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equipment or methods (including biological monitoring methods when appropriate);

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including when appropriate, continuous monitoring;

(c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in part 146. Reporting shall be no less frequent than specified in the above regulations.

§ 144.55 Corrective action.

(a) *Coverage.* Applicants for Class I, II, (other than existing), or III injection well permits shall identify the location of all known wells within the injection well's area of review which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the injection formation, all known wells within the area of review penetrating formations affected by the increase in pressure. For such wells which are improperly sealed, completed, or abandoned, the applicant shall also submit a plan consisting of such steps or modifications as are necessary to prevent movement of fluid into underground sources of drinking water ("corrective action"). Where the plan is adequate, the Director shall incorporate it into the permit as a condition. Where the Director's review of an application indicates that the permittee's plan is inadequate (based on the factors in § 146.07), the Director shall require the applicant to revise the plan, prescribe a plan for corrective action as a condition of the permit under paragraph (b) of this section, or deny the application. The Director may disregard the provisions of § 146.06 (Area of Review) and § 146.07 (Corrective Action) when reviewing an application to permit an existing Class II well.

(b) *Requirements—(1) Existing injection wells.* Any permit issued for an existing injection well (other than Class II) requiring corrective action shall include a compliance schedule requiring any corrective action accepted or prescribed under paragraph (a) of this section to be completed as soon as possible.

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(2) *New injection wells.* No owner or operator of a new injection well may begin injection until all required corrective action has been taken.

(3) *Injection pressure limitation.* The Director may require as a permit condition that injection pressure be so limited that pressure in the injection zone does not exceed hydrostatic pressure at the site of any improperly completed or abandoned well within the area of review. This pressure limitation shall satisfy the corrective action requirement. Alternatively, such injection pressure limitation can be part of a compliance schedule and last until all other required corrective action has been taken.

(4) *Class III wells only.* When setting corrective action requirements the Director shall consider the overall effect of the project on the hydraulic gradient in potentially affected USDWs, and the corresponding changes in potentiometric surface(s) and flow direction(s) rather than the discrete effect of each well. If a decision is made that corrective action is not necessary based on the determinations above, the monitoring program required in § 146.33(b) shall be designed to verify the validity of such determinations.

Subpart F—Financial Responsibility: Class I Hazardous Waste Injection Wells

SOURCE: 49 FR 20186, May 11, 1984, unless otherwise noted.

§ 144.60 Applicability.

(a) The requirements of §§ 144.62, 144.63, and 144.70 apply to owners and operators of all existing and new Class I Hazardous waste injection wells, except as provided otherwise in this section.

§ 144.61 Definitions of terms as used in this subpart.

(a) *Plugging and abandonment plan* means the plan for plugging and abandonment prepared in accordance with the requirements of §§ 144.28 and 144.51.

(b) *Current plugging cost estimate* means the most recent of the estimates prepared in accordance with § 144.62 (a), (b) and (c).

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(c) *Parent corporation* means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the injection well owner or operator; the latter corporation is deemed a *subsidiary* of the parent corporation.

(d) The following terms are used in the specifications for the financial test for plugging and abandonment. The definitions are intended to represent the common meanings of the terms as they are generally used by the business community.

Assets means all existing and all probable future economic benefits obtained or controlled by a particular entity.

Current assets means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

Current liabilities means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

Independently audited refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

Liabilities means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Net working capital means current assets minus current liabilities.

Net worth means total assets minus total liabilities and is equivalent to owner's equity.

Tangible net worth means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

§ 144.62 Cost estimate for plugging and abandonment.

(a) The owner or operator must prepare a written estimate, in current dollars, of the cost of plugging the injection well in accordance with the plugging and abandonment plan as specified

in §§ 144.28 and 144.51. The plugging and abandonment cost estimate must equal the cost of plugging and abandonment at the point in the facility's operating life when the extent and manner of its operation would make plugging and abandonment the most expensive, as indicated by its plugging and abandonment plan.

(b) The owner or operator must adjust the plugging and abandonment cost estimate for inflation within 30 days after each anniversary of the date on which the first plugging and abandonment cost estimate was prepared. The adjustment must be made as specified in paragraphs (b) (1) and (2) of this section, using an inflation factor derived from the annual Oil and Gas Field Equipment Cost Index. The inflation factor is the result of dividing the latest published annual Index by the Index for the previous year.

(1) The first adjustment is made by multiplying the plugging and abandonment cost estimate by the inflation factor. The result is the adjusted plugging and abandonment cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted plugging and abandonment cost estimate by the latest inflation factor.

(c) The owner or operator must revise the plugging and abandonment cost estimate whenever a change in the plugging and abandonment plan increases the cost of plugging and abandonment. The revised plugging and abandonment cost estimate must be adjusted for inflation as specified in § 144.62(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: the latest plugging and abandonment cost estimate prepared in accordance with § 144.62 (a) and (c) and, when this estimate has been adjusted in accordance with § 144.62(b), the latest adjusted plugging and abandonment cost estimate.

§ 144.63 Financial assurance for plugging and abandonment.

An owner or operator of each facility must establish financial assurance for the plugging and abandonment of each existing and new Class I hazardous waste injection well. He must choose