§ 265.93 Preparation, evaluation, and response.

- (a) Within one year after the effective date of these regulations, the owner or operator must prepare an *outline* of a ground-water quality assessment program. The outline must describe a more comprehensive ground-water monitoring program (than that described in §§ 265.91 and 265.92) capable of determining:
- (1) Whether hazardous waste or hazardous waste constituents have entered the ground water;
- (2) The rate and extent of migration of hazardous waste or hazardous waste constituents in the ground water; and
- (3) The concentrations of hazardous waste or hazardous waste constituents in the ground water.
- (b) For each indicator parameter specified in §265.92(b)(3), the owner or operator must calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample, for each well monitored in accordance with §265.92(d)(2), and compare these results with its initial background arithmetic mean. The comparison must consider individually each of the wells in the monitoring system, and must use the Student's t-test at the 0.01 level of significance (see appendix IV) to determine statistically significant increases (and decreases, in the case of pH) over initial background.
- (c)(1) If the comparisons for the *upgradient* wells made under paragraph (b) of this section show a significant increase (or pH decrease), the owner or operator must submit this information in accordance with §265.94(a)(2)(ii).
- (2) If the comparisons for downgradient wells made under paragraph (b) of this section show a significant increase (or pH decrease), the owner or operator must then immediately obtain additional ground-water samples from those downgradient wells where a significant difference was detected, split the samples in two, and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.
- (d)(1) If the analyses performed under paragraph (c)(2) of this section confirm the significant increase (or pH decrease), the owner or operator must

- provide written notice to the Regional Administrator—within seven days of the date of such confirmation—that the facility may be affecting groundwater quality.
- (2) Within 15 days after the notification under paragraph (d)(1) of this section, the owner or operator must develop a specific plan, based on the outline required under paragraph (a) of this section and certified by a qualified geologist or geotechnical engineer, for a ground-water quality assessment at the facility. This plan must be placed in the facility operating record and be maintained until closure of the facility.
- (3) The plan to be submitted under §265.90(d)(1) or paragraph (d)(2) of this section must specify:
- (i) The number, location, and depth of wells:
- (ii) Sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;
- (iii) Evaluation procedures, including any use of previously-gathered groundwater quality information; and
 - (iv) A schedule of implementation.
- (4) The owner or operator must implement the ground-water quality assessment plan which satisfies the requirements of paragraph (d)(3) of this section, and, at a minimum, determine:
- (i) The rate and extent of migration of the hazardous waste or hazardous waste constituents in the ground water; and
- (ii) The concentrations of the hazardous waste or hazardous waste constituents in the ground water.
- (5) The owner or operator must make his first determination under paragraph (d)(4) of this section, as soon as technically feasible, and prepare a report containing an assessment of ground-water quality. This report must be placed in the facility operating record and be maintained until closure of the facility.
- (6) If the owner or operator determines, based on the results of the first determination under paragraph (d)(4) of this section, that no hazardous waste or hazardous waste constituents from the facility have entered the ground water, then he may reinstate the indicator evaluation program described in

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§265.92 and paragraph (b) of this section. If the owner or operator reinstates the indicator evaluation program, he must so notify the Regional Administrator in the report submitted under paragraph (d)(5) of this section.

- (7) If the owner or operator determines, based on the first determination under paragraph (d)(4) of this section, that hazardous waste or hazardous waste constituents from the facility have entered the ground water, then he:
- (i) Must continue to make the determinations required under paragraph (d)(4) of this section on a quarterly basis until final closure of the facility, if the ground-water quality assessment plan was implemented prior to final closure of the facility; or
- (ii) May cease to make the determinations required under paragraph (d)(4) of this section, if the groundwater quality assessment plan was implemented during the post-closure care period.
- (e) Notwithstanding any other provision of this subpart, any ground-water quality assessment to satisfy the requirements of §265.93(d)(4) which is initiated prior to final closure of the facility must be completed and reported in accordance with §265.93(d)(5).
- (f) Unless the ground water is monitored to satisfy the requirements of \$265.93(d)(4), at least annually the owner or operator must evaluate the data on ground-water surface elevations obtained under \$265.92(e) to determine whether the requirements under \$265.91(a) for locating the monitoring wells continues to be satisfied. If the evaluation shows that \$265.91(a) is no longer satisfied, the owner or operator must immediately modify the number, location, or depth of the monitoring wells to bring the ground-water monitoring system into compliance with this requirement.

[45 FR 33232, May 19, 1980, as amended at 50 FR 4514, Jan. 31, 1985; 71 FR 16909, Apr. 4, 2006]

§265.94 Recordkeeping and reporting.

(a) Unless the ground water is monitored to satisfy the requirements of $\S 265.93(d)(4)$, the owner or operator must:

- (1) Keep records of the analyses required in §265.92(c) and (d), the associated ground-water surface elevations required in §265.92(e), and the evaluations required in §265.93(b) throughout the active life of the facility, and, for disposal facilities, throughout the post-closure care period as well; and
- (2) Report the following ground-water monitoring information to the Regional Administrator:
- (i) During the first year when initial background concentrations are being established for the facility: concentrations or values of the parameters listed in §265.92(b)(1) for each ground-water monitoring well within 15 days after completing each quarterly analysis. The owner or operator must separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in appendix III.
- (ii) Annually: Concentrations or values of the parameters listed in §265.92(b)(3) for each ground-water monitoring well, along with the required evaluations for these parameters under §265.93(b). The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with §265.93(c)(1). During the active life of the facility, this information must be submitted no later than March 1 following each calendar year.
- (iii) No later than March 1 following each calendar year: Results of the evaluations of ground-water surface elevations under §265.93(f), and a description of the response to that evaluation, where applicable.
- (b) If the ground water is monitored to satisfy the requirements of §265.93(d)(4), the owner or operator must:
- (1) Keep records of the analyses and evaluations specified in the plan, which satisfies the requirements of §265.93(d)(3), throughout the active life of the facility, and, for disposal facilities, throughout the post-closure care period as well; and
- (2) Annually, until final closure of the facility, submit to the Regional Administrator a report containing the