

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).

(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

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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 from the options as specified in paragraphs (a) through (f) of this section.

(a) *Plugging and abandonment trust fund.* (1) An owner or operator may sat-

isfy the requirements of this section by establishing a plugging and abandonment trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a Class I well injecting hazardous waste must submit the originally signed duplicate of the trust agreement to the Regional Administrator with the permit application or for approval to operate under rule. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in §144.70(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see §144.70(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current plugging and abandonment cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial permit or over the remaining operating life of the injection well as estimated in the plugging and abandonment plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the plugging and abandonment trust fund must be made as follows:

(i) For a new well, the first payment must be made before the initial injection of hazardous waste. A receipt from the trustee for this payment must be submitted by the owner or operator to the Regional Administrator before this initial injection of hazardous waste. The first payment must be at least equal to the current plugging and abandonment cost estimate, except as provided in §144.70(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula: