(2)(i) of this section must submit the application information required by paragraph (q) of this section, using Form 2S or other form provided by the director.

- (ii) The application information required by paragraph (a)(2)(i) of this section may be electronically submitted if such method of submittal is approved by EPA or the Director.
- (iii) Applicants can obtain copies of these forms by contacting the Water Management Divisions (or equivalent division which contains the NPDES permitting function) of the EPA Regional Offices. The Regional Offices' addresses can be found at §1.7 of this chapter.
- (iv) Applicants for State-issued permits must use State forms which must require at a minimum the information listed in the appropriate paragraphs of this section.
- (b) Who applies? When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.
- (c) Time to apply. (1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under §122.26(b)(14)(x) or (b)(15)(i) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and §122.26(c)(1)(i)(G) and (c)(1)(ii).
- (2) Permits under section 405(f) of CWA. All TWTDS whose sewage sludge use or disposal practices are regulated by part 503 of this chapter must submit permit applications according to the applicable schedule in paragraphs (c)(2)(i) or (ii) of this section.
- (i) A TWTDS with a currently effective NPDES permit must submit a permit application at the time of its next NPDES permit renewal application. Such information must be submitted in

accordance with paragraph (d) of this section.

- (ii) Any other TWTDS not addressed under paragraph (c)(2)(i) of this section must submit the information listed in paragraphs (c)(2)(ii)(A) through (E) of this section to the Director within 1 year after publication of a standard applicable to its sewage sludge use or disposal practice(s), using Form 2S or another form provided by the Director. The Director will determine when such TWTDS must submit a full permit application.
- (A) The TWTDS's name, mailing address, location, and status as federal, State, private, public or other entity;
- (B) The applicant's name, address, telephone number, electronic mail address and ownership status;
- (C) A description of the sewage sludge use or disposal practices. Unless the sewage sludge meets the requirements of paragraph (q)(8)(iv) of this section, the description must include the name and address of any facility where sewage sludge is sent for treatment or disposal, and the location of any land application sites:
- (D) Annual amount of sewage sludge generated, treated, used or disposed (estimated dry weight basis); and
- (E) The most recent data the TWTDS may have on the quality of the sewage sludge.
- (iii) Notwithstanding paragraphs (c)(2)(i) or (ii) of this section, the Director may require permit applications from any TWTDS at any time if the Director determines that a permit is necessary to protect public health and the environment from any potential adverse effects that may occur from toxic pollutants in sewage sludge.
- (iv) Any TWTDS that commences operations after promulgation of an applicable "standard for sewage sludge use or disposal" must submit an application to the Director at least 180 days prior to the date proposed for commencing operations.
- (d) *Duty to reapply*. (1) Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be sub-

mitted later than the expiration date of the existing permit.)

- (2) All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that:
- (i) The Regional Administrator may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date; and
 - (3) [Reserved]
- (e) Completeness. (1) The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity. For EPA administered NPDES programs, an application which is reviewed under §124.3 of this chapter is complete when the Director receives either a complete application or the information listed in a notice of deficiency.
- (2) A permit application shall not be considered complete if a permitting authority has waived application requirements under paragraphs (j) or (q) of this section and EPA has disapproved the waiver application. If a waiver request has been submitted to EPA more than 210 days prior to permit expiration and EPA has not disapproved the waiver application 181 days prior to permit expiration lacking the information subject to the waiver application shall be considered complete.
- (3) Except as specified in 122.21(e)(3)(ii), a permit application shall not be considered complete unless all required quantitative data are collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O.
- (i) For the purposes of this requirement, a method approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O is "sufficiently sensitive" when:

- (A) The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured pollutant or pollutant parameter; or
- (B) The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- (C) The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter.

NOTE TO PARAGRAPH (e)(3)(i): Consistent with 40 CFR part 136, applicants have the option of providing matrix or sample specific minimum levels rather than the published levels. Further, where an applicant can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive", the analytical results are not consistent with the QA/QC specifications for that method, then the Director may determine that the method is not performing adequately and the applicant should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.21(e)(3)(i). Where no other EPA-approved methods exist, the applicant should select a consistent with 122.21(e)(3)(ii).

- (ii) When there is no analytical method that has been approved under 40 CFR part 136, required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the Director, the applicant may use any suitable method but shall provide a description of the method. When selecting a suitable method, other factors such as a method's precision, accuracy, or resolution, may be considered when assessing the performance of the method.
- (f) Information requirements. All applicants for NPDES permits, other than POTWs and other TWTDS, vessels, and pesticide applicators, must provide the information in paragraphs (f)(1) through (10) of this section to the Director, using the application form provided by the Director. Additional information required of applicants is set

forth in paragraphs (g) through (k) and (q) through (r) of this section.

- (1) The activities conducted by the applicant which require it to obtain an NPDES permit.
- (2) Name, mailing address, and location of the facility for which the application is submitted.
- (3) Up to four SIC and up to four NAICS codes that best reflect the principal products or services provided by the facility.
- (4) The operator's name, address, telephone number, electronic mail address, ownership status, and status as Federal, State, private, public, or other entity.
- (5) Whether the facility is located on Indian lands.
- (6) A listing of all permits or construction approvals received or applied for under any of the following programs:
- (i) Hazardous Waste Management program under RCRA.
 - (ii) UIC program under SDWA.
 - (iii) NPDES program under CWA.
- (iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.
- (v) Nonattainment program under the Clean Air Act.
- (vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.
- (vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.
- (viii) Dredge or fill permits under section 404 of CWA.
- (ix) Other relevant environmental permits, including State permits.
- (7) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.
- (8) A brief description of the nature of the business.

- (9) An indication of whether the facility uses cooling water and the source of the cooling water.
- (10) An indication of whether the facility is requesting any of the variances at 40 CFR 122.21(m), if known at the time of application.
- (g) Application requirements for existing manufacturing, commercial, mining, and silvicultural dischargers. Existing manufacturing, commercial, mining, and silvicultural dischargers applying for NPDES permits, except for those facilities subject to the requirements of §122.21(h), shall provide the following information to the Director, using application forms provided by the Director.
- (1) *Outfall location*. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.
- (2) Line drawing. A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under paragraph (g)(3) of this section. The water balance must show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined (for example, for certain mining activities), the applicant may provide instead a pictorial description of the nature and amount of any sources of water and any collection and treatment measures.
- (3) Average flows and treatment. A narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and stormwater runoff; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations, or production areas may be described in general terms (for example, "dye-making reactor", "distillation tower"). For a privately owned treatment works, this information shall include the identity of each user

- of the treatment works. The average flow of point sources composed of storm water may be estimated. The basis for the rainfall event and the method of estimation must be indicated.
- (4) Intermittent flows. If any of the discharges described in paragraph (g)(3) of this section are intermittent or seasonal, a description of the frequency, duration and flow rate of each discharge occurrence (except for stormwater runoff, spillage or leaks).
- (5) Maximum production. If an effluent guideline promulgated under section 304 of CWA applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's actual production reported in the units used in the applicable effluent guideline. The reported measure must reflect the actual production of the facility as required by §122.45(b)(2).
- (6) Improvements. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates.
- (7) Effluent characteristics. (i) Information on the discharge of pollutants specified in this paragraph (g)(7) (except information on storm water discharges which is to be provided as specified in §122.26). When "quantitative data" for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under Part 136 of this chapter unless use of another method is required for the pollutant under 40 CFR subchapters N or O. When no analytical method is approved under Part 136 or required under subchapters N or O, the applicant may use any suitable method but must provide a description of the method. When an applicant has two or more outfalls with substantially identical effluents, the Director may allow the applicant to test only one outfall and report that quantitative data as applying to the substantially identical outfall. The requirements in paragraphs (g)(7)(vi) and (vii) of this section

state that an applicant must provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must report such pollutants as present. When paragraph (g)(7) of this section requires analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including E. coli), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)), or volatile organics, grab samples must be collected for those pollutants. For all other pollutants, a 24-hour composite sample, using a minimum of four (4) grab samples, must be used unless specified otherwise at 40 CFR Part 136. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. In addition, for discharges other than storm water discharges, the Director mav waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of four (4) grab samples will be a representative sample of the effluent being discharged. Results of analyses of individual grab samples for any parameter may be averaged to obtain the daily average. Grab samples that are not required to be analyzed immediately (see Table II at 40 CFR 136.3 (e)) may be composited in the laboratory, provided that container, preservation, and holding time requirements are met (see Table II at 40 CFR 136.3 (e)) and that sample integrity is not compromised by compositing.

(ii) Storm water discharges. For storm water discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area. For all applicants, a flow-weighted composite shall be taken for either the entire discharge or for

the first three hours of the discharge. The flow-weighted composite sample for a storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes (applicants submitting permit applications for storm water discharges under §122.26(d) may collect flowweighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the Director). However, a minimum of one grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than 24 hours. For a flow-weighted composite sample, only one analysis of the composite of aliquots is required. For storm water discharge samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in §122.26(c)(1). For all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in §122.26 except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting samples under part 136 of this chapter, and additional time for submitting data on a case-by-case basis. An applicant is expected to "know or have reason to believe" that a pollutant is present in an effluent based on an evaluation of the expected

use, production, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.)

(iii) Reporting requirements. Every applicant must report quantitative data for every outfall for the following pollutants:

Biochemical Oxygen Demand (BOD5) Chemical Oxygen Demand Total Organic Carbon Total Suspended Solids Ammonia (as N) Temperature (both winter and summer) pH

- (iv) The Director may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in paragraph (g)(7)(iii) of this section if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements.
- (v) Each applicant with processes in one or more primary industry category (see appendix A of this part) contributing to a discharge must report quantitative data for the following pollutants in each outfall containing process wastewater:
- (A) The organic toxic pollutants in the fractions designated in table I of appendix D of this part for the applicant's industrial category or categories unless the applicant qualifies as a small business under paragraph (g)(8) of this section. Table II of appendix D of this part lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromatography/mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes. See Notes 2, 3, and 4 of this section.
- (B) The pollutants listed in table III of appendix D of this part (the toxic metals, cyanide, and total phenols).

- (vi)(A) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in table IV of appendix D of this part (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant must report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.
- (B) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants listed in table II or table III of appendix D of this part (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under paragraph (g)(7)(v) of this section are discharged from each outfall. For every pollutant expected to be discharged in concentrations of 10 ppb or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4, dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant must report quantitative data. For every pollutant expected to be discharged in concentrations less than 10 ppb, or in the case of acrylonitrile. acrolein. 2.4 dinitrophenol. and 2-methyl-4, 6 dinitrophenol, in concentrations less than 100 ppb, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. An applicant qualifying as a small business under paragraph (g)(8) of this section is not required to analyze for pollutants listed in table II of appendix D of this part (the organic toxic pollutants).
- (vii) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in table V of appendix D of this part (certain hazardous substances and asbestos) are discharged from each outfall.

For every pollutant expected to be discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant.

- (viii) Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:
- (A) Uses or manufactures 2,4,5trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic (Silvex. 2,4,5,-TP);2-(2,4,5trichlorophenoxy) 2.2ethyl. dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel): 2,4,5trichlorophenol (TCP): hexachlorophene (HCP); or
- (B) Knows or has reason to believe that TCDD is or may be present in an effluent.
- (ix) Where quantitative data are required in paragraphs (g)(7)(i) through (viii) of this section, existing data may be used, if available, in lieu of sampling done solely for the purpose of the application, provided that: All data requirements are met; sampling was performed, collected, and analyzed no more than four and one-half years prior to submission; all data are representative of the discharge; and all available representative data are considered in the values reported.
- (8) Small business exemption. An application which qualifies as a small business under one of the following criteria is exempt from the requirements in paragraph (g)(7)(v)(A) or (g)(7)(vi)(A) of this section to submit quantitative data for the pollutants listed in table II of appendix D of this part (the organic toxic pollutants):
- (i) For coal mines, a probable total annual production of less than 100,000 tons per year.
- (ii) For all other applicants, gross total annual sales averaging less than \$100,000 per year (in second quarter 1980 dollars).
- (9) Used or manufactured toxics. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Director may

waive or modify this requirement for any applicant if the applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue the permit.

(10) [Reserved]

- (11) Biological toxicity tests. An identification of any biological toxicity tests which the applicant knows or has reason to believe have been made within the last 3 years on any of the applicant's discharges or on a receiving water in relation to a discharge.
- (12) Contract analyses. If a contract laboratory or consulting firm performed any of the analyses required by paragraph (g)(7) of this section, the identity of each laboratory or firm and the analyses performed.
- (13) Additional information. In addition to the information reported on the application form, applicants shall provide to the Director, at his or her request, such other information as the Director may reasonably require to assess the discharges of the facility and to determine whether to issue an NPDES permit. The additional information may include additional quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity.
- (h) Application requirements for manufacturing, commercial, mining and silvicultural facilities which discharge only non-process wastewater. Except for stormwater discharges, all manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits which discharge only non-process wastewater not regulated by an effluent limitations guideline or new source performance standard shall provide the following information to the Director, using application forms provided by the Director:
- (1) Outfall location. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the receiving water.
- (2) Discharge date (for new dischargers). Date of expected commencement of discharge.
- (3) Type of waste. An identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including

sanitary wastes, restaurant or cafeteria wastes, or noncontact cooling water. An identification of cooling water additives (if any) that are used or expected to be used upon commencement of operations, along with their composition if existing composition is available.

- (4) Effluent characteristics. (i) Quantitative data for the pollutants or parameters listed below, unless testing is waived by the Director. The quantitative data may be data collected over the past 365 days, if they remain representative of current operations, and must include maximum daily value, average daily value, and number of measurements taken. The applicant must collect and analyze samples in accordance with 40 CFR Part 136. When analysis of pH, temperature, residual chlorine, oil and grease, or fecal coli-(including E. coli),Enterococci (previously known as fecal streptococcus) and volatile organics is required in paragraphs (h)(4)(i)(A) through (K) of this section, grab samples must be collected for those pollutants. For all other pollutants, a 24-hour composite sample, using a minimum of four (4) grab samples, must be used unless specified otherwise at 40 CFR Part 136. For a composite sample, only one analysis of the composite of aliquots is required. New dischargers must include estimates for the pollutants or parameters listed below instead of actual sampling data, along with the source of each estimate. All levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature.
- (A) Biochemical Oxygen Demand (BOD₅).
 - (B) Total Suspended Solids (TSS).
- (C) Fecal Coliform (if believed present or if sanitary waste is or will be discharged).
- (D) Total Residual Chlorine (if chlorine is used).
 - (E) Oil and Grease.
- (F) Chemical Oxygen Demand (COD) (if non-contact cooling water is or will be discharged).
- (G) Total Organic Carbon (TOC) (if non-contact cooling water is or will be discharged).
 - (H) Ammonia (as N).
 - (I) Discharge Flow.

- (J) pH.
- (K) Temperature (Winter and Summer).
- (ii) The Director may waive the testing and reporting requirements for any of the pollutants or flow listed in paragraph (h)(4)(i) of this section if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.
- (iii) If the applicant is a new discharger, he must complete and submit Item IV of Form 2e (see §122.21(h)(4)) by providing quantitative data in accordance with that section no later than two years after commencement of discharge. However, the applicant need not complete those portions of Item IV requiring tests which he has already performed and reported under the discharge monitoring requirements of his NPDES permit.
- (iv) The requirements of parts i and iii of this section that an applicant must provide quantitative data or estimates of certain pollutants do not apply to pollutants present in a discharge solely as a result of their presence in intake water. However, an applicant must report such pollutants as present. Net credit may be provided for the presence of pollutants in intake water if the requirements of §122.45(g) are met.
- (5) Flow. A description of the frequency of flow and duration of any seasonal or intermittent discharge (except for stormwater runoff, leaks, or spills).
- (6) Treatment system. A brief description of any system used or to be used.
- (7) Optional information. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining "net" credits pursuant to §122.45(g).
- (8) Certification. Signature of certifying official under §122.22.
- (i) Application requirements for new and existing concentrated animal feeding operations and aquatic animal production facilities. New and existing concentrated animal feeding operations (defined in §122.23) and concentrated aquatic animal production facilities (defined in §122.24) shall provide the following information to the Director,

using the application form provided by the Director:

- (1) For concentrated animal feeding operations:
- (i) The name of the owner or operator;
- (ii) The facility location and mailing addresses:
- (iii) Latitude and longitude of the production area (entrance to production area):
- (iv) A topographic map of the geographic area in which the CAFO is located showing the specific location of the production area, in lieu of the requirements of paragraph (f)(7) of this section:
- (v) Specific information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);
- (vi) The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage(tons/gallons);
- (vii) The total number of acres under control of the applicant available for land application of manure, litter, or process wastewater;
- (viii) Estimated amounts of manure, litter, and process wastewater generated per year (tons/gallons);
- (ix) Estimated amounts of manure, litter and process wastewater transferred to other persons per year (tons/gallons); and
- (x) A nutrient management plan that at a minimum satisfies the requirements specified in §122.42(e), including, for all CAFOs subject to 40 CFR part 412, subpart C or subpart D, the requirements of 40 CFR 412.4(c), as applicable
- (2) For concentrated aquatic animal production facilities:
- (i) The maximum daily and average monthly flow from each outfall.
- (ii) The number of ponds, raceways, and similar structures.

- (iii) The name of the receiving water and the source of intake water.
- (iv) For each species of aquatic animals, the total yearly and maximum harvestable weight.
- (v) The calendar month of maximum feeding and the total mass of food fed during that month.
- (j) Application requirements for new and existing POTWs. Unless otherwise indicated, all POTWs and other dischargers designated by the Director must provide, at a minimum, the information in this paragraph to the Director, using Form 2A or another application form provided by the Director. Permit applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the Director. The Director may waive any requirement of this paragraph if he or she has access to substantially identical information. The Director may also waive any requirement of this paragraph that is not of material concern for a specific permit, if approved by the Regional Administrator. The waiver request to the Regional Administrator must include the State's justification for the waiver. A Regional Administrator's disapproval of a State's proposed waiver does not constitute final Agency action, but does provide notice to the State and permit applicant(s) that EPA may object to any State-issued permit issued in the absence of the required information.
- (1) Basic application information. All applicants must provide the following information:
- (i) Facility information. Name, mailing address, and location of the facility for which the application is submitted;
- (ii) Applicant information. Name, mailing address, telephone number, and electronic mail address of the applicant, and indication as to whether the applicant is the facility's owner, operator, or both:
- (iii) Existing environmental permits. Identification of all environmental permits or construction approvals received or applied for (including dates) under any of the following programs:

- (A) Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA), Subpart C;
- (B) Underground Injection Control program under the Safe Drinking Water Act (SDWA);
- (C) NPDES program under Clean Water Act (CWA);
- (D) Prevention of Significant Deterioration (PSD) program under the Clean Air Act:
- (E) Nonattainment program under the Clean Air Act;
- (F) National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;
- (G) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act:
- (H) Dredge or fill permits under section 404 of the CWA; and
- (I) Other relevant environmental permits, including State permits;
- (iv) Population. The name and population of each municipal entity served by the facility, including unincorporated connector districts. Indicate whether each municipal entity owns or maintains the collection system and whether the collection system is separate sanitary or combined storm and sanitary, if known;
- (v) Indian country. Information concerning whether the facility is located in Indian country and whether the facility discharges to a receiving stream that flows through Indian country;
- (vi) Flow rate. The facility's design flow rate (the wastewater flow rate the plant was built to handle), annual average daily flow rate, and maximum daily flow rate for each of the previous 3 years:
- (vii) Collection system. Identification of type(s) of collection system(s) used by the treatment works (i.e., separate sanitary sewers or combined storm and sanitary sewers) and an estimate of the percent of sewer line that each type comprises; and
- (viii) Outfalls and other discharge or disposal methods. The following information for outfalls to waters of the United States and other discharge or disposal methods:
- (A) For effluent discharges to waters of the United States, the total number

- and types of outfalls (e.g., treated effluent, combined sewer overflows, bypasses, constructed emergency overflows):
- (B) For wastewater discharged to surface impoundments:
- (1) The location of each surface impoundment;
- (2) The average daily volume discharged to each surface impoundment; and
- (3) Whether the discharge is continuous or intermittent:
- (C) For wastewater applied to the land:
- (1) The location of each land application site;
- (2) The size of each land application site, in acres:
- (3) The average daily volume applied to each land application site, in gallons per day; and
- (4) Whether land application is continuous or intermittent;
- (D) For effluent sent to another facility for treatment prior to discharge:
- (1) The means by which the effluent is transported;
- (2) The name, mailing address, contact person, phone number, and electronic mail address of the organization transporting the discharge, if the transport is provided by a party other than the applicant:
- (3) The name, mailing address, contact person, phone number, electronic mail address and NPDES permit number (if any) of the receiving facility; and
- (4) The average daily flow rate from this facility into the receiving facility, in millions of gallons per day; and
- (E) For wastewater disposed of in a manner not included in paragraphs (j)(1)(viii)(A) through (D) of this section (e.g., underground percolation, underground injection):
- (1) A description of the disposal method, including the location and size of each disposal site, if applicable;
- (2) The annual average daily volume disposed of by this method, in gallons per day; and
- (3) Whether disposal through this method is continuous or intermittent;
- (ix) An indication of whether applicant is operating under or requesting to operate under a variance as specified

- at 40 CFR 122.21(n), if known at the time of application.
- (2) Additional Information. All applicants with a design flow greater than or equal to 0.1 mgd must provide the following information:
- (i) Inflow and infiltration. The current average daily volume of inflow and infiltration, in gallons per day, and steps the facility is taking to minimize inflow and infiltration:
- (ii) Topographic map. A topographic map (or other map if a topographic map is unavailable) extending at least one mile beyond property boundaries of the treatment plant, including all unit processes, and showing:
- (A) Treatment plant area and unit processes;
- (B) The major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable:
- (C) Each well where fluids from the treatment plant are injected underground:
- (D) Wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within ½ mile of the treatment works' property boundaries:
- (E) Sewage sludge management facilities (including on-site treatment, storage, and disposal sites); and
- (F) Location at which waste classified as hazardous under RCRA enters the treatment plant by truck, rail, or dedicated pipe;
- (iii) Process flow diagram or schematic.
 (A) A diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. This includes a water balance showing all treatment units, including disinfection, and showing daily average flow rates at influent and discharge points, and approximate daily flow rates between treatment units; and
- (B) A narrative description of the diagram; and
- (iv) Scheduled improvements, schedules of implementation. The following information regarding scheduled improvements:

- (A) The outfall number of each outfall affected;
- (B) A narrative description of each required improvement;
- (C) Scheduled or actual dates of completion for the following:
 - (1) Commencement of construction;
 - (2) Completion of construction;
 - (3) Commencement of discharge; and
 - (4) Attainment of operational level;
- (D) A description of permits and clearances concerning other Federal and/or State requirements;
- (3) Information on effluent discharges. Each applicant must provide the following information for each outfall, including bypass points, through which effluent is discharged, as applicable:
- (i) Description of outfall. The following information about each outfall:
 - (A) Outfall number;
- (B) State, county, and city or town in which outfall is located;
- (C) Latitude and longitude, to the nearest second:
- (D) Distance from shore and depth below surface:
- (E) Average daily flow rate, in million gallons per day:
- (F) The following information for each outfall with a seasonal or periodic discharge:
- (1) Number of times per year the discharge occurs;
 - (2) Duration of each discharge;
 - (3) Flow of each discharge; and
- (4) Months in which discharge occurs; and
- (G) Whether the outfall is equipped with a diffuser and the type (e.g., high-rate) of diffuser used:
- (ii) Description of receiving waters. The following information (if known) for each outfall through which effluent is discharged to waters of the United States:
 - (A) Name of receiving water;
- (B) Name of watershed/river/stream system and United States Soil Conservation Service 14-digit watershed code:
- (C) Name of State Management/River Basin and United States Geological Survey 8-digit hydrologic cataloging unit code; and
- (D) Critical flow of receiving stream and total hardness of receiving stream at critical low flow (if applicable);

- (iii) Description of treatment. The following information describing the treatment provided for discharges from each outfall to waters of the United States:
- (A) The highest level of treatment (e.g., primary, equivalent to secondary, secondary, advanced, other) that is provided for the discharge for each outfall and:
- (1) Design biochemical oxygen demand $(BOD_5 \text{ or } CBOD_5)$ removal (percent):
- (2) Design suspended solids (SS) removal (percent); and, where applicable,
- (3) Design phosphorus (P) removal (percent);
- (4) Design nitrogen (N) removal (percent); and
- (5) Any other removals that an advanced treatment system is designed to achieve.
- (B) A description of the type of disinfection used, and whether the treatment plant dechlorinates (if disinfection is accomplished through chlorination);
- (4) Effluent monitoring for specific parameters. (i) As provided in paragraphs (j)(4)(ii) through (x) of this section, all applicants must submit to the Director effluent monitoring information for samples taken from each outfall through which effluent is discharged to waters of the United States, except for CSOs. The Director may allow applicants to submit sampling data for only one outfall on a case-by-case basis, where the applicant has two or more outfalls with substantially identical effluent. The Director may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone. For POTWs applying prior to commencement of discharge, data shall be submitted no later than 24 months after the commencement of discharge;
- (ii) All applicants must sample and analyze for the pollutants listed in appendix J. Table 1A of this part;
- (iii) All applicants with a design flow greater than or equal to 0.1 mgd must sample and analyze for the pollutants listed in appendix J, Table 1 of this part. Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential

- to discharge chlorine in their effluent may delete chlorine from Table 1;
- (iv) The following applicants must sample and analyze for the pollutants listed in appendix J, Table 2 of this part, and for any other pollutants for which the State or EPA have established water quality standards applicable to the receiving waters:
- (A) All POTWs with a design flow rate equal to or greater than one million gallons per day;
- (B) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;
- (C) Other POTWs, as required by the Director;
- (v) The Director should require sampling for additional pollutants, as appropriate, on a case-by-case basis;
- (vi) Applicants must provide data from a minimum of three samples taken within four and one-half years prior to the date of the permit application. Samples must be representative of the seasonal variation in the discharge from each outfall. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application. The Director should require additional samples, as appropriate, on a case-by-case basis.
- (vii) All existing data for pollutants specified in paragraphs (j)(4)(ii) through (v) of this section that is collected within four and one-half years of the application must be included in the pollutant data summary submitted by the applicant. If, however, the applicant samples for a specific pollutant on a monthly or more frequent basis, it is only necessary, for such pollutant, to summarize all data collected within one year of the application.
- (viii) Applicants must collect samples of effluent and analyze such samples for pollutants in accordance with analytical methods approved under 40 CFR Part 136 unless an alternative is specified in the existing NPDES permit. When analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), or volatile organics is required in paragraphs (j)(4)(ii) through (iv) of this section, grab samples must be collected for those pollutants. For all other pollutants, 24-hour composite

samples must be used. For a composite sample, only one analysis of the composite of aliquots is required.

- (ix) The effluent monitoring data provided must include at least the following information for each parameter:
- (A) Maximum daily discharge, expressed as concentration or mass, based upon actual sample values;
- (B) Average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value;
 - (C) The analytical method used; and
- (D) The threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used.
- (x) Unless otherwise required by the Director, metals must be reported as total recoverable.
- (5) Effluent monitoring for whole effluent toxicity. (i) All applicants must provide an identification of any whole effluent toxicity tests conducted during the four and one-half years prior to the date of the application on any of the applicant's discharges or on any receiving water near the discharge. For POTWs applying prior to commencement of discharge, data shall be submitted no later than 24 months after the commencement of discharge.
- (ii) As provided in paragraphs (j)(5)(iii)-(ix) of this section, the following applicants must submit to the Director the results of valid whole effluent toxicity tests for acute or chronic toxicity for samples taken from each outfall through which effluent is discharged to surface waters, except for combined sewer overflows:
- (A) All POTWs with design flow rates greater than or equal to one million gallons per day;
- (B) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;
- (C) Other POTWs, as required by the Director, based on consideration of the following factors:
- (1) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment plant, and types of industrial contributors);
- (2) The ratio of effluent flow to receiving stream flow;

- (3) Existing controls on point or nonpoint sources, including total maximum daily load calculations for the receiving stream segment and the relative contribution of the POTW;
- (4) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a coastal water, one of the Great Lakes, or a water designated as an outstanding natural resource water; or
- (5) Other considerations (including, but not limited to, the history of toxic impacts and compliance problems at the POTW) that the Director determines could cause or contribute to adverse water quality impacts.
- (iii) Where the POTW has two or more outfalls with substantially identical effluent discharging to the same receiving stream segment, the Director may allow applicants to submit whole effluent toxicity data for only one outfall on a case-by-case basis. The Director may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone.
- (iv) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section must provide:
- (A) Results of a minimum of four quarterly tests for a year, from the year preceding the permit application; or
- (B) Results from four tests performed at least annually in the four and one half year period prior to the application, provided the results show no appreciable toxicity using a safety factor determined by the permitting authority.
- (v) Applicants must conduct tests with multiple species (no less than two species; e.g., fish, invertebrate, plant), and test for acute or chronic toxicity, depending on the range of receiving water dilution. EPA recommends that applicants conduct acute or chronic testing based on the following dilutions:
- (A) Acute toxicity testing if the dilution of the effluent is greater than 1000:1 at the edge of the mixing zone;
- (B) Acute or chronic toxicity testing if the dilution of the effluent is between 100:1 and 1000:1 at the edge of the

mixing zone. Acute testing may be more appropriate at the higher end of this range (1000:1), and chronic testing may be more appropriate at the lower end of this range (100:1); and

- (C) Chronic testing if the dilution of the effluent is less than 100:1 at the edge of the mixing zone.
- (vi) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section must provide the number of chronic or acute whole effluent toxicity tests that have been conducted since the last permit reissuance.
- (vii) Applicants must provide the results using the form provided by the Director, or test summaries if available and comprehensive, for each whole effluent toxicity test conducted pursuant to paragraph (j)(5)(ii) of this section for which such information has not been reported previously to the Director.
- (viii) Whole effluent toxicity testing conducted pursuant to paragraph (j)(5)(ii) of this section must be conducted using methods approved under 40 CFR part 136. West coast facilities in Washington, Oregon, California, Alaska, Hawaii, and the Pacific Territories are exempted from 40 CFR part 136 chronic methods and must use alternative guidance as directed by the permitting authority.
- (ix) For whole effluent toxicity data submitted to the Director within four and one-half years prior to the date of the application, applicants must provide the dates on which the data were submitted and a summary of the results.
- (x) Each POTW required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section must provide any information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if any whole effluent toxicity test conducted within the past four and one-half years revealed toxicity.
- (6) Industrial discharges. Applicants must submit the following information about industrial discharges to the POTW:
- (i) Number of significant industrial users (SIUs) and non-significant categorical industrial users (NSCIUs), as

- defined at 40 CFR 403.3(v), including SIUs and NSCIUs that truck or haul waste, discharging to the POTW; and
- (ii) POTWs with one or more SIUs shall provide the following information for each SIU, as defined at 40 CFR 403.3(v), that discharges to the POTW:
 - (A) Name and mailing address;
- (B) Description of all industrial processes that affect or contribute to the SIU's discharge;
- (C) Principal products and raw materials of the SIU that affect or contribute to the SIU's discharge;
- (D) Average daily volume of wastewater discharged, indicating the amount attributable to process flow and non-process flow;
- (E) Whether the SIU is subject to local limits:
- (F) Whether the SIU is subject to categorical standards, and if so, under which category(ies) and subcategory(ies); and
- (G) Whether any problems at the POTW (e.g., upsets, pass through, interference) have been attributed to the SIU in the past four and one-half years.
- (iii) The information required in paragraphs (j)(6)(i) and (ii) of this section may be waived by the Director for POTWs with pretreatment programs if the applicant has submitted either of the following that contain information substantially identical to that required in paragraphs (j)(6)(i) and (ii) of this section.
- (A) An annual report submitted within one year of the application; or
 - (B) A pretreatment program;
- (7) Discharges from hazardous waste generators and from waste cleanup or remediation sites. POTWs receiving Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or RCRA Corrective Action wastes or wastes generated at another type of cleanup or remediation site must provide the following information:
- (i) If the POTW receives, or has been notified that it will receive, by truck, rail, or dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR part 261, the applicant must report the following:

- (A) The method by which the waste is received (i.e., whether by truck, rail, or dedicated pipe); and
- (B) The hazardous waste number and amount received annually of each hazardous waste;
- (ii) If the POTW receives, or has been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and sections 3004(u) or 3008(h) of RCRA, the applicant must report the following:
- (A) The identity and description of the site(s) or facility(ies) at which the wastewater originates;
- (B) The identities of the wastewater's hazardous constituents, as listed in appendix VIII of part 261 of this chapter; if known; and
- (C) The extent of treatment, if any, the wastewater receives or will receive before entering the POTW;
- (iii) Applicants are exempt from the requirements of paragraph (j)(7)(ii) of this section if they receive no more than fifteen kilograms per month of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e).
- (8) Combined sewer overflows. Each applicant with combined sewer systems must provide the following information:
- (i) Combined sewer system information. The following information regarding the combined sewer system:
- (A) *System map*. A map indicating the location of the following:
- (1) All CSO discharge points;
- (2) Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national resource waters); and
- (3) Waters supporting threatened and endangered species potentially affected by CSOs; and
- (B) System diagram. A diagram of the combined sewer collection system that includes the following information:
- (1) The location of major sewer trunk lines, both combined and separate sanitary;
- (2) The locations of points where separate sanitary sewers feed into the combined sewer system;
- (3) In-line and off-line storage structures;

- (4) The locations of flow-regulating devices; and
 - (5) The locations of pump stations;
- (ii) Information on CSO outfalls. The following information for each CSO discharge point covered by the permit application:
- (A) Description of outfall. The following information on each outfall:
 - (1) Outfall number;
- (2) State, county, and city or town in which outfall is located:
- (3) Latitude and longitude, to the nearest second; and
- (4) Distance from shore and depth below surface:
- (5) Whether the applicant monitored any of the following in the past year for this CSO:
 - (i) Rainfall:
 - (ii) CSO flow volume;
 - (iii) CSO pollutant concentrations;
 - (iv) Receiving water quality;
 - (v) CSO frequency; and
- (6) The number of storm events monitored in the past year;
- (B) CSO events. The following information about CSO overflows from each outfall:
- (1) The number of events in the past year;
- (2) The average duration per event, if available;
- (3) The average volume per CSO event, if available; and
- (4) The minimum rainfall that caused a CSO event, if available, in the last year:
- (C) Description of receiving waters. The following information about receiving waters:
- (1) Name of receiving water;
- (2) Name of watershed/stream system and the United States Soil Conservation Service watershed (14-digit) code (if known); and
- (3) Name of State Management/River Basin and the United States Geological Survey hydrologic cataloging unit (8digit) code (if known); and
- (D) CSO operations. A description of any known water quality impacts on the receiving water caused by the CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance of any applicable State water quality standard);

- (iii) Public notification plan for CSO discharges to the Great Lakes Basin. Each permittee authorized to discharge a combined sewer overflow to the Great Lakes Basin as defined in §122.2 must submit a public notification plan developed in accordance with §122.38 as part of its permit application. The public notification plan shall describe any significant updates to the plan that may have occurred since the last plan submission.
- (9) Contractors. All applicants must provide the name, mailing address, telephone number, electronic mail address and responsibilities of all contractors responsible for any operational or maintenance aspects of the facility; and
- (10) *Signature*. All applications must be signed by a certifying official in compliance with §122.22.
- (k) Application requirements for new sources and new discharges. New manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits (except for new discharges of facilities subject to the requirements of paragraph (h) of this section or new discharges of storm water associated with industrial activity which are subject to the requirements of §122.26(c)(1) and this section (except as provided by §122.26(c)(1)(ii)) shall provide the following information to the Director, using the application forms provided by the Director:
- (1) Expected outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water
- (2) Discharge dates. The expected date of commencement of discharge.
- (3) Flows, sources of pollution, and treatment technologies—(i) Expected treatment of wastewater. Description of the treatment that the wastewater will receive, along with all operations contributing wastewater to the effluent, average flow contributed by each operation, and the ultimate disposal of any solid or liquid wastes not discharged.
- (ii) Line drawing. A line drawing of the water flow through the facility with a water balance as described in §122.21(g)(2).
- (iii) Intermittent flows. If any of the expected discharges will be intermittent or seasonal, a description of the

- frequency, duration and maximum daily flow rate of each discharge occurrence (except for stormwater runoff, spillage, or leaks).
- (4) Production. If a new source performance standard promulgated under section 306 of CWA or an effluent limitation guideline applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's expected actual production reported in the units used in the applicable effluent guideline or new source performance standard as required by §122.45(b)(2) for each of the first three years. Alternative estimates may also be submitted if production is likely to vary.
- (5) Effluent characteristics. The requirements in paragraphs (h)(4)(i), (ii), and (iii) of this section that an applicant must provide estimates of certain pollutants expected to be present do not apply to pollutants present in a discharge solely as a result of their presence in intake water; however, an applicant must report such pollutants as present. Net credits may be provided for the presence of pollutants in intake water if the requirements of §122.45(g) are met. All levels (except for discharge flow, temperature, and pH) must be estimated as concentration and as total mass.
- (i) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants or parameters. The Director may waive the reporting requirements for any of these pollutants and parameters if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of the permit can be obtained through less stringent reporting requirements.
- (A) Biochemical Oxygen Demand
- (B) Chemical Oxygen Demand (COD).
- (C) Total Organic Carbon (TOC).
- (D) Total Suspended Solids (TSS).
- (E) Flow.
- (F) Ammonia (as N).
- (G) Temperature (winter and summer).
- (H) pH.

- (ii) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants, if the applicant knows or has reason to believe they will be present or if they are limited by an effluent limitation guideline or new source performance standard either directly or indirectly through limitations on an indicator pollutant: all pollutants in table IV of appendix D of part 122 (certain conventional and nonconventional pollutants).
- (iii) Each applicant must report estimated daily maximum, daily average and source of information for the following pollutants if he knows or has reason to believe that they will be present in the discharges from any outfall:
- (A) The pollutants listed in table III of appendix D (the toxic metals, in the discharge from any outfall: Total cyanide, and total phenols);
- (B) The organic toxic pollutants in table II of appendix D (except bis (chloromethyl) ether, dichlorofluoromethane and trichlorofluoromethane). This requirement is waived for applicants with expected gross sales of less than \$100,000 per year for the next three years, and for coal mines with expected average production of less than 100,000 tons of coal per year.
- (iv) The applicant is required to report that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) may be discharged if he uses or manufactures one of the following compounds, or if he knows or has reason to believe that TCDD will or may be present in an effluent:
- (A) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);
- (B) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);
- (C) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4):
- (D) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3);
- (E) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or
- (F) Hexachlorophene (HCP) (CAS #70–30–4);

- (v) Each applicant must report any pollutants listed in table V of appendix D (certain hazardous substances) if he believes they will be present in any outfall (no quantitative estimates are required unless they are already available).
- (vi) No later than 24 months after the commencement of discharge from the proposed facility, the applicant is required to complete and submit items V and VI of NPDES application Form 2C (see §122.21(g)). However, the applicant need not complete those portions of Item V requiring tests which have already been performed and reported under the discharge monitoring requirements of the NPDES permit.
- (6) Engineering Report. Each applicant must report the existence of any technical evaluation concerning his wastewater treatment, along with the name and location of similar plants of which he has knowledge.
- (7) Other information. Any optional information the permittee wishes to have considered.
- (8) Certification. Signature of certifying official under §122.22.
- (1) Special provisions for applications from new sources. (1) The owner or operator of any facility which may be a new source (as defined in §122.2) and which is located in a State without an approved NPDES program must comply with the provisions of this paragraph (1)(1).
- (2)(i) Before beginning any on-site construction as defined in §122.29, the owner or operator of any facility which may be a new source must submit information to the Regional Administrator so that he or she can determine if the facility is a new source. The Regional Administrator may request any additional information needed to determine whether the facility is a new source.
- (ii) The Regional Administrator shall make an initial determination whether the facility is a new source within 30 days of receiving all necessary information under paragraph (1)(2)(i) of this section.
- (3) The Regional Administrator shall issue a public notice in accordance with §124.10 of this chapter of the new source determination under paragraph (1)(2) of this section. If the Regional

Administrator has determined that the facility is a new source, the notice shall state that the applicant must comply with the environmental review requirements of 40 CFR 6.600 through 6.607.

- (4) Any interested party may challenge the Regional Administrator's initial new source determination by requesting review of the determination under §124.19 of this chapter within 30 days of the public notice of the initial determination. If all interested parties agree, the Environmental Appeals Board may defer review until after a final permit decision is made, and consolidate review of the determination with any review of the permit decision.
- (m) Variance requests by non-POTWs. A discharger which is not a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory or regulatory provisions within the times specified in this paragraph:
- (1) Fundamentally different factors. (i) A request for a variance based on the presence of "fundamentally different factors" from those on which the effluent limitations guideline was based shall be filed as follows:
- (A) For a request from best practicable control technology currently available (BPT), by the close of the public comment period under §124.10.
- (B) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than:
- (1) July 3, 1989, for a request based on an effluent limitation guideline promulgated before February 4, 1987, to the extent July 3, 1989 is not later than that provided under previously promulgated regulations; or
- (2) 180 days after the date on which an effluent limitation guideline is published in the FEDERAL REGISTER for a request based on an effluent limitation guideline promulgated on or after February 4, 1987.
- (ii) The request shall explain how the requirements of the applicable regulatory and/or statutory criteria have been met.
- (2) Non-conventional pollutants. A request for a variance from the BAT re-

quirements for CWA section 301(b)(2)(F) pollutants (commonly called "non-conventional" pollutants) pursuant to section 301(c) of CWA because of the economic capability of the owner or operator, or pursuant to section 301(g) of the CWA (provided however that a \$301(g) variance may only be requested for ammonia; chlorine; color; iron; total phenols (4AAP) (when determined by the Administrator to be a pollutant covered by section 301(b)(2)(F)) and any other pollutant which the Administrator lists under section 301(g)(4) of the CWA) must be made as follows:

- (i) For those requests for a variance from an effluent limitation based upon an effluent limitation guideline by:
- (A) Submitting an initial request to the Regional Administrator, as well as to the State Director if applicable, stating the name of the discharger, the permit number, the outfall number(s), the applicable effluent guideline, and whether the discharger is requesting a section 301(c) or section 301(g) modification or both. This request must have been filed not later than:
- (1) September 25, 1978, for a pollutant which is controlled by a BAT effluent limitation guideline promulgated before December 27, 1977; or
- (2) 270 days after promulgation of an applicable effluent limitation guideline for guidelines promulgated after December 27, 1977; and
- (B) Submitting a completed request no later than the close of the public comment period under §124.10 demonstrating that the requirements of §124.13 and the applicable requirements of part 125 have been met. Notwithstanding this provision, the complete application for a request under section 301(g) shall be filed 180 days before EPA must make a decision (unless the Regional Division Director establishes a shorter or longer period).
- (ii) For those requests for a variance from effluent limitations not based on effluent limitation guidelines, the request need only comply with paragraph (m)(2)(i)(B) of this section and need not be preceded by an initial request under paragraph (m)(2)(i)(A) of this section.
 - (3)–(4) [Reserved]
- (5) Water quality related effluent limitations. A modification under section 302(b)(2) of requirements under section

302(a) for achieving water quality related effluent limitations may be requested no later than the close of the public comment period under §124.10 on the permit from which the modification is sought.

- (6) Thermal discharges. A variance under CWA section 316(a) for the thermal component of any discharge must be filed with a timely application for a permit under this section, except that if thermal effluent limitations are established under CWA section 402(a)(1) or are based on water quality standards the request for a variance may be filed by the close of the public comment period under §124.10. A copy of the request as required under 40 CFR part 125, subpart H, shall be sent simultaneously to the appropriate State or interstate certifying agency as required under 40 CFR part 125. (See §124.65 for special procedures for section 316(a) thermal variances.)
- (n) Variance requests by POTWs. A discharger which is a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory provisions as specified in this paragraph:
- (1) Discharges into marine waters. A request for a modification under CWA section 301(h) of requirements of CWA section 301(b)(1)(B) for discharges into marine waters must be filed in accordance with the requirements of 40 CFR part 125, subpart G.
 - (2) [Reserved]
- (3) Water quality based effluent limitation. A modification under CWA section 302(b)(2) of the requirements under section 302(a) for achieving water quality based effluent limitations shall be requested no later than the close of the public comment period under §124.10 on the permit from which the modification is sought.
- (0) Expedited variance procedures and time extensions. (1) Notwithstanding the time requirements in paragraphs (m) and (n) of this section, the Director may notify a permit applicant before a draft permit is issued under §124.6 that the draft permit will likely contain limitations which are eligible for variances. In the notice the Director may require the applicant as a condition of consideration of any potential

variance request to submit a request explaining how the requirements of part 125 applicable to the variance have been met and may require its submission within a specified reasonable time after receipt of the notice. The notice may be sent before the permit application has been submitted. The draft or final permit may contain the alternative limitations which may become effective upon final grant of the variance.

- (2) A discharger who cannot file a timely complete request required under paragraph (m)(2)(i)(B) or (m)(2)(ii) of this section may request an extension. The extension may be granted or denied at the discretion of the Director. Extensions shall be no more than 6 months in duration.
- (p) Recordkeeping. Except for information required by paragraph (d)(3)(ii) of this section, which shall be retained for a period of at least five years from the date the application is signed (or longer as required by 40 CFR part 503), applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under this section for a period of at least 3 years from the date the application is signed.
- (q) Sewage sludge management. All TWTDS subject to paragraph (c)(2)(i) of this section must provide the information in this paragraph to the Director, using Form 2S or another application form approved by the Director. New applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the Director. The Director may waive any requirement of this paragraph if he or she has access to substantially identical information. The Director may also waive any requirement of this paragraph that is not of material concern for a specific permit, if approved by the Regional Administrator. The waiver request to the Regional Administrator must include the State's justification for the waiver. Α Regional Administrator's approval of a State's proposed waiver does not constitute final Agency action, but does provide notice to the State and permit applicant(s) that EPA may object to any State-issued permit

issued in the absence of the required information.

- (1) Facility information. All applicants must submit the following information:
- (i) The name, mailing address, and location of the TWTDS for which the application is submitted;
- (ii) Whether the facility is a Class I Sludge Management Facility;
- (iii) The design flow rate (in million gallons per day);
- (iv) The total population served; and (v) The TWTDS's status as Federal,
- State, private, public, or other entity;
 (2) Applicant information. All appli-
- cants must submit the following information:
- (i) The name, mailing address, telephone number, and electronic mail address of the applicant; and
- (ii) Indication whether the applicant is the owner, operator, or both;
- (3) Permit information. All applicants must submit the facility's NPDES permit number, if applicable, and a listing of all other Federal, State, and local permits or construction approvals received or applied for under any of the following programs:
- (i) Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA);
- (ii) UIC program under the Safe Drinking Water Act (SDWA);
- (iii) NPDES program under the Clean Water Act (CWA);
- (iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
- (v) Nonattainment program under the Clean Air Act;
- (vi) National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act:
- (vii) Dredge or fill permits under section 404 of CWA;
- (viii) Other relevant environmental permits, including State or local permits:
- (4) Indian country. All applicants must identify any generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian country;
- (5) Topographic map. All applicants must submit a topographic map (or other map if a topographic map is un-

available) extending one mile beyond property boundaries of the facility and showing the following information:

- (i) All sewage sludge management facilities, including on-site treatment, storage, and disposal sites; and
- (ii) Wells, springs, and other surface water bodies that are within ½ mile of the property boundaries and listed in public records or otherwise known to the applicant;
- (6) Sewage sludge handling. All applicants must submit a line drawing and/ or a narrative description that identifies all sewage sludge management practices employed during the term of the permit, including all units used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each such unit, and all processes used for pathogen reduction and vector attraction reduction;
- (7) Sewage sludge quality. The applicant must submit sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR part 503 for the applicant's use or disposal practices on the date of permit application.
- (i) The Director may require sampling for additional pollutants, as appropriate, on a case-by-case basis;
- (ii) Applicants must provide data from a minimum of three samples taken within four and one-half years prior to the date of the permit application. Samples must be representative of the sewage sludge and should be taken at least one month apart. Existing data may be used in lieu of sampling done solely for the purpose of this application;
- (iii) Applicants must collect and analyze samples in accordance with analytical methods approved under SW-846 unless an alternative has been specified in an existing sewage sludge permit;
- (iv) The monitoring data provided must include at least the following information for each parameter:
- (A) Average monthly concentration for all samples (mg/kg dry weight), based upon actual sample values;
 - (B) The analytical method used; and (C) The method detection level.
- (8) Preparation of sewage sludge. If the applicant is a "person who prepares" sewage sludge, as defined at 40 CFR

503.9(r), the applicant must provide the following information:

- (i) If the applicant's facility generates sewage sludge, the total dry metric tons per 365-day period generated at the facility;
- (ii) If the applicant's facility receives sewage sludge from another facility, the following information for each facility from which sewage sludge is received:
- (A) The name, mailing address, and location of the other facility;
- (B) The total dry metric tons per 365day period received from the other facility; and
- (C) A description of any treatment processes occurring at the other facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics;
- (iii) If the applicant's facility changes the quality of sewage sludge through blending, treatment, or other activities, the following information:
- (A) Whether the Class A pathogen reduction requirements in 40 CFR 503.32(a) or the Class B pathogen reduction requirements in 40 CFR 503.32(b) are met, and a description of any treatment processes used to reduce pathogens in sewage sludge;
- (B) Whether any of the vector attraction reduction options of 40 CFR 503.33(b)(1) through (b)(8) are met, and a description of any treatment processes used to reduce vector attraction properties in sewage sludge; and
- (C) A description of any other blending, treatment, or other activities that change the quality of sewage sludge;
- (iv) If sewage sludge from the applicant's facility meets the ceiling concentrations in 40 CFR 503.13(b)(1), the pollutant concentrations in §503.13(b)(3), the Class A pathogen requirements in §503.32(a), and one of the vector attraction reduction requirements in §503.33(b)(1) through (b)(8), and if the sewage sludge is applied to the land, the applicant must provide the total dry metric tons per 365-day period of sewage sludge subject to this paragraph that is applied to the land;
- (v) If sewage sludge from the applicant's facility is sold or given away in a bag or other container for application to the land, and the sewage sludge is not subject to paragraph (q)(8)(iv) of

this section, the applicant must provide the following information:

- (A) The total dry metric tons per 365day period of sewage sludge subject to this paragraph that is sold or given away in a bag or other container for application to the land; and
- (B) A copy of all labels or notices that accompany the sewage sludge being sold or given away:
- (vi) If sewage sludge from the applicant's facility is provided to another "person who prepares," as defined at 40 CFR 503.9(r), and the sewage sludge is not subject to paragraph (q)(8)(iv) of this section, the applicant must provide the following information for each facility receiving the sewage sludge:
- (A) The name, mailing address, and electronic mail address of the receiving facility;
- (B) The total dry metric tons per 365day period of sewage sludge subject to this paragraph that the applicant provides to the receiving facility;
- (C) A description of any treatment processes occurring at the receiving facility, including blending activities and treatment to reduce pathogens or vector attraction characteristic;
- (D) A copy of the notice and necessary information that the applicant is required to provide the receiving facility under 40 CFR 503.12(g); and
- (E) If the receiving facility places sewage sludge in bags or containers for sale or give-away to application to the land, a copy of any labels or notices that accompany the sewage sludge;
- (9) Land application of bulk sewage sludge. If sewage sludge from the applicant's facility is applied to the land in bulk form, and is not subject to paragraphs (q)(8)(iv), (v), or (vi) of this section, the applicant must provide the following information:
- (i) The total dry metric tons per 365day period of sewage sludge subject to this paragraph that is applied to the land;
- (ii) If any land application sites are located in States other than the State where the sewage sludge is prepared, a description of how the applicant will notify the permitting authority for the State(s) where the land application sites are located;
- (iii) The following information for each land application site that has

been identified at the time of permit application:

- (A) The name (if any), and location for the land application site;
- (B) The site's latitude and longitude to the nearest second, and method of determination:
- (C) A topographic map (or other map if a topographic map is unavailable) that shows the site's location;
- (D) The name, mailing address, telephone number, and electronic mail address of the site owner, if different from the applicant;
- (E) The name, mailing address, telephone number, and electronic mail address of the person who applies sewage sludge to the site, if different from the applicant:
- (F) Whether the site is agricultural land, forest, a public contact site, or a reclamation site, as such site types are defined under 40 CFR 503.11;
- (G) The type of vegetation grown on the site, if known, and the nitrogen requirement for this vegetation;
- (H) Whether either of the vector attraction reduction options of 40 CFR 503.33(b)(9) or (b)(10) is met at the site, and a description of any procedures employed at the time of use to reduce vector attraction properties in sewage sludge; and
- (I) Other information that describes how the site will be managed, as specified by the permitting authority.
- (iv) The following information for each land application site that has been identified at the time of permit application, if the applicant intends to apply bulk sewage sludge subject to the cumulative pollutant loading rates in 40 CFR 503.13(b)(2) to the site:
- (A) Whether the applicant has contacted the permitting authority in the State where the bulk sewage sludge subject to \$503.13(b)(2) will be applied, to ascertain whether bulk sewage sludge subject to \$503.13(b)(2) has been applied to the site on or since July 20, 1993, and if so, the name of the permitting authority and the name, phone number, and electronic mail address if available, of a contact person at the permitting authority;
- (B) Identification of facilities other than the applicant's facility that have sent, or are sending, sewage sludge subject to the cumulative pollutant load-

- ing rates in \$503.13(b)(2) to the site since July 20, 1993, if, based on the inquiry in paragraph (q)(iv)(A), bulk sewage sludge subject to cumulative pollutant loading rates in \$503.13(b)(2) has been applied to the site since July 20, 1993;
- (v) If not all land application sites have been identified at the time of permit application, the applicant must submit a land application plan that, at a minimum:
- (A) Describes the geographical area covered by the plan;
- (B) Identifies the site selection criteria:
- (C) Describes how the site(s) will be managed;
- (D) Provides for advance notice to the permit authority of specific land application sites and reasonable time for the permit authority to object prior to land application of the sewage sludge; and
- (E) Provides for advance public notice of land application sites in the manner prescribed by State and local law. When State or local law does not require advance public notice, it must be provided in a manner reasonably calculated to apprize the general public of the planned land application.
- (10) Surface disposal. If sewage sludge from the applicant's facility is placed on a surface disposal site, the applicant must provide the following information:
- (i) The total dry metric tons of sewage sludge from the applicant's facility that is placed on surface disposal sites per 365-day period;
- (ii) The following information for each surface disposal site receiving sewage sludge from the applicant's facility that the applicant does *not* own or operate:
- (A) The site name or number, contact person, mailing address, telephone number, and electronic mail address for the surface disposal site; and
- (B) The total dry metric tons from the applicant's facility per 365-day period placed on the surface disposal site;
- (iii) The following information for each active sewage sludge unit at each surface disposal site that the applicant owns or operates:
- (A) The name or number and the location of the active sewage sludge unit;

- (B) The unit's latitude and longitude to the nearest second, and method of determination:
- (C) If not already provided, a topographic map (or other map if a topographic map is unavailable) that shows the unit's location;
- (D) The total dry metric tons placed on the active sewage sludge unit per 365-day period;
- (E) The total dry metric tons placed on the active sewage sludge unit over the life of the unit;
- (F) A description of any liner for the active sewage sludge unit, including whether it has a maximum permeability of 1×10^{-7} cm/sec;
- (G) A description of any leachate collection system for the active sewage sludge unit, including the method used for leachate disposal, and any Federal, State, and local permit number(s) for leachate disposal;
- (H) If the active sewage sludge unit is less than 150 meters from the property line of the surface disposal site, the actual distance from the unit boundary to the site property line;
- (I) The remaining capacity (dry metric tons) for the active sewage sludge unit:
- (J) The date on which the active sewage sludge unit is expected to close, if such a date has been identified:
- (K) The following information for any other facility that sends sewage sludge to the active sewage sludge
- (1) The name, contact person, mailing address, and electronic mail address of the facility; and
- (2) Available information regarding the quality of the sewage sludge received from the facility, including any treatment at the facility to reduce pathogens or vector attraction characteristics;
- (L) Whether any of the vector attraction reduction options of 40 CFR 503.33(b)(9) through (b)(11) is met at the active sewage sludge unit, and a description of any procedures employed at the time of disposal to reduce vector attraction properties in sewage sludge;
- (M) The following information, as applicable to any ground-water monitoring occurring at the active sewage sludge unit:

- (1) A description of any ground-water monitoring occurring at the active sewage sludge unit:
- (2) Any available ground-water monitoring data, with a description of the well locations and approximate depth to ground water;
- (3) A copy of any ground-water monitoring plan that has been prepared for the active sewage sludge unit;
- (4) A copy of any certification that has been obtained from a qualified ground-water scientist that the aquifer has not been contaminated; and
- (N) If site-specific pollutant limits are being sought for the sewage sludge placed on this active sewage sludge unit, information to support such a request;
- (11) *Incineration*. If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator, the applicant must provide the following information:
- (i) The total dry metric tons of sewage sludge from the applicant's facility that is fired in sewage sludge incinerators per 365-day period;
- (ii) The following information for each sewage sludge incinerator firing the applicant's sewage sludge that the applicant does *not* own or operate:
- (A) The name and/or number, contact person, mailing address, telephone number, and electronic mail address of the sewage sludge incinerator; and
- (B) The total dry metric tons from the applicant's facility per 365-day period fired in the sewage sludge incinerator:
- (iii) The following information for each sewage sludge incinerator that the applicant owns or operates:
- (A) The name and/or number and the location of the sewage sludge incinerator:
- (B) The incinerator's latitude and longitude to the nearest second, and method of determination;
- (C) The total dry metric tons per 365-day period fired in the sewage sludge incinerator;
- (D) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Beryllium in 40 CFR part 61 will be achieved;

- (E) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Mercury in 40 CFR part 61 will be achieved:
- (F) The dispersion factor for the sewage sludge incinerator, as well as modeling results and supporting documentation:
- (G) The control efficiency for parameters regulated in 40 CFR 503.43, as well as performance test results and supporting documentation;
- (H) Information used to calculate the risk specific concentration (RSC) for chromium, including the results of incinerator stack tests for hexavalent and total chromium concentrations, if the applicant is requesting a chromium limit based on a site-specific RSC value;
- (I) Whether the applicant monitors total hydrocarbons (THC) or Carbon Monoxide (CO) in the exit gas for the sewage sludge incinerator;
- (J) The type of sewage sludge incinerator:
- (K) The maximum performance test combustion temperature, as obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies;
- (L) The following information on the sewage sludge feed rate used during the performance test:
- (1) Sewage sludge feed rate in dry metric tons per day;
- (2) Identification of whether the feed rate submitted is average use or maximum design; and
- (3) A description of how the feed rate was calculated:
- (M) The incinerator stack height in meters for each stack, including identification of whether actual or creditable stack height was used;
- (N) The operating parameters for the sewage sludge incinerator air pollution control device(s), as obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies;
- (O) Identification of the monitoring equipment in place, including (but not limited to) equipment to monitor the following:
- (1) Total hydrocarbons or Carbon Monoxide;

- (2) Percent oxygen;
- (3) Percent moisture; and
- (4) Combustion temperature; and
- (P) A list of all air pollution control equipment used with this sewage sludge incinerator;
- (12) Disposal in a municipal solid waste landfill. If sewage sludge from the applicant's facility is sent to a municipal solid waste landfill (MSWLF), the applicant must provide the following information for each MSWLF to which sewage sludge is sent:
- (i) The name, contact person, mailing address, electronic mail address, location, and all applicable permit numbers of the MSWLF:
- (ii) The total dry metric tons per 365-day period sent from this facility to the MSWLF;
- (iii) A determination of whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a MSWLF, including the results of the paint filter liquids test and any additional requirements that apply on a site-specific basis; and
- (iv) Information, if known, indicating whether the MSWLF complies with criteria set forth in 40 CFR part 258;
- (13) Contractors. All applicants must provide the name, mailing address, telephone number, electronic mail address and responsibilities of all contractors responsible for any operational or maintenance aspects of the facility related to sewage sludge generation, treatment, use, or disposal;
- (14) Other information. At the request of the permitting authority, the applicant must provide any other information necessary to determine the appropriate standards for permitting under 40 CFR part 503, and must provide any other information necessary to assess the sewage sludge use and disposal practices, determine whether to issue a permit, or identify appropriate permit requirements; and
- (15) Signature. All applications must be signed by a certifying official in compliance with §122.22.

[Note 1: At 46 FR 2046, Jan. 8, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(v)(A) and the corresponding portions of Item V-C of the NPDES application Form 2C as they apply to coal mines. This suspension continues in effect.]

[Note 2: At 46 FR 22585, Apr. 20, 1981, the Environmental Protection Agency suspended until further notice \$122.21(g)(7)(v)(A) and the corresponding portions of Item V-C of the NPDES application Form 2C as they apply to:

- a. Testing and reporting for all four organic fractions in the Greige Mills Subcategory of the Textile Mills industry (subpart C—Low water use processing of 40 CFR part 410), and testing and reporting for the pesticide fraction in all other subcategories of this industrial category.
- b. Testing and reporting for the volatile, base/neutral and pesticide fractions in the Base and Precious Metals Subcategory of the Ore Mining and Dressing industry (subpart B of 40 CFR part 440), and testing and reporting for all four fractions in all other subcategories of this industrial category.
- c. Testing and reporting for all four GC/MS fractions in the Porcelain Enameling industry.

This revision continues that suspension.]1

[Note 3: At 46 FR 35090, July 1, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(v)(A) and the corresponding portions of Item V-C of the NPDES application Form 2C as they apply to:

- a. Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory (subpart D) and Rosin-Based Derivatives Subcategory (subpart F) of the Gum and Wood Chemicals industry (40 CFR part 454), and testing and reporting for the pesticide and base-neutral fractions in all other subcategories of this industrial category.
- b. Testing and reporting for the pesticide fraction in the Leather Tanning and Finishing, Paint and Ink Formulation, and Photographic Supplies industrial categories.
- c. Testing and reporting for the acid, base/neutral and pesticide fractions in the Petro-leum Refining industrial category.
- d. Testing and reporting for the pesticide fraction in the Papergrade Sulfite subcategories (subparts J and U) of the Pulp and Paper industry (40 CFR part 430); testing and reporting for the base/neutral and pesticide fractions in the following subcategories: Deink (subpart Q), Dissolving Kraft (subpart F), and Paperboard from Waste Paper (subpart E); testing and reporting for the volatile, base/neutral and pesticide fractions in the following subcategories: BCT Bleached Kraft (subpart H), Semi-Chemical (subparts B and C), and Nonintegrated-Fine Papers (subpart R); and testing and reporting for the acid, base/neutral, and pesticide fractions in the following subcategories: Fine Bleached Kraft (subpart I), Dissolving Sulfite Pulp (subpart K), Groundwood-Fine Papers (subpart O), Market Bleached Kraft (subpart G), Tissue from Wastepaper (subpart T), and Nonintegrated-Tissue Papers (subpart S).

e. Testing and reporting for the base/neutral fraction in the Once-Through Cooling Water, Fly Ash and Bottom Ash Transport Water process wastestreams of the Steam Electric Power Plant industrial category.

This revision continues that suspension.] 1

- (r) Application requirements for facilities with cooling water intake structures—
- (1)(i) New facilities with new or modified cooling water intake structures. New facilities (other than offshore oil and gas extraction facilities) with cooling water intake structures as defined in part 125, subpart I of this chapter, must submit to the Director for review the information required under paragraphs (r)(2) (except (r)(2)(iv)), (3), and (4) (except (r)(4)(ix), (x), (xi), and (xii)) of this section and §125.86 of this chapter as part of the permit application. New offshore oil and gas extraction facilities with cooling water intake structures as defined in part 125, subpart N, of this chapter that are fixed facilities must submit to the Director for review the information required under paragraphs (r)(2) (except (r)(2)(iv)), (3), and (4) (except (r)(4)(ix), (x), (xi), and (xii)) of this section and §125.136 of this chapter as part of their permit application.
- (ii) Existing facilities. (A) All existing facilities. The owner or operator of an existing facility defined at 40 CFR 125.92(k) must submit to the Director for review the information required under paragraphs (r)(2) and (3) of this section and applicable provisions of paragraphs (r)(4), (5), (6), (7), and (8) of this section.
- (B) Existing facilities greater than 125 mgd AIF. In addition, the owner or operator of an existing facility that withdraws greater than 125 mgd actual intake flow (AIF), as defined at 40 CFR 125.92 (a), of water for cooling purposes must also submit to the Director for review the information required under paragraphs (r)(9), (10), (11), (12), and (13) of this section. If the owner or operator of an existing facility intends to comply with the BTA (best technology available) standards for entrainment using a closed-cycle recirculating system as defined at 40 CFR 125.92(c), the Director may reduce or waive some or all of the information required under

 $^{^1\}rm EDITORIAL$ NOTE: The words "This revision" refer to the document published at 48 FR 14153, Apr. 1, 1983.

paragraphs (r)(9) through (13) of this section.

- (C) Additional information. The owner or operator of an existing facility must also submit such additional information as the Director determines is necessary pursuant to 40 CFR 125.98(i).
- (D) New units at existing facilities. The owner or operator of a new unit at an existing facility, as defined at 40 CFR 125.92(u), must submit or update any information previously provided to the Director by submitting the information required under paragraphs (r)(2), (3), (5), (8), and (14) of this section and applicable provisions of paragraphs (r)(4), (6), and (7) of this section. Requests for and approvals of alternative requirements sought under 40 CFR 125.94(e)(2) or 125.98(b)(7) must be submitted with the permit application.
- (E) New units at existing facilities not previously subject to Part 125. The owner or operator of a new unit as defined at 40 CFR 125.92(u) at an existing facility not previously subject to part 125 of this chapter that increases the total capacity of the existing facility to more than 2 mgd DIF must submit the information required under paragraphs (r)(2), (3), (5), and (8) of this section andapplicable provisions of paragraphs (r)(4), (6), and (7) of this section at the time of the permit application for the new unit. Requests for alternative requirements under 40 CFR 125.94(e)(2) or 125.98(b)(7) must be submitted with the permit application. If the total capacity of the facility will increase to more than 125 mgd AIF, the owner or operator must also submit the information required in paragraphs (r)(9) through (13) of this section. If the owner or operator of an existing facility intends to comply with the BTA (best technology available) standards for entrainment using a closed-cycle recirculating system as defined at 40 CFR 125.92(c), the Director may reduce or waive some or all of the information required under paragraphs (r)(9) through (13) of this section.
- (F) If the owner or operator of an existing facility plans to retire the facility before the current permit expires, then the requirements of paragraphs (r)(1)(ii)(A), (B), (C), (D), and (E) of this section do not apply.

- (G) If the owner or operator of an existing facility plans to retire the facility after the current permit expires but within one permit cycle, then the Director may waive the requirements of paragraphs (r)(7), (9), (10), (11), (12), and (13) of this section pending a signed certification statement from the owner or operator of the facility specifying the last operating date of the facility.
- (H) All facilities. The owner or operator of any existing facility or new unit at any existing facility must also submit with its permit application all information received as a result of any communication with a Field Office of the Fish and Wildlife Service and/or Regional Office of the National Marine Fisheries Service.
- (2) Source water physical data. These include:
- (i) A narrative description and scaled drawings showing the physical configuration of all source water bodies used by your facility, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports your determination of the water body type where each cooling water intake structure is located;
- (ii) Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods you used to conduct any physical studies to determine your intake's area of influence within the waterbody and the results of such studies;
 - (iii) Locational maps; and
- (iv) For new offshore oil and gas facilities that are not fixed facilities, a narrative description and/or locational maps providing information on predicted locations within the waterbody during the permit term in sufficient detail for the Director to determine the appropriateness of additional impingement requirements under §125.134(b)(4).
- (3) Cooling water intake structure data. These include:
- (i) A narrative description of the configuration of each of your cooling water intake structures and where it is located in the water body and in the water column:
- (ii) Latitude and longitude in degrees, minutes, and seconds for each of your cooling water intake structures;

- (iii) A narrative description of the operation of each of your cooling water intake structures, including design intake flows, daily hours of operation, number of days of the year in operation and seasonal changes, if applicable;
- (iv) A flow distribution and water balance diagram that includes all sources of water to the facility, recirculating flows, and discharges; and
- (v) Engineering drawings of the cooling water intake structure.
- (4) Source water baseline biological characterization data. This information is required to characterize the biological community in the vicinity of the cooling water intake structure and to characterize the operation of the cooling water intake structures. The Director may also use this information in subsequent permit renewal proceedings to determine if your Design and Construction Technology Plan as required in §125.86(b)(4) or §125.136(b)(3) of this chapter should be revised. This supporting information must include existing data (if they are available). However, you may supplement the data using newly conducted field studies if you choose to do so. The information you submit must include:
- (i) A list of the data in paragraphs (r)(4)(ii) through (vi) of this section that are not available and efforts made to identify sources of the data;
- (ii) A list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of the cooling water intake structure;
- (iii) Identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated should include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;
- (iv) Identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa;
- (v) Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the cooling water intake structure;
- (vi) Identification of all threatened, endangered, and other protected species that might be susceptible to im-

pingement and entrainment at your cooling water intake structures;

(vii) Documentation of any public participation or consultation with Federal or State agencies undertaken in development of the plan; and

(viii) If you supplement the information requested in paragraph (r)(4)(i) of this section with data collected using field studies, supporting documentation for the Source Water Baseline Biological Characterization must include a description of all methods and quality assurance procedures for sampling, and data analysis including a description of the study area; taxonomic identification of sampled and evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods. The sampling and/or data analysis methods you use must be appropriate for a quantitative survey and based on consideration of methods used in other biological studies performed within the same source water body. The study area should include, at a minimum, the area of influence of the cooling water intake structure.

- (ix) In the case of the owner or operator of an existing facility or new unit at an existing facility, the *Source Water Baseline Biological Characterization Data* is the information in paragraphs (r)(4)(i) through (xii) of this section.
- (x) For the owner or operator of an existing facility, identification of protective measures and stabilization activities that have been implemented, and a description of how these measures and activities affected the baseline water condition in the vicinity of the intake.
- (xi) For the owner or operator of an existing facility, a list of fragile species, as defined at 40 CFR 125.92(m), at the facility. The applicant need only identify those species not already identified as fragile at 40 CFR 125.92(m). New units at an existing facility are not required to resubmit this information if the cooling water withdrawals for the operation of the new unit are from an existing intake.
- (xii) For the owner or operator of an existing facility that has obtained incidental take exemption or authorization for its cooling water intake structure(s) from the U.S. Fish and Wildlife

Service or the National Marine Fisheries Service, any information submitted in order to obtain that exemption or authorization may be used to satisfy the permit application information requirement of paragraph 40 CFR 125.95(f) if included in the application.

- (5) Cooling Water System Data. The owner or operator of an existing facility must submit the following information for each cooling water intake structure used or intended to be used:
- (i) A narrative description of the operation of the cooling water system and its relationship to cooling water intake structures; the proportion of the design intake flow that is used in the system; the number of days of the year the cooling water system is in operation and seasonal changes in the operation of the system, if applicable; the proportion of design intake flow for contact cooling, non-contact cooling, and process uses; a distribution of water reuse to include cooling water reused as process water, process water reused for cooling, and the use of gray water for cooling; a description of reductions in total water withdrawals including cooling water intake flow reductions already achieved through minimized process water withdrawals; a description of any cooling water that is used in a manufacturing process either before or after it is used for cooling, including other recycled process water flows; the proportion of the source waterbody withdrawn (on a monthly basis):
- (ii) Design and engineering calculations prepared by a qualified professional and supporting data to support the description required by paragraph (r)(5)(i) of this section; and
- (iii) Description of existing impingement and entrainment technologies or operational measures and a summary of their performance, including but not limited to reductions in impingement mortality and entrainment due to intake location and reductions in total water withdrawals and usage.
- (6) Chosen Method(s) of Compliance with Impingement Mortality Standard. The owner or operator of the facility must identify the chosen compliance method for the entire facility; alternatively, the applicant must identify the chosen compliance method for each

- cooling water intake structure at its facility. The applicant must identify any intake structure for which a BTA determination for Impingement Mortality under 40 CFR 125.94 (c)(11) or (12) is requested. In addition, the owner or operator that chooses to comply via 40 CFR 125.94 (c)(5) or (6) must also submit an impingement technology performance optimization study as described below:
- (i) If the applicant chooses to comply with 40 CFR 125.94(c)(5), subject to the flexibility for timing provided in 40 CFR 125.95(a)(2), the impingement technology performance optimization study must include two years of biological data collection measuring the reduction in impingement mortality achieved by the modified traveling screens as defined at 40 CFR 125.92(s) and demonstrating that the operation has been optimized to minimize impingement mortality. A complete description of the modified traveling screens and associated equipment must be included, including, for example, type of mesh, mesh slot size, pressure sprays and fish return mechanisms. A description of any biological data collection and data collection approach used in measuring impingement mortality must be included:
- (A) Collecting data no less frequently than monthly. The Director may establish more frequent data collection;
- (B) Biological data collection representative of the impingement and the impingement mortality at the intakes subject to this provision;
- (C) A taxonomic identification to the lowest taxon possible of all organisms collected;
- (D) The method in which naturally moribund organisms are identified and taken into account;
- (E) The method in which mortality due to holding times is taken into account;
- (F) If the facility entraps fish or shellfish, a count of entrapment, as defined at 40 CFR 125.92(j), as impingement mortality; and
- (G) The percent impingement mortality reflecting optimized operation of the modified traveling screen and all supporting calculations.

(ii) If the applicant chooses to comply with 40 CFR 125.94(c)(6), the impingement technology performance optimization study must include biological data measuring the reduction in impingement mortality achieved by operation of the system of technologies, operational measures and best management practices, and demonstrating that operation of the system has been optimized to minimize impingement mortality. This system of technologies, operational measures and best management practices may include flow reductions, seasonal operation, unit closure, credit for intake location, and behavioral deterrent systems. The applicant must document how each system element contributes to the system's performance. The applicant must include a minimum of two years of biological data measuring the reduction in impingement mortality achieved by the system. The applicant must also include a description of any sampling or data collection approach used in measuring the rate of impingement, impingement mortality, or flow reductions.

(A) Rate of Impingement. If the demonstration relies in part on a credit for reductions in the rate of impingement in the system, the applicant must provide an estimate of those reductions to be used as credit towards reducing impingement mortality, and any relevant supporting documentation, including previously collected biological data, performance reviews, and previously conducted performance studies not already submitted to the Director. The submission of studies more than 10 years old must include an explanation of why the data are still relevant and representative of conditions at the facility and explain how the data should be interpreted using the definitions of impingement and entrapment at 40 CFR 125.92(n) and (j), respectively. The estimated reductions in rate of impingement must be based on a comparison of the system to a once-through cooling system with a traveling screen whose point of withdrawal from the surface water source is located at the shoreline of the source waterbody. For impoundments that are waters of the United States in whole or in part, the facility's rate of impingement must be

measured at a location within the cooling water intake system that the Director deems appropriate. In addition, the applicant must include two years of biological data collection demonstrating the rate of impingement resulting from the system. For this demonstration, the applicant must collect data no less frequently than monthly. The Director may establish more frequent data collection.

(B) Impingement Mortality. If the demonstration relies in part on a credit for reductions in impingement mortality already obtained at the facility, the applicant must include two years of biological data collection demonstrating the level of impingement mortality the system is capable of achieving. The applicant must submit any relevant supporting documentation, including previously collected biological data, performance reviews, and previously conducted performance studies not already submitted to the Director. The applicant must provide a description of any sampling or data collection approach used in measuring impingement mortality. In addition, for this demonstration the applicant must:

- (1) Collect data no less frequently than monthly. The Director may establish more frequent data collection;
- (2) Conduct biological data collection that is representative of the impingement and the impingement mortality at an intake subject to this provision. In addition, the applicant must describe how the location of the cooling water intake structure in the waterbody and the water column are accounted for in the points of data collection:
- (3) Include a taxonomic identification to the lowest taxon possible of all organisms to be collected;
- (4) Describe the method in which naturally moribund organisms are identified and taken into account:
- (5) Describe the method in which mortality due to holding times is taken into account; and
- (6) If the facility entraps fish or shellfish, a count of the entrapment, as defined at 40 CFR 125.92(j), as impingement mortality.
- (C) Flow reduction. If the demonstration relies in part on flow reduction to reduce impingement, the applicant

must include two years of intake flows, measured daily, as part of the demonstration, and describe the extent to which flow reductions are seasonal or intermittent. The applicant must document how the flow reduction results in reduced impingement. In addition, the applicant must describe how the reduction in impingement has reduced impingement mortality.

- (D) Total system performance. The applicant must document the percent impingement mortality reflecting optimized operation of the total system of technologies, operational measures, and best management practices and all supporting calculations. The total system performance is the combination of the impingement mortality performance reflected in paragraphs (r)(6)(ii)(A), (B), and (C) of this section.
- (7) Entrainment Performance Studies. The owner or operator of an existing facility must submit any previously conducted studies or studies obtained from other facilities addressing technology efficacy, through-facility entrainment survival, and other entrainment studies. Any such submittals must include a description of each study, together with underlying data, and a summary of any conclusions or results. Any studies conducted at other locations must include an explanation as to why the data from other locations are relevant and representative of conditions at your facility. In the case of studies more than 10 years old, the applicant must explain why the data are still relevant and representative of conditions at the facility and explain how the data should be interpreted using the definition of entrainment at 40 CFR 125.92(h).
- (8) Operational Status. The owner or operator of an existing facility must submit a description of the operational status of each generating, production, or process unit that uses cooling water, including but not limited to:
- (i) For power production or steam generation, descriptions of individual unit operating status including age of each unit, capacity utilization rate (or equivalent) for the previous 5 years, including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, including iden-

tification of any operating unit with a capacity utilization rate of less than 8 percent averaged over a 24-month block contiguous period, and any major upgrades completed within the last 15 years, including but not limited to boiler replacement, condenser replacement, turbine replacement, or changes to fuel type;

- (ii) Descriptions of completed, approved, or scheduled uprates and Nuclear Regulatory Commission relicensing status of each unit at nuclear facilities;
- (iii) For process units at your facility that use cooling water other than for power production or steam generation. if you intend to use reductions in flow or changes in operations to meet the requirements of 40 CFR 125.94(c), descriptions of individual production processes and product lines, operating status including age of each line, seasonal operation, including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, any major upgrades completed within the last 15 years, and plans or schedules for decommissioning or replacement of process units or production processes and product lines;
- (iv) For all manufacturing facilities, descriptions of current and future production schedules; and
- (v) Descriptions of plans or schedules for any new units planned within the next $5\ {\rm years}.$
- (9)Entrainment Characterization Study. The owner or operator of an existing facility that withdraws greater than 125 mgd AIF, where the withdrawal of cooling water is measured at a location within the cooling water intake structure that the Director deems appropriate, must develop for submission to the Director an Entrainment Characterization Study that includes a minimum of two years of entrainment data collection. The Entrainment Characterization Study must include the following components:
- (i) Entrainment Data Collection Method. The study should identify and document the data collection period and frequency. The study should identify and document organisms collected to the lowest taxon possible of all life stages of fish and shellfish that are in

the vicinity of the cooling water intake structure(s) and are susceptible to entrainment, including any organisms identified by the Director, and any species protected under Federal, State, or Tribal law, including threatened or endangered species with a habitat range that includes waters in the vicinity of the cooling water intake structure. Biological data collection must be representative of the entrainment at the intakes subject to this provision. The owner or operator of the facility must identify and document how the location of the cooling water intake structure in the waterbody and the water column are accounted for by the data collection locations;

(ii) Biological Entrainment Characterization. Characterization of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal law (including threatened or endangered species), including a description of their abundance and their temporal and spatial characteristics in the vicinity of the cooling water intake structure(s), based on sufficient data to characterize annual, seasonal, and diel variations in entrainment, including but not limited to variations related to climate and weather differences spawning, feeding, and water column migration. This characterization may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Identification of all life stages of fish and shellfish must include identification of any surrogate species used, and identification of data representing both motile and nonmotile life-stages of organisms;

(iii) Analysis and Supporting Documentation. Documentation of the current entrainment of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal law (including threatened or endangered species). The documentation may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Entrainment data to support the facility's calculations must be collected during periods of representative operational flows for the cooling water intake structure, and the flows associated with the data collection

must be documented. The method used to determine latent mortality along with data for specific organism mortality or survival that is applied to other life-stages or species must be identified. The owner or operator of the facility must identify and document all assumptions and calculations used to determine the total entrainment for that facility together with all methods and quality assurance/quality control procedures for data collection and data analysis. The proposed data collection and data analysis methods must be appropriate for a quantitative survey.

- (10) Comprehensive Technical Feasibility and Cost Evaluation Study. The owner or operator of an existing facility that withdraws greater than 125 mgd AIF must develop for submission to the Director an engineering study of the technical feasibility and incremental costs of candidate entrainment control technologies. In addition, the study must include the following:
- (i) Technical feasibility. An evaluation of the technical feasibility of closed-cycle recirculating systems as defined at 40 CFR 125.92(c), fine mesh screens with a mesh size of 2 millimeters or smaller, and water reuse or alternate sources of cooling water. In addition, this study must include:
- (A) A description of all technologies and operational measures considered (including alternative designs of closed-cycle recirculating systems such as natural draft cooling towers, mechanical draft cooling towers, hybrid designs, and compact or multi-cell arrangements);
- (B) A discussion of land availability, including an evaluation of adjacent land and acres potentially available due to generating unit retirements, production unit retirements, other buildings and equipment retirements, and potential for repurposing of areas devoted to ponds, coal piles, rail yards, transmission yards, and parking lots;
- (C) A discussion of available sources of process water, grey water, waste water, reclaimed water, or other waters of appropriate quantity and quality for use as some or all of the cooling water needs of the facility; and
- (D) Documentation of factors other than cost that may make a candidate

technology impractical or infeasible for further evaluation.

- (ii) Other entrainment control technologies. An evaluation of additional technologies for reducing entrainment may be required by the Director.
- (iii) Cost evaluations. The study must include engineering cost estimates of all technologies considered in paragraphs (r)(10)(i) and (ii) of this section. Facility costs must also be adjusted to estimate social costs. All costs must be presented as the net present value (NPV) and the corresponding annual value. Costs must be clearly labeled as compliance costs or social costs. The applicant must separately discuss facility level compliance costs and social costs, and provide documentation as follows:
- (A) Compliance costs are calculated as after-tax, while social costs are calculated as pre-tax. Compliance costs include the facility's administrative costs, including costs of permit application, while the social cost adjustment includes the Director's administrative costs. Any outages, downtime, or other impacts to facility net revenue, are included in compliance costs, while only that portion of lost net revenue that does not accrue to other producers can be included in social costs. Social costs must also be discounted using social discount rates of 3 percent and 7 percent. Assumptions regarding depreciation schedules, tax rates, interest rates, discount rates and related assumptions must be identified;
- (B) Costs and explanation of any additional facility modifications necessary to support construction and operation of technologies considered in paragraphs (r)(10)(i) and (ii) of this section, including but not limited to relocation of existing buildings or equipment, reinforcement or upgrading of existing equipment, and additional construction and operating permits. Assumptions regarding depreciation schedules, interest rates, discount rates, useful life of the technology considered, and any related assumptions must be identified; and
- (C) Costs and explanation for addressing any non-water quality environmental and other impacts identified in paragraph (r)(12) of this section. The cost evaluation must include a discus-

- sion of all reasonable attempts to mitigate each of these impacts.
- (11) Benefits Valuation Study. The owner or operator of an existing facility that withdraws greater than 125 mgd AIF must develop for submission to the Director an evaluation of the benefits of the candidate entrainment reduction technologies and operational measures evaluated in paragraph (r)(10) of this section including using the Entrainment Characterization Study completed in paragraph (r)(9) of this section. Each category of benefits must be described narratively, and when possible, benefits should be quantified in physical or biological units and monetized using appropriate economic valuation methods. The benefits valuation study must include, but is not limited to, the following elements:
- (i) Incremental changes in the numbers of individual fish and shellfish lost due to impingement mortality and entrainment as defined in 40 CFR 125.92, for all life stages of each exposed species;
- (ii) Description of basis for any estimates of changes in the stock sizes or harvest levels of commercial and recreational fish or shellfish species or forage fish species:
- (iii) Description of basis for any monetized values assigned to changes in the stock size or harvest levels of commercial and recreational fish or shellfish species, forage fish, and to any other ecosystem or non use benefits;
- (iv) A discussion of mitigation efforts completed prior to October 14, 2014 including how long they have been in effect and how effective they have been;
- (v) Discussion, with quantification and monetization, where possible, of any other benefits expected to accrue to the environment and local communities, including but not limited to improvements for mammals, birds, and other organisms and aquatic habitats;
- (vi) Discussion, with quantification and monetization, where possible, of any benefits expected to result from any reductions in thermal discharges from entrainment technologies.
- (12) Non-water Quality Environmental and Other Impacts Study. The owner or operator of an existing facility that withdraws greater than 125 mgd AIF

must develop for submission to the Director a detailed facility-specific discussion of the changes in non-water quality environmental and other impacts attributed to each technology and operational measure considered in paragraph (r)(10) of this section, including both impacts increased and impacts decreased. The study must include the following:

- (i) Estimates of changes to energy consumption, including but not limited to auxiliary power consumption and turbine backpressure energy penalty;
- (ii) Estimates of air pollutant emissions and of the human health and environmental impacts associated with such emissions;
 - (iii) Estimates of changes in noise;
- (iv) A discussion of impacts to safety, including documentation of the potential for plumes, icing, and availability of emergency cooling water;
- (v) A discussion of facility reliability, including but not limited to facility availability, production of steam, impacts to production based on process unit heating or cooling, and reliability due to cooling water availability;
- (vi) Significant changes in consumption of water, including a facility-specific comparison of the evaporative losses of both once-through cooling and closed-cycle recirculating systems, and documentation of impacts attributable to changes in water consumption; and
- (vii) A discussion of all reasonable attempts to mitigate each of these factors.

(13) Peer Review. If the applicant is required to submit studies under paragraphs (r)(10) through (12) of this section, the applicant must conduct an external peer review of each report to be submitted with the permit application. The applicant must select peer reviewers and notify the Director in advance of the peer review. The Director may disapprove of a peer reviewer or require additional peer reviewers. The Director may confer with EPA, Federal, State and Tribal fish and wildlife management agencies with responsibility for fish and wildlife potentially affected by the cooling water intake structure, independent system operators, and state public utility regulatory agencies, to determine which peer review

comments must be addressed. The applicant must provide an explanation for any significant reviewer comments not accepted. Peer reviewers must have appropriate qualifications and their names and credentials must be included in the peer review report.

(14) New Units. The applicant must identify the chosen compliance method for the new unit. In addition, the owner or operator that selects the BTA standards for new units at 40 CFR 125.94 (e)(2) as its route to compliance must submit information to demonstrate entrainment reductions equivalent to 90 percent or greater of the reduction that could be achieved through compliance with 40 CFR 125.94(e)(1). The demonstration must include the Entrainment Characterization Study at paragraph (r)(9) of this section. In addition, if data specific to your facility indicates that compliance with the requirements of §125.94 of this chapter for each new unit would result in compliance costs wholly out of proportion to the costs EPA considered in establishing the requirements at issue, or would result in significant adverse impacts on local air quality, significant adverse impacts on local water resources other than impingement or entrainment, or significant adverse impacts on local energy markets, you must submit all supporting data as part of paragraph (r)(14) of this section. The Director may determine that additional data and information, including but not limited to monitoring, must be included as part of paragraph (r)(14) of this section.

[48 FR 14153, Apr. 1, 1983]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §122.21, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.govinfo.gov.

§122.22 Signatories to permit applications and reports (applicable to State programs, see §123.25).

- (a) *Applications*. All permit applications shall be signed as follows:
- (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary,