

120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States. The owner or operator must notify the State Director that a copy of the insurance policy has been placed in the operating record.

(2) The closure or post-closure care insurance policy must guarantee that funds will be available to close the MSWLF unit whenever final closure occurs or to provide post-closure care for the MSWLF unit whenever the post-closure care period begins, whichever is applicable. The policy must also guarantee that once closure or post-closure care begins, the insurer will be responsible for the paying out of funds to the owner or operator or other person authorized to conduct closure or post-closure care, up to an amount equal to the face amount of the policy.

(3) The insurance policy must be issued for a face amount at least equal to the current cost estimate for closure or post-closure care, whichever is applicable, except as provided in paragraph (k) of this section. The term *face amount* means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) An owner or operator, or any other person authorized to conduct closure or post-closure care, may receive reimbursements for closure or post-closure expenditures, whichever is applicable. Requests for reimbursement will be granted by the insurer only if the remaining value of the policy is sufficient to cover the remaining costs of closure or post-closure care, and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the State Director that the documentation of the justification for reimbursement has been placed in the operating record and that reimbursement has been received.

(5) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided that such consent is not unreasonably refused.

(6) The insurance policy must provide that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner and operator and to the State Director 120 days in advance of cancellation. If the insurer cancels the policy, the owner or operator must obtain alternate financial assurance as specified in this section.

(7) For insurance policies providing coverage for post-closure care, commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(8) The owner or operator may cancel the insurance policy only if alternate financial assurance is substituted as specified in this section or if the owner or operator, is no longer required to demonstrate financial responsibility in accordance with the requirements of §258.71(b), §258.72(b) or §258.73(b).

(e) *Corporate financial test.* An owner or operator that satisfies the requirements of this paragraph (e) may demonstrate financial assurance up to the amount specified in this paragraph (e):

(1) *Financial component.* (i) The owner or operator must satisfy one of the following three conditions:

(A) A current rating for its senior unsubordinated debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; or

(B) A ratio of less than 1.5 comparing total liabilities to net worth; or

(C) A ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus \$10 million, to total liabilities.

(ii) The tangible net worth of the owner or operator must be greater than: (A) The sum of the current closure, post-closure care, corrective action cost estimates and any other environmental obligations, including guarantees, covered by a financial test plus \$10 million except as provided in paragraph (e)(1)(ii)(B) of this section.

(B) \$10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities on the financial statements provided all of the current closure, post-closure care, and corrective action costs and any other environmental obligations covered by a financial test are recognized as liabilities on the owner's or operator's audited financial statements, and subject to the approval of the State Director.

(iii) The owner or operator must have assets located in the United States amounting to at least the sum of current closure, post-closure care, corrective action cost estimates and any other environmental obligations covered by a financial test as described in paragraph (e)(3) of this section.

(2) *Recordkeeping and reporting requirements.* (i) The owner or operator must place the following items into the facility's operating record:

(A) A letter signed by the owner's or operator's chief financial officer that:

(1) Lists all the current cost estimates covered by a financial test, including, but not limited to, cost estimates required for municipal solid waste management facilities under this part 258, cost estimates required for UIC facilities under 40 CFR part 144, if applicable, cost estimates required for petroleum underground storage tank facilities under 40 CFR part 280, if applicable, cost estimates required for PCB storage facilities under 40 CFR part 761, if applicable, and cost estimates required for hazardous waste treatment, storage, and disposal facilities under 40 CFR parts 264 and 265, if applicable; and

(2) Provides evidence demonstrating that the firm meets the conditions of either paragraph (e)(1)(i)(A) or (e)(1)(i)(B) or (e)(1)(i)(C) of this section and paragraphs (e)(1)(ii) and (e)(1)(iii) of this section.

(B) A copy of the independent certified public accountant's unqualified opinion of the owner's or operator's financial statements for the latest completed fiscal year. To be eligible to use the financial test, the owner's or operator's financial statements must receive an unqualified opinion from the independent certified public accountant. An adverse opinion, disclaimer of opinion, or other qualified opinion will be cause for disallowance, with the potential exception for qualified opinions provided in the next sentence. The Director of an approved State may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Director deems that the matters which form the basis for the qualification are insufficient to warrant disallowance of the test. If the Director of an approved State does not allow use of the test, the owner or operator must provide alternate financial assurance that meets the requirements of this section.

(C) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that owner or operator satisfies paragraph (e)(1)(i)(B) or (e)(1)(i)(C) of this section that are different from data in the audited financial statements referred to in paragraph (e)(2)(i)(B) of this section or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of that comparison, and the reasons for any differences.

(D) If the chief financial officer's letter provides a demonstration that the firm has assured for environmental obligations as provided in paragraph (e)(1)(ii)(B) of this section, then the letter shall include a report from the independent certified public accountant that verifies that all of the environmental obligations covered by a financial test have been recognized as liabilities on the audited financial statements, how these obligations have been measured and reported, and that the tangible net worth of the firm is at least \$10 million plus the amount of any guarantees provided.

(ii) An owner or operator must place the items specified in paragraph (e)(2)(i) of this section in the operating record and notify the State Director that these items have been placed in the operating record before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997 or October 9, 1997 for MSWLF units meeting the conditions of §258.1(f)(1)), whichever is later in the case of closure, and post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.

(iii) After the initial placement of items specified in paragraph (e)(2)(i) of this section in the operating record, the owner or operator must annually update the information and place updated information in the operating record within 90 days following the close of the owner or operator's fiscal year. The Director of a State may provide up to an additional 45 days for an owner or operator who can demonstrate that 90 days is insufficient time to acquire audited financial statements. The updated information must consist of all items specified in paragraph (e)(2)(i) of this section.

(iv) The owner or operator is no longer required to submit the items specified in this paragraph (e)(2) or comply with the requirements of this paragraph (e) when:

(A) He substitutes alternate financial assurance as specified in this section that is not subject to these recordkeeping and reporting requirements; or

(B) He is released from the requirements of this section in accordance with §258.71(b), §258.72(b), or §258.73(b).

(v) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must, within 120 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets

the requirements of this section, place the required submissions for that assurance in the operating record, and notify the State Director that the owner or operator no longer meets the criteria of the financial test and that alternate assurance has been obtained.

(vi) The Director of an approved State may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require at any time the owner or operator to provide reports of its financial condition in addition to or including current financial test documentation as specified in paragraph (e)(2) of this section. If the Director of an approved State finds that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance that meets the requirements of this section.

(3) *Calculation of costs to be assured.* When calculating the current cost estimates for closure, post-closure care, corrective action, or the sum of the combination of such costs to be covered, and any other environmental obligations assured by a financial test referred to in this paragraph (e), the owner or operator must include cost estimates required for municipal solid waste management facilities under this part, as well as cost estimates required for the following environmental obligations, if it assures them through a financial test: obligations associated with UIC facilities under 40 CFR part 144, petroleum underground storage tank facilities under 40 CFR part 280, PCB storage facilities under 40 CFR part 761, and hazardous waste treatment, storage, and disposal facilities under 40 CFR parts 264 and 265.

(f) *Local government financial test.* An owner or operator that satisfies the requirements of paragraphs (f)(1) through (3) of this section may demonstrate financial assurance up to the amount specified in paragraph (f)(4) of this section:

(1) *Financial component.* (i) The owner or operator must satisfy paragraph (f)(1)(i)(A) or (B) of this section as applicable:

(A) If the owner or operator has outstanding, rated, general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, it must have a current rating of Aaa, Aa, A, or Baa, as issued by Moody's, or AAA, AA, A, or BBB, as issued by Standard and Poor's on all such general obligation bonds; or

(B) The owner or operator must satisfy each of the following financial ratios based on the owner or operator's most recent audited annual financial statement:

(1) A ratio of cash plus marketable securities to total expenditures greater than or equal to 0.05; and

(2) A ratio of annual debt service to total expenditures less than or equal to 0.20.

(ii) The owner or operator must prepare its financial statements in conformity with Generally Accepted Accounting Principles for governments and have its financial statements audited by an independent certified public accountant (or appropriate State agency).

(iii) A local government is not eligible to assure its obligations under §258.74(f) if it:

(A) Is currently in default on any outstanding general obligation bonds; or

(B) Has any outstanding general obligation bonds rated lower than Baa as issued by Moody's or BBB as issued by Standard and Poor's; or

(C) Operated at a deficit equal to five percent or more of total annual revenue in each of the past two fiscal years; or

(D) Receives an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent certified public accountant (or appropriate State agency) auditing its financial statement as required under paragraph (f)(1)(ii) of this section. However, the Director of an approved State may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Director deems the qualification insufficient to warrant disallowance of use of the test.

(iv) The following terms used in this paragraph are defined as follows:

(A) *Deficit* equals total annual revenues minus total annual expenditures;

(B) *Total revenues* include revenues from all taxes and fees but does not include the proceeds from borrowing or asset sales, excluding revenue from funds managed by local government on behalf of a specific third party;

(C) *Total expenditures* include all expenditures excluding capital outlays and debt repayment;

(D) *Cash plus marketable securities* is all the cash plus marketable securities held by the local government on the last day of a fiscal year, excluding cash and marketable securities designated to satisfy past obligations such as pensions; and

(E) *Debt service* is the amount of principal and interest due on a loan in a given time period, typically the current year.

(2) *Public notice component.* The local government owner or operator must place a reference to the closure and post-closure care costs assured through the financial test into its next comprehensive annual financial report (CAFR) after the effective date of this section or prior to the initial receipt of waste at the facility, whichever is later. Disclosure must include the nature and source of closure and post-closure care requirements, the reported liability at the balance sheet date, the estimated total closure and post-closure care cost remaining to be recognized, the percentage of landfill capacity used to date, and the estimated landfill life in years. A reference to corrective action costs must be placed in the CAFR not later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58. For the first year the financial test is used to assure costs at a particular facility, the reference may instead be placed in the operating record until issuance of the next available CAFR if timing does not permit the reference to be incorporated into the most recently issued CAFR or budget. For closure and post-closure costs, conformance with Government Accounting Standards Board Statement 18 assures compliance with this public notice component.

(3) *Recordkeeping and reporting requirements.* (i) The local government owner or operator must place the following items in the facility's operating record:

(A) A letter signed by the local government's chief financial officer that:

(1) Lists all the current cost estimates covered by a financial test, as described in paragraph (f)(4) of this section;

(2) Provides evidence and certifies that the local government meets the conditions of paragraphs (f)(1)(i), (f)(1)(ii), and (f)(1)(iii) of this section; and

(3) Certifies that the local government meets the conditions of paragraphs (f)(2) and (f)(4) of this section.

(B) The local government's independently audited year-end financial statements for the latest fiscal year (except for local governments where audits are required every two years where unaudited statements may be used in years when audits are not required), including the unqualified opinion of the auditor who must be an independent, certified public accountant or an appropriate State agency that conducts equivalent comprehensive audits;

(C) A report to the local government from the local government's independent certified public accountant (CPA) or the appropriate State agency based on performing an agreed upon procedures engagement relative to the financial ratios required by paragraph (f)(1)(i)(B) of this section, if applicable, and the requirements of paragraphs (f)(1)(ii) and (f)(1)(iii) (C) and (D) of this section. The CPA or State agency's report should state the procedures performed and the CPA or State agency's findings; and

(D) A copy of the comprehensive annual financial report (CAFR) used to comply with paragraph (f)(2) of this section or certification that the requirements of General Accounting Standards Board Statement 18 have been met.

(ii) The items required in paragraph (f)(3)(i) of this section must be placed in the facility operating record as follows:

(A) In the case of closure and post-closure care, either before the effective date of this section, which is April 9, 1997, or prior to the initial receipt of waste at the facility, whichever is later, or

(B) In the case of corrective action, not later than 120 days after the corrective action remedy is selected in accordance with the requirements of §258.58.

(iii) After the initial placement of the items in the facility's operating record, the local government owner or operator must update the information and place the updated information in the operating record within 180 days following the close of the owner or operator's fiscal year.

(iv) The local government owner or operator is no longer required to meet the requirements of paragraph (f)(3) of this section when:

(A) The owner or operator substitutes alternate financial assurance as specified in this section; or

(B) The owner or operator is released from the requirements of this section in accordance with §258.71(b), 258.72(b), or 258.73(b).

(v) A local government must satisfy the requirements of the financial test at the close of each fiscal year. If the local government owner or operator no longer meets the requirements of the local government financial test it must, within 210 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets the requirements of this section, place the required submissions for that assurance in the operating record, and notify the State Director that the owner or operator no longer meets the criteria of the financial test and that alternate assurance has been obtained.

(vi) The Director of an approved State, based on a reasonable belief that the local government owner or operator may no longer meet the requirements of the local government financial test, may require additional reports of financial condition from the local government at any time. If the Director of an approved State finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of the local government financial test, the local government must provide alternate financial assurance in accordance with this section.

(4) *Calculation of costs to be assured.* The portion of the closure, post-closure, and corrective action costs for which an owner or operator can assure under this paragraph is determined as follows:

(i) If the local government owner or operator does not assure other environmental obligations through a financial test, it may assure closure, post-closure, and corrective action costs that equal up to 43 percent of the local government's total annual revenue.

(ii) If the local government assures other environmental obligations through a financial test, including those associated with UIC facilities under 40 CFR 144.62, petroleum underground storage tank facilities under 40 CFR Part 280, PCB storage facilities under 40 CFR Part 761, and hazardous waste treatment, storage, and disposal facilities under 40 CFR Parts 264 and 265, it must add those costs to the closure, post-closure, and corrective action costs it seeks to assure under this paragraph. The total that may be assured must not exceed 43 percent of the local government's total annual revenue.

(iii) The owner or operator must obtain an alternate financial assurance instrument for those costs that exceed the limits set in paragraphs (f)(4) (i) and (ii) of this section.

(g) *Corporate Guarantee.* (1) An owner or operator may meet the requirements of this section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in paragraph (e) of this section and must comply with the terms of the guarantee. A certified copy of the guarantee must be placed in the facility's operating record along with copies of the letter from the guarantor's chief financial officer and accountants' opinions. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee.

(2) The guarantee must be effective and all required submissions placed in the operating record before the initial receipt of waste or before the effective date of the requirements of this section (April 9, 1997 or October 9, 1997 for MSWLF units meeting the conditions of §258.1(f)(1), whichever is later, in the case of closure and post-closure care, or in the case of corrective action no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.

(3) The terms of the guarantee must provide that:

(i) If the owner or operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

(A) Perform, or pay a third party to perform, closure, post-closure care, and/or corrective action as required (performance guarantee); or

(B) Establish a fully funded trust fund as specified in paragraph (a) of this section in the name of the owner or operator (payment guarantee).

(ii) The guarantee will remain in force for as long as the owner or operator must comply with the applicable financial assurance requirements of this Subpart unless the guarantor sends prior notice of cancellation by certified mail to the owner or operator and to the State Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the State Director, as evidenced by the return receipts.

(iii) If notice of cancellation is given, the owner or operator must, within 90 days following receipt of the cancellation notice by the owner or operator and the State Director, obtain alternate financial assurance, place evidence of that alternate financial assurance in the facility operating record, and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within 120 days of the cancellation notice, obtain alternative assurance, place evidence of the alternate assurance in the facility operating record, and notify the State Director.

(4) If a corporate guarantor no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must, within 90 days, obtain alternative assurance, place evidence of the alternate assurance in the facility operating record,

and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

(5) The owner or operator is no longer required to meet the requirements of this paragraph (g) when:

(i) The owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The owner or operator is released from the requirements of this section in accordance with §258.71(b), §258.72(b), or §258.73(b).

(h) *Local government guarantee.* An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, as required by §§258.71, 258.72, and 258.73, by obtaining a written guarantee provided by a local government. The guarantor must meet the requirements of the local government financial test in paragraph (f) of this section, and must comply with the terms of a written guarantee.

(1) *Terms of the written guarantee.* The guarantee must be effective before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure, post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58. The guarantee must provide that:

(i) If the owner or operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

(A) Perform, or pay a third party to perform, closure, post-closure care, and/or corrective action as required; or

(B) Establish a fully funded trust fund as specified in paragraph (a) of this section in the name of the owner or operator.

(ii) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the State Director. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the State Director, as evidenced by the return receipts.

(iii) If a guarantee is cancelled, the owner or operator must, within 90 days following receipt of the cancellation notice by the owner or operator and the State Director, obtain alternate financial assurance, place evidence of that alternate financial assurance in the facility operating record, and notify the State Director. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within 120 days following the guarantor's notice of cancellation, place evidence of the alternate assurance in the facility operating record, and notify the State Director.

(2) *Recordkeeping and reporting.* (i) The owner or operator must place a certified copy of the guarantee along with the items required under paragraph (f)(3) of this section into the facility's operating record before the initial receipt of waste or before the effective date of this section, whichever is later, in the case of closure, post-closure care, or no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58.

(ii) The owner or operator is no longer required to maintain the items specified in paragraph (h)(2) of this section when:

(A) The owner or operator substitutes alternate financial assurance as specified in this section; or

(B) The owner or operator is released from the requirements of this section in accordance with §258.71(b), 258.72(b), or 258.73(b).

(iii) If a local government guarantor no longer meets the requirements of paragraph (f) of this section, the owner or operator must, within 90 days, obtain alternative assurance, place evidence of the alternate assurance in the facility operating record, and notify the State Director. If the owner or operator fails to obtain alternate financial assurance within that 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

(i) *State-Approved mechanism.* An owner or operator may satisfy the requirements of this section by obtaining any other mechanism that meets the criteria specified in §258.74(1), and that is approved by the Director of an approved State.

(j) *State assumption of responsibility.* If the State Director either assumes legal responsibility for an owner or operator's compliance with the closure, post-closure care and/or corrective action requirements of this part, or assures that the funds will be available from State sources to cover the requirements, the owner or operator will be in compliance with the requirements of this section. Any State assumption of responsibility must meet the criteria specified in §258.74(l).

(k) *Use of multiple mechanisms.* An owner or operator may demonstrate financial assurance for closure, post-closure, and corrective action, as required by §§258.71, 258.72, and 258.73 by establishing more than one mechanism per facility, except that mechanisms guaranteeing performance rather than payment, may not be combined with other instruments. The

mechanisms must be as specified in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this section, except that financial assurance for an amount at least equal to the current cost estimate for closure, post-closure care, and/or corrective action may be provided by a combination of mechanisms rather than a single mechanism.

(l) The language of the mechanisms listed in paragraphs (a), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this section must ensure that the instruments satisfy the following criteria:

(1) The financial assurance mechanisms must ensure that the amount of funds assured is sufficient to cover the costs of closure, post-closure care, and corrective action for known releases when needed;

(2) The financial assurance mechanisms must ensure that funds will be available in a timely fashion when needed;

(3) The financial assurance mechanisms must be obtained by the owner or operator by the effective date of these requirements or prior to the initial receipt of solid waste, whichever is later, in the case of closure and post-closure care, and no later than 120 days after the corrective action remedy has been selected in accordance with the requirements of §258.58, until the owner or operator is released from the financial assurance requirements under §§258.71, 258.72 and 258.73.

(4) The financial assurance mechanisms must be legally valid, binding, and enforceable under State and Federal law.

[56 FR 51029, Oct. 9, 1991, as amended at 58 FR 51547, Oct. 1, 1993; 60 FR 40105, Aug. 7, 1995; 60 FR 52342, Oct. 6, 1995; 61 FR 60337, Nov. 27, 1996; 63 FR 17729, Apr. 10, 1998]

[↑ Back to Top](#)

#### §258.75 Discounting.

The Director of an approved State may allow discounting of closure cost estimates in §258.71(a), post-closure cost estimates in §258.72(a), and/or corrective action costs in §258.73(a) up to the rate of return for essentially risk free investments, net of inflation, under the following conditions:

(a) The State Director determines that cost estimates are complete and accurate and the owner or operator has submitted a statement from a Registered Professional Engineer so stating;

(b) The State finds the facility in compliance with applicable and appropriate permit conditions;

(c) The State Director determines that the closure date is certain and the owner or operator certifies that there are no foreseeable factors that will change the estimate of site life; and

(d) Discounted cost estimates must be adjusted annually to reflect inflation and years of remaining life.

[61 FR 60339, Nov. 27, 1996]

[↑ Back to Top](#)

#### Appendix I to Part 258—Constituents for Detection Monitoring

| Common name <sup>1</sup>       | CAS RN <sup>2</sup> |
|--------------------------------|---------------------|
| <i>Inorganic Constituents:</i> |                     |
| (1) Antimony                   | (Total)             |
| (2) Arsenic                    | (Total)             |
| (3) Barium                     | (Total)             |
| (4) Beryllium                  | (Total)             |
| (5) Cadmium                    | (Total)             |
| (6) Chromium                   | (Total)             |
| (7) Cobalt                     | (Total)             |
| (8) Copper                     | (Total)             |
| (9) Lead                       | (Total)             |
| (10) Nickel                    | (Total)             |
| (11) Selenium                  | (Total)             |
| (12) Silver                    | (Total)             |
| (13) Thallium                  | (Total)             |
| (14) Vanadium                  | (Total)             |
| (15) Zinc                      | (Total)             |
| <i>Organic Constituents:</i>   |                     |
| (16) Acetone                   | 67-64-1             |
| (17) Acrylonitrile             | 107-13-1            |
| (18) Benzene                   | 71-43-2             |
| (19) Bromochloromethane        | 74-97-5             |
| (20) Bromodichloromethane      | 75-27-4             |

|  |            |
|--|------------|
| (21) Bromoform; Tribromomethane                                    | 75-25-2    |
| (22) Carbon disulfide  | 75-15-0    |
| (23) Carbon tetrachloride  | 56-23-5    |
| (24) Chlorobenzene   | 108-90-7   |
| (25) Chloroethane; Ethyl chloride                                  | 75-00-3    |
| (26) Chloroform; Trichloromethane                                  | 67-66-3    |
| (27) Dibromochloromethane; Chlorodibromomethane                    | 124-48-1   |
| (28) 1,2-Dibromo-3-chloropropane; DBCP                             | 96-12-8    |
| (29) 1,2-Dibromoethane; Ethylene dibromide; EDB                    | 106-93-4   |
| (30) o-Dichlorobenzene; 1,2-Dichlorobenzene                        | 95-50-1    |
| (31) p-Dichlorobenzene; 1,4-Dichlorobenzene                        | 106-46-7   |
| (32) trans-1, 4-Dichloro-2-butene                                  | 110-57-6   |
| (33) 1,1-Dichloroethane; Ethylidene chloride                       | 75-34-3    |
| (34) 1,2-Dichloroethane; Ethylene dichloride                       | 107-06-2   |
| (35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride | 75-35-4    |
| (36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene              | 156-59-2   |
| (37) trans-1, 2-Dichloroethylene; trans-1,2-Dichloroethene         | 156-60-5   |
| (38) 1,2-Dichloropropane; Propylene dichloride                     | 78-87-5    |
| (39) cis-1,3-Dichloropropene                                       | 10061-01-5 |
| (40) trans-1,3-Dichloropropene                                     | 10061-02-6 |
| (41) Ethylbenzene  | 100-41-4   |
| (42) 2-Hexanone; Methyl butyl ketone                               | 591-78-6   |
| (43) Methyl bromide; Bromomethane                                  | 74-83-9    |
| (44) Methyl chloride; Chloromethane                                | 74-87-3    |
| (45) Methylene bromide; Dibromomethane                             | 74-95-3    |
| (46) Methylene chloride; Dichloromethane                           | 75-09-2    |
| (47) Methyl ethyl ketone; MEK; 2-Butanone                          | 78-93-3    |
| (48) Methyl iodide; Iodomethane                                    | 74-88-4    |
| (49) 4-Methyl-2-pentanone; Methyl isobutyl ketone                  | 108-10-1   |
| (50) Styrene   | 100-42-5   |
| (51) 1,1,1,2-Tetrachloroethane                                     | 630-20-6   |
| (52) 1,1,2,2-Tetrachloroethane                                     | 79-34-5    |
| (53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene     | 127-18-4   |
| (54) Toluene   | 108-88-3   |
| (55) 1,1,1-Trichloroethane; Methylchloroform                       | 71-55-6    |
| (56) 1,1,2-Trichloroethane   | 79-00-5    |
| (57) Trichloroethylene; Trichloroethene                            | 79-01-6    |
| (58) Trichlorofluoromethane; CFC-11                                | 75-69-4    |
| (59) 1,2,3-Trichloropropane  | 96-18-4    |
| (60) Vinyl acetate   | 108-05-4   |
| (61) Vinyl chloride  | 75-01-4    |
| (62) Xylenes   | 1330-20-7  |

<sup>1</sup>Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

<sup>2</sup>Chemical Abstract Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

[70 FR 34555, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

⬆ Back to Top

#### Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents

| Common name <sup>1</sup>     | CAS RN <sup>2</sup> | Chemical abstracts service index name <sup>3</sup>  |
|------------------------------|---------------------|---|
| Acenaphthene                 | 83-32-9             | Acenaphthylene, 1,2-dihydro-  |
| Acenaphthylene               | 208-96-8            | Acenaphthylene  |
| Acetone                      | 67-64-1             | 2-Propanone   |
| Acetonitrile; Methyl cyanide | 75-05-8             | Acetonitrile  |
| Acetophenone                 | 98-86-2             | Ethanone, 1-phenyl-   |
| 2-Acetylaminofluorene; 2-AAF | 53-96-3             | Acetamide, N-9H-fluoren-2-yl-   |
| Acrolein                     | 107-02-8            | 2-Propenal  |
| Acrylonitrile                | 107-13-1            | 2-Propenenitrile  |
| Aldrin                       | 309-00-2            | 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)- |
| Allyl chloride               | 107-05-1            | 1-Propene, 3-chloro-  |
| 4-Aminobiphenyl              | 92-67-1             | [1,1'-Biphenyl]-4-amine   |
| Anthracene                   | 120-12-7            | Anthracene  |
| Antimony                     | (Total)             | Antimony  |
| Arsenic                      | (Total)             | Arsenic   |
| Barium                       | (Total)             | Barium  |



|   |                |  |
|---|----------------|--|
| Benzene   | 71-43-2        | Benzene  |
| Benzo[a]anthracene; Benzanthracene  | 56-55-3        | Benzo[a]anthracene   |
| Benzo[b]fluoranthene  | 205-99-2       | Benzo[b]acephenanthrylene  |
| Benzo[k]fluoranthene  | 207-08-9       | Benzo[k]fluoranthene   |
| Benzo[ghi]perylene  | 191-24-2       | Benzo[ghi]perylene   |
| Benzo[a]pyrene  | 50-32-8        | Benzo[a]pyrene   |
| Benzyl alcohol  | 100-51-6       | Benzenemethanol  |
| Beryllium   | (Total)        | Beryllium  |
| alpha-BHC   | 319-84-6       | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\beta$ ,6 $\beta$ )-  |
| beta-BHC  | 319-85-7       | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ )-  |
| delta-BHC   | 319-86-8       | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ )- |
| gamma-BHC; Lindane  | 58-89-9        | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\alpha$ ,6 $\beta$ )- |
| Bis(2-chloroethoxy)methane  | 111-91-1       | Ethane, 1,1'-[methylenebis(oxy)]bis [2-chloro-   |
| Bis(2-chloroethyl)ether; Dichloroethyl ether  | 111-44-4       | Ethane, 1,1'-oxybis[2-chloro-  |
| Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether; DCIP, See footnote 4 | 108-60-1       | Propane, 2,2'-oxybis[1-chloro-   |
| Bis(2-ethylhexyl) phthalate   | 117-81-7       | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester   |
| Bromochloromethane; Chlorobromomethane  | 74-97-5        | Methane, bromochloro-  |
| Bromodichloromethane; Dibromochloromethane  | 75-27-4        | Methane, bromodichloro-  |
| Bromoform; Tribromomethane  | 75-25-2        | Methane, tribromo-   |
| 4-Bromophenyl phenyl ether  | 101-55-3       | Benzene, 1-bromo-4-phenoxy-  |
| Butyl phenyl phthalate; Benzyl butyl phthalate  | 85-68-7        | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester   |
| Cadmium   | (Total)        | Cadmium  |
| Carbon disulfide  | 75-15-0        | Carbon disulfide   |
| Carbon tetrachloride  | 56-23-5        | Methane, tetrachloro-  |
| Chlordane   | See footnote 5 | See 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-                                 |
| p-Chloroaniline   | 106-47-8       | Benzenamine, 4-chloro-   |
| Chlorobenzene   | 108-90-7       | Benzene, chloro-   |
| Chlorobenzilate   | 510-15-6       | Benzenoacetic acid, 4-chloro-(4-chlorophenyl)-hydroxy-, ethyl ester.   |
| p-Chloro-m-cresol; 4-Chloro-3-methylphenol  | 59-50-7        | Phenol, 4-chloro-3-methyl-   |
| Chloroethane; Ethyl chloride  | 75-00-3        | Ethane, chloro-  |
| Chloroform; Trichloromethane  | 67-66-3        | Methane, trichloro-  |
| 2-Chloronaphthalene   | 91-58-7        | Naphthalene, 2-chloro-   |
| 2-Chlorophenol  | 95-57-8        | Phenol, 2-chloro-  |
| 4-Chlorophenyl phenyl ether   | 7005-72-3      | Benzene, 1-chloro-4-phenoxy-   |
| Chloroprene   | 126-99-8       | 1,3-Butadiene, 2-chloro-   |
| Chromium  | (Total)        | Chromium   |
| Chrysene  | 218-01-9       | Chrysene   |
| Cobalt  | (Total)        | Cobalt   |
| Copper  | (Total)        | Copper   |
| m-Cresol; 3-Methylphenol  | 108-39-4       | Phenol, 3-methyl-  |
| o-Cresol; 2-Methylphenol  | 95-48-7        | Phenol, 2-methyl-  |
| p-Cresol; 4-Methylphenol  | 106-44-5       | Phenol, 4-methyl-  |
| Cyanide   | 57-12-5        | Cyanide  |
| 2,4-D; 2,4-Dichlorophenoxyacetic acid   | 94-75-7        | Acetic acid, (2,4-dichlorophenoxy)-  |
| 4,4'-DDD  | 72-54-8        | Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-  |
| 4,4'-DDE  | 72-55-9        | Benzene, 1,1'-(dichloroethenyldiene) bis[4-chloro-   |
| 4,4'-DDT  | 50-29-3        | Benzene, 1,1'-(2,2-trichloroethylidene) bis[4-chloro-  |
| Diallate  | 2303-16-4      | Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester.                                   |
| Dibenz[a,h]anthracene   | 53-70-3        | Dibenz[a,h]anthracene  |
| Dibenzofuran  | 132-64-9       | Dibenzofuran   |
| Dibromochloromethane; Chlorodibromomethane  | 124-48-1       | Methane, dibromochloro-  |
| 1,2-Dibromo-3-chloropropane; DBCP   | 96-12-8        | Propane, 1,2-dibromo-3-chloro-   |
| 1,2-Dibromoethane; Ethylene dibromide; EDB  | 106-93-4       | Ethane, 1,2-dibromo-   |
| Di-n-butyl phthalate  | 84-74-2        | 1,2-Benzenedicarboxylic acid, dibutyl ester  |
| o-Dichlorobenzene; 1,2-Dichlorobenzene  | 95-50-1        | Benzene, 1,2-dichloro-   |
| m-Dichlorobenzene; 1,3-Dichlorobenzene  | 541-73-1       | Benzene, 1,3-dichloro-   |
| p-Dichlorobenzene; 1,4-Dichlorobenzene  | 106-46-7       | Benzene, 1,4-dichloro-   |
| 3,3'-Dichlorobenzidine  | 91-94-1        | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-   |
| trans-1,4-Dichloro-2-butene   | 110-57-6       | 2-Butene, 1,4-dichloro-, (E)-  |
| Dichlorodifluoromethane; CFC 12   | 75-71-8        | Methane, dichlorodifluoro-   |
| 1,1-Dichloroethane; Ethyldiene chloride   | 75-34-3        | Ethane, 1,1-dichloro-  |
| 1,2-Dichloroethane; Ethylene dichloride   | 107-06-2       | Ethane, 1,2-dichloro-  |
| 1,1-Dichloroethylene; 1,1-Dichloroethene;   | 75-35-4        | Ethene, 1,1-dichloro-  |
| Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene                    | 156-59-2       | Ethene, 1,2-dichloro-(Z)-  |
| trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene                                    | 156-60-5       | Ethene, 1,2-dichloro-, (E)-  |
| 2,4-Dichlorophenol  | 120-83-2       | Phenol, 2,4-dichloro-  |
| 2,6-Dichlorophenol  | 87-65-0        | Phenol, 2,6-dichloro-  |

|  |            |   |
|--|------------|---|
| 1,2-Dichloropropane  | 178-87-5   | Propane, 1,2-dichloro-  |
| 1,3-Dichloropropane; Trimethylene dichloride                     | 142-28-9   | Propane, 1,3-dichloro-  |
| 2,2-Dichloropropane; Isopropylidene chloride                     | 594-20-7   | Propane, 2,2-dichloro-  |
| 1,1-Dichloropropene  | 563-58-6   | 1-Propene, 1,1-dichloro-  |
| cis-1,3-Dichloropropene  | 10061-01-5 | 1-Propene, 1,3-dichloro-, (Z)-  |
| trans-1,3-Dichloropropene  | 10061-02-6 | 1-Propene, 1,3-dichloro-, (E)-  |
| Dieldrin   | 60-57-1    | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a,2,2a,3,6,6a,7,7a)- |
| Diethyl phthalate  | 84-66-2    | 1,2-Benzenedicarboxylic acid, diethyl ester   |
| O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin Dimethoate | 297-97-2   | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.  |
| p-(Dimethylamino)azobenzene                                      | 60-11-7    | Benzenamine, N,N-dimethyl-4-(phenylazo)-  |
| 7,12-Dimethylbenz[a]anthracene                                   | 57-97-6    | Benz[a]anthracene, 7,12-dimethyl-   |
| 3,3'-Dimethylbenzidine   | 119-93-7   | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-  |
| alpha, alpha-Dimethylphenethylamine                              | 122-09-8   | Benzenethanamine, alpha-dimethyl-   |
| 2,4-Dimethylphenol; m-Xylenol                                    | 105-67-9   | Phenol, 2,4-dimethyl-   |
| Dimethyl phthalate   | 131-11-3   | 1,2-Benzenedicarboxylic acid, dimethyl ester  |
| m-Dinitrobenzene   | 99-65-0    | Benzene, 1,3-dinitro-   |
| 4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol                 | 534-52-1   | Phenol, 2-methyl-4,6-dinitro-   |
| 2,4-Dinitrophenol  | 51-28-5    | Phenol, 2,4-dinitro-  |
| 2,4-Dinitrotoluene   | 121-14-2   | Benzene, 1-methyl-2,4-dinitro-  |
| 2,6-Dinitrotoluene   | 606-20-2   | Benzene, 2-methyl-1,3-dinitro-  |
| Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol                     | 88-85-7    | Phenol, 2-(1-methylpropyl)-4,6-dinitro-   |
| Di-n-octyl phthalate   | 117-84-0   | 1,2-Benzenedicarboxylic acid, dioctyl ester   |
| Diphenylamine  | 122-39-4   | Benzenamine, N-phenyl-  |
| Disulfoton   | 298-04-4   | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester  |
| Endosulfan I   | 959-98-8   | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,                      |
| Endosulfan II  | 33213-65-9 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3a,5a,6,9,9a)-      |
| Endosulfan sulfate   | 1031-07-8  | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide                   |
| Endrin   | 72-20-8    | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a,2,2a,3,6,6a,7,7a)-  |
| Endrin aldehyde  | 7421-93-4  | 1,2,4-Methanocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro- (1a,2,2a,3,4,7,7a)-          |
| Ethylbenzene   | 100-41-4   | Benzene, ethyl-   |
| Ethyl methacrylate   | 97-63-2    | 2-Propenoic acid, 2-methyl-, ethyl ester  |
| Ethyl methanesulfonate   | 62-50-0    | Methanesulfonic acid, ethyl ester   |
| Famphur  | 52-85-7    | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester  |
| Fluoranthene   | 206-44-0   | Fluoranthene  |
| Fluorene   | 86-73-7    | 9H-Fluorene   |
| Heptachlor   | 76-44-8    | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-  |
| Heptachlor epoxide   | 1024-57-3  | 2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-, (1a,1b,2a,5a,6,6a)        |
| Hexachlorobenzene  | 118-74-1   | Benzene, hexachloro-  |
| Hexachlorobutadiene  | 87-68-3    | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-  |
| Hexachlorocyclopentadiene  | 77-47-4    | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-  |
| Hexachloroethane   | 67-72-1    | Ethane, hexachloro-   |
| Hexachloropropene  | 1888-71-7  | 1-Propene, 1,1,2,3,3,3-hexachloro-  |
| 2-Hexanone; Methyl butyl ketone                                  | 591-78-6   | 2-Hexanone  |
| Indeno(1,2,3-cd)pyrene   | 193-39-5   | indeno[1,2,3-cd]pyrene  |
| Isobutyl alcohol   | 78-83-1    | 1-Propanol, 2-methyl-   |
| Isodrin  | 465-73-6   | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1a,4a,4a,5,8,8,8,8a)-                 |
| Isophorone   | 78-59-1    | 2-Cyclohexen-1-one, 3,5,5-trimethyl-  |
| Isosafrole   | 120-58-1   | 1,3-Benzodioxole, 5-(1-propenyl)-   |
| Kepone   | 143-50-0   | 1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-                           |
| Lead   | (Total)    | Lead  |
| Mercury  | (Total)    | Mercury   |
| Methacrylonitrile  | 126-98-7   | 2-Propenenitrile, 2-methyl-   |
| Methapyrilene  | 91-80-5    | 1,2-Ethanediamine, N,N-dimethyl-N'-(2-pyridinyl-N'-(2-thienyl)methyl)-  |
| Methoxychlor   | 72-43-5    | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-  |
| Methyl bromide; Bromomethane                                     | 74-83-9    | Methane, bromo-   |
| Methyl chloride; Chloromethane                                   | 74-87-3    | Methane, chloro-  |
| 3-Methylcholanthrene   | 56-49-5    | Benz[ <i>h</i> ]aceanthrylene, 1,2-dihydro-3-methyl-  |
| Methyl ethyl ketone; MEK; 2-Butanone                             | 78-93-3    | 2-Butanone  |
| Methyl iodide; Iodomethane                                       | 74-88-4    | Methane, iodo-  |
| Methyl methacrylate  | 80-62-6    | 2-Propenoic acid, 2-methyl-, methyl ester   |
| Methyl methanesulfonate  | 66-27-3    | Methanesulfonic acid, methyl ester  |
| 2-Methylnaphthalene  | 91-57-6    | Naphthalene, 2-methyl-  |

|   |                |  |
|---|----------------|--|
| Methyl parathion; Parathion methyl  | 298-00-0       | Phosphorothioic acid, O,O-dimethyl                               |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone                              | 108-10-1       | 2-Pentanone, 4-methyl-   |
| Methylene bromide; Dibromomethane   | 74-95-3        | Methane, dibromo-  |
| Methylene chloride; Dichloromethane                                       | 75-09-2        | Methane, dichloro-   |
| Naphthalene   | 91-20-3        | Naphthalene  |
| 1,4-Naphthoquinone  | 130-15-4       | 1,4-Naphthalenedione   |
| 1-Naphthylamine   | 134-32-7       | 1-Naphthalenamine  |
| 2-Naphthylamine   | 91-59-8        | 2-Naphthalenamine  |
| Nickel  | (Total)        | Nickel   |
| o-Nitroaniline; 2-Nitroaniline  | 88-74-4        | Benzenamine, 2-nitro-  |
| m-Nitroaniline; 3-Nitroaniline  | 99-09-2        | Benzenamine, 3-nitro-  |
| p-Nitroaniline; 4-Nitroaniline  | 100-01-6       | Benzenamine, 4-nitro-  |
| Nitrobenzene  | 98-95-3        | Benzene, nitro-  |
| o-Nitrophenol; 2-Nitrophenol  | 88-75-5        | Phenol, 2-nitro-   |
| p-Nitrophenol; 4-Nitrophenol  | 100-02-7       | Phenol, 4-nitro-   |
| N-Nitrosodi-n-butylamine  | 924-16-3       | 1-Butanamine, N-butyl-N-nitroso-                                 |
| N-Nitrosodiethylamine   | 55-18-5        | Ethanamine, N-ethyl-N-nitroso-                                   |
| N-Nitrosodimethylamine  | 62-75-9        | Methanamine, N-methyl-N-nitroso-                                 |
| N-Nitrosodiphenylamine  | 86-30-6        | Benzenamine, N-nitroso-N-phenyl-                                 |
| N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine | 621-64-7       | 1-Propanamine, N-nitroso-N-propyl-                               |
| N-Nitrosomethylethylamine   | 10595-95-6     | Ethanamine, N-methyl-N-nitroso-                                  |
| N-Nitrosopiperidine   | 100-75-4       | Piperidine, 1-nitroso-   |
| N-Nitrosopyrrolidine  | 930-55-2       | Pyrrolidine, 1-nitroso-  |
| 5-Nitro-o-toluidine   | 99-55-8        | Benzenamine, 2-methyl-5-nitro-                                   |
| Parathion   | 56-38-2        | Phosphorothioic acid, O,O-diethyl S- [(ethylthio)methyl] ester   |
| Pentachlorobenzene  | 608-93-5       | Benzene, pentachloro-  |
| Pentachloronitrobenzene   | 82-68-8        | Benzene, pentachloronitro-                                       |
| Pentachlorophenol   | 87-86-5        | Phenol, pentachloro-   |
| Phenacetin  | 62-44-2        | Acetamide, N-(4-ethoxyphenyl)                                    |
| Phenanthrene  | 85-01-8        | Phenanthrene   |
| Phenol  | 108-95-2       | Phenol   |
| p-Phenylenediamine  | 106-50-3       | 1,4-Benzenediamine   |
| Phorate   | 298-02-2       | Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester |
| Polychlorinated biphenyls; PCBs   | See footnote 6 | 1,1'-Biphenyl, chloro derivatives                                |
| Pronamide   | 23950-58-5     | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-             |
| Propionitrile; Ethyl cyanide  | 107-12-0       | Propanenitrile   |
| Pyrene  | 129-00-0       | Pyrene   |
| Safrole   | 94-59-7        | 1,3-Benzodioxole, 5-(2-propenyl)-                                |
| Selenium  | (Total)        | Selenium   |
| Silver  | (Total)        | Silver   |
| Silvex; 2,4,5-TP  | 93-72-1        | Propanoic acid, 2-(2,4,5-trichlorophenoxy)-                      |
| Styrene   | 100-42-5       | Benzene, ethenyl-  |
| Sulfide   | 18496-25-8     | Sulfide  |
| 2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid                                | 93-76-5        | Acetic acid, (2,4,5-trichlorophenoxy)-                           |
| 2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin                         | 1746-01-6      | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-                    |
| 1,2,4,5-Tetrachlorobenzene  | 95-94-3        | Benzene, 1,2,4,5-tetrachloro-                                    |
| 1,1,1,2-Tetrachloroethane   | 630-20-6       | Ethane, 1,1,1,2-tetrachloro-                                     |
| 1,1,2,2-Tetrachloroethane   | 79-34-5        | Ethane, 1,1,2,2-tetrachloro-                                     |
| Tetrachloroethylene; Tetrachloroethene; Perchloroethylene                 | 127-18-4       | Ethene, tetrachloro-   |
| 2,3,4,6-Tetrachlorophenol   | 58-90-2        | Phenol, 2,3,4,6-tetrachloro-                                     |
| Thallium  | (Total)        | Thallium   |
| Tin   | (Total)        | Tin  |
| Toluene   | 108-88-3       | Benzene, methyl-   |
| o-Toluidine   | 95-53-4        | Benzenamine, 2-methyl-   |
| Toxaphene   | See footnote 7 | Toxaphene  |
| 1,2,4-Trichlorobenzene  | 120-82-1       | Benzene, 1,2,4-trichloro-  |
| 1,1,1-Trichloroethane; Methylchloroform                                   | 71-55-6        | Ethane, 1,1,1-trichloro-   |
| 1,1,2-Trichloroethane   | 79-00-5        | Ethane, 1,1,2-trichloro-   |
| Trichloroethylene; Trichloroethene  | 79-01-6        | Ethene, trichloro-   |
| Trichlorofluoromethane; CFC-11  | 75-69-4        | Methane, trichlorofluoro-  |
| 2,4,5-Trichlorophenol   | 95-95-4        | Phenol, 2,4,5-trichloro-   |
| 2,4,6-Trichlorophenol   | 88-06-2        | Phenol, 2,4,6-trichloro-   |
| 1,2,3-Trichloropropane  | 96-18-4        | Propane, 1,2,3-trichloro-  |
| O,O,O-Triethyl phosphorothioate   | 126-68-1       | Phosphorothioic acid, O,O,O-triethyl ester                       |
| sym-Trinitrobenzene   | 99-35-4        | Benzene, 1,3,5-trinitro-   |
| Vanadium  | (Total)        | Vanadium   |
| Vinyl acetate   | 108-05-4       | Acetic acid, ethenyl ester                                       |

|                              |                            |                    |
|------------------------------|----------------------------|--------------------|
| Vinyl chloride; Chloroethene | 75-01-4                    | Ethene, chloro-    |
| Xylene (total)               | See footnote 8:<br>(Total) | Benzene, dimethyl- |
| Zinc                         |                            | Zinc               |

<sup>1</sup>Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

<sup>2</sup>Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

<sup>3</sup>CAS index names are those used in the 9th Cumulative Index.

<sup>4</sup>This substance is often called bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, propane, 2,2"-oxybis[2-chloro-(CAS RN 39638-32-9)].

<sup>5</sup>Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

<sup>6</sup>Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

<sup>7</sup>Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

<sup>8</sup>Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

[70 FR 34556, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

[Back to Top](#)

Need assistance?