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RCRA's Underground Storage Tanks and Corrective Action Provisions

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Significant New Additions to RCRA:

Underground Storage Tanks and Corrective Action

by Alberto Gutierrez and Kim Bullerdick

Last year's Hazardous and Solid Waste Amendments of 1984, make substantial changes to the Resource Conservation and Recovery Act (RCRA), greatly increasing the scope of the federal hazardous waste control program. Although the amendments (Pub.L. 98-615 Stat. 3221) impose significant new requirements in many areas, two portions of the amendments in particular merit special consideration—the underground storage tank and corrective action provisions. The new statute in these two provisions will have a major impact on American industry.

The significance of the amendments' underground storage tank provisions cannot be overstated. For the first time, the Environmental Protection Agency is authorized under RCRA to regulate more than hazardous waste. The amendments specifically make crude oil, petroleum products, and substances defined as hazardous by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) subject to underground storage tank requirements.[1] Furthermore, the amendments' requirements are not limited to buried tanks. The term "underground storage tank" is defined broadly, subject to certain specified exemptions, to encompass any tank, including underground pipes connected to the tank, so long as at least 10 percent is located beneath the surface of the ground.

The amendments' corrective action provisions also constitute a substantial departure from prior law. They require, among other things, that persons

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seeking a RCRA permit for a treatment, storage, or disposal (TSD) facility identify all past and present solid waste management units at the facility. The facilities will have to investigate units suspected of releasing hazardous waste or hazardous waste constituents and clean up any areas affected by such releases. The corrective action provisions in effect will operate as a superfund-type clean-up mechanism applicable to active TSD facilities applying for, or receiving, permits after November 8, 1984. The few active facilities that already have final RCRA permits become subject to this mechanism when their permits come up for renewal.

The amendments' underground storage tank and corrective action provisions will have far-reaching impacts. The underground storage tank provisions will significantly affect many businesses which traditionally had been unregulated. In addition, short implementation deadlines will cause many companies to take action prior to the availability of definitive guidance from EPA. For example, the amendments' notification rules will require completion of significant record searches on the part of many firms by May 8, 1986. Furthermore, the provisions will require substantial changes in the design, construction, and installation of new tanks, and also require more careful and precise inventory recordkeeping.

Most of the new requirements for TSD facilities, including the corrective action provisions, are effective immediately upon enactment or by November 1985. EPA estimates that the cost to the regulated community of compliance with the amendments will be $3.8 billion in the first year and at least $584 million annually thereafter.

Underground Storage Tanks

The amendments add a new Subtitle I to RCRA dealing with regulation of underground storage tanks. Subtitle I creates a multi-faceted program for controlling leakage from underground storage tanks, including: 1) required notifications; 2) an immediate ban of tanks that do not prevent releases of regulated substances resulting from corrosion or structural failures or that do not use construction or lining material compatible with the substance to be stored; 3) EPA promulgation of both new tank performance standards and release detection, prevention, and correction regulations; 4) substitution of approved state release detection, prevention, and correction programs for the federal program; 5) inspection, monitoring, and testing requirements; and 6) federal enforcement.[2]

The amendments' notification requirements specify that by May 8, 1986, each owner of an underground storage tank must notify the appropriate state or local agency of the tank's existence, specifying the tank's age, size, type, location, and use. Similar notification requirements apply to owners of underground storage tanks taken out of operation after January 1, 1974, and to owners of tanks brought into use after May 8, 1986. EPA is to develop the form to be utilized in providing such notifications by this coming November.[3]

To assure that owners of underground storage tanks are aware of the notification requirements, a person depositing regulated substances in an underground storage tank must notify the owner or operator of the owner's notification requirements within 19 months after EPA develops the required form of notification. Beginning on that same date, persons selling a tank designed to be used as an underground storage tank must notify the purchaser of the tank owner's notification requirements.

EPA by February 1987 is to promulgate release detection, prevention, and correction regulations for tanks storing petroleum products, and by August 1988 for tanks storing hazardous substances. Those regulations are to include requirements for:

- maintaining a system or method for identifying releases that may endanger human health or the environment;
- maintaining records pertaining to such a system or method;
- reporting releases and any corrective action;
- taking corrective action in response to a release; and
- closing tanks to prevent future releases of regulated substances into the environment.

EPA is authorized also to develop regulations governing the retention of evidence of financial responsibility for corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of an underground storage tank.

Subtitle I also requires EPA to develop performance standards by February 1987 for new petroleum tanks and by August 1987 for new hazardous substance tanks. The EPA regulations must include, at a minimum, standards for tank design, construction, installation, release detection, and compatibility.

To protect against manufacture and use of substandard tanks prior to the effective date of the mandated new tank performance standards, no person as of May 1985 may install an underground storage tank for the purpose of storing regulated substances unless:

- the tank prevents releases resulting from corrosion or structural failure for the tank's operational life;
- the tank is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in

a manner to prevent the release or threatened release of any stored substance; and

- the material used in the construction or lining of the tank is compatible with the substance to be stored.

These prohibitions will be replaced by EPA's new source standards as soon as the standards become effective.

The 1984 Amendments are designed to encourage states to obtain EPA approval to substitute their own petroleum and/or hazardous substance release detection, prevention, and correction programs for the federal program. The amendments make $25 million per year in grant funds available to the states in fiscal years 1985 through 1988 for development and implementation of such programs. States can submit their own programs to EPA for approval. To receive EPA approval, the state program must contain the minimum requirements of the federal program and also, among other things, requirements for maintaining evidence of financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank. The specified requirements, however, can be waived during a grace period of one to three years, varying in length based upon the need for state regulatory and legislative action.

If EPA determines that a state program complies with the minimum requirements specified by the amendments and provides for adequate enforcement of compliance with applicable requirements and standards, it must substitute the state program for the federal program, giving the state primary enforcement responsibility. If EPA determines after public hearing, however, that the state is not adequately administering and enforcing its program, the agency's approval of the state program can be withdrawn. Historically, such withdrawals of state delegations are, of course, very uncommon under environmental statutes.

In order to assist in developing and enforcing underground storage tank regulations, appropriate federal and state officials may request information from owners and operators of underground storage tanks. They may also inspect the tanks and obtain samples of regulated substances. Furthermore, they are permitted to monitor and test not only the tanks, but also associated equipment and the surrounding area.

EPA is authorized to institute enforcement proceedings to assure compliance with the amendments' underground storage tank provisions. Whenever EPA determines that any person is in violation of the amendments' requirements, it may either issue an order requiring compliance within a reasonable specified time period, or commence a civil action in federal district court for appropriate relief. A civil penalty of up to $10,000 per tank for each day of violation may be imposed.

The underground storage tank provisions raise numerous difficult questions of statutory interpretation, many of which may have serious economic repercussions. For example, refiners and other companies with substantial underground piping networks attached to above-ground tanks may well be subject to the requirements under the new amendments, depending on the interpretation given to the "underground pipes" portion of the amendments' definition of "underground storage tank." Similarly, a company's compliance with the May 1985 prohibition against installation of underground tanks not preventing releases of regulated substances by structural failure will again depend upon the interpretation given to the term "structural failure." Such issues may well require many companies to make difficult compliance determinations.

New Requirements for Treatment, Storage and Disposal Facilities

The amendments contain numerous new requirements applicable to treatment, storage and disposal facilities. The new requirements can be divided into six major categories: 1) corrective actions for continuing releases; 2) waste minimization and financial responsibility certifications; 3) permits and loss of interim status; 4) exposure assessments; 5) minimal technology requirements; and 6) groundwater monitoring and certification. The first three categories of statutory requirements apply to all TSD facilities; the second three apply only to those TSD facilities which have land disposal units. Significant portions of the new requirements will be effective this November, a year after enactment into law.

Owners and operators of TSD facilities must review both the general facility requirements added by the amendments and the requirements that apply to specific units located on their facilities, described in their Part B permit applications.[4] Many of the requirements will cause facilities to incur substantial costs in investigating and documenting current and past operations. The corrective action provisions contain some of the most significant of these requirements.

Corrective Actions for Continuing Releases

Sections 3004(u), (v) and 3008(h), of the 1984 RCRA amendments deal with the need to take corrective action in connection with continuing releases of hazardous wastes. These provisions apply to all permits issued after November 8, 1984.

Section 3004(u) provides that permits issued by EPA or a state shall require corrective action for all releases of hazardous waste or constituents from any solid waste management unit at any TSD facility

seeking a permit under Subtitle C, regardless of when the waste was placed in the unit.[5] This provision, in effect, brings currently active, operating RCRA facilities under a superfund-type authority. In other words, the applicable regulatory agencies (EPA or a state) can require that corrective action be taken for spills or releases which have occurred on site *prior* to the issuance of a final Part B permit.

EPA has interpreted Section 3004(u) to mean that all permit applicants must now: 1) identify all past and present solid waste management units at the facility; 2) identify releases that have occurred or are occurring from these units; 3) take appropriate corrective measures to clean up those releases; and 4) demonstrate financial assurance for those corrective measures.[6] These requirements, however, do not apply to facilities which already have closed or will close under interim status, and which are not subject to post-closure permits. Such facilities, nevertheless, can be required to perform corrective measures through the use of CERCLA enforcement authorities. A facility issued a RCRA permit prior to the amendments' enactment will be required to perform corrective actions only upon the issuance of a new permit when the current permit expires.

Section 3004(u) will require Part B permit applicants to identify all solid waste management units located at a facility.[7] The term "solid waste management unit" includes active and inactive units that contain either hazardous waste or solid waste or both. Therefore, landfills and other units which contain only solid waste and are located at facilities seeking RCRA permits are now subject to the same corrective action requirements as hazardous waste management units. One very important exclusion is that if a spill or release occurs from other than a solid waste management unit, for instance from a production area or product storage tank, the release is not covered by the continuing release requirements.

The amendments' corrective action requirements are not limited to facility boundaries. Section 3004(v) requires EPA to develop regulations requiring corrective action to be taken beyond a facility's boundary when necessary to protect human health and the environment. Until the regulations are promulgated, Section 3004(v) gives EPA authority to issue corrective action orders to compel owners to take action consistent with the section.

Under Section 3004(v), if a Part B application has been requested and a final determination or permit has not been issued prior to November 8, 1984, the facility will be required to submit additional information on continuing releases. Although no regulations have yet been promulgated by EPA requiring submission of information on continuing releases, the amendments provide that permits can be issued to facilities *only* upon a determination that the facility is in compliance with the requirements of Section 3004.[8] Therefore, failure to submit this information to EPA or the states' satisfaction would provide grounds for denying the permit.

The immediate effect of the corrective action provisions will be to require the submittal of additional information in connection with permit applications to document the occurrence of any past or present continuing releases. Implementation of the provisions will typically take place in several stages, with each stage consisting of several specific steps.

TABLE 1

STAGE 2

ASSESSMENT OF NEED FOR CORRECTIVE MEASURES

STEP 1	STEP 2
Submission of Part B information by applicant	Preliminary assessment/site investigation

STAGE II

REMEDIAL INVESTIGATIONS AND DEVELOPMENT OF PROPOSED PROGRAMS OF CORRECTIVE MEASURES

STEP 1	STEP 2
Remedial investigations by owner/operator to identify/ characterize releases	Development of a proposed program of corrective measures and cost estimate

STAGE III

SELECTING AND PERFORMING CORRECTIVE MEASURES

STEP 1	STEP 2
Establishing the program for corrective measures	Demonstration of financial assurance

STEP 3
Conducting corrective measures

The key elements of the process are outlined in Table 1. The requirements will place a significant burden on existing operating facilities in terms of determining the location and extent of continuing releases, identifying, and characterizing those releases, designing a program of corrective measures, and performing corrective measures.[9]

Compliance with the amendments' corrective action provisions can be a very expensive proposition for many existing facilities with a long history of operation. The provisions, in effect, will require facility-wide soil and groundwater contamination assessments for existing facilities to identify and characterize past continuing releases. Many facilities will need to undertake extensive drilling and sampling programs accompanied by costly and extensive analytical programs. This problem is further ag-

gravated by the fact that EPA Acting Assistant Administrator Jack W. McGraw recommended in a February 5, 1985, memorandum to all EPA regions that applicants who already had submitted their Part B applications be given 30-45 days to submit this information. Furthermore, EPA has said that if corrective measures cannot be completed prior to final permit issuance, the agency will put owners and operators on a compliance schedule, included in the permit, specifying dates for the development of data, identification of the appropriate corrective measures, and completion of the corrective measures.

Conclusion

The 1984 RCRA amendments contain several major provisions that both significantly affect currently regulated industries and greatly expand the regulated community. The underground storage tank provisions apply to many companies previously not covered by RCRA, while the corrective action provisions significantly expand the responsibility and liability of existing TSD facilities.

Owners and operators of underground storage tanks and TSD facilities must understand how the new amendments will affect their ongoing operations. Compliance with the amendments may require an analysis of difficult questions of statutory interpretation and expenditure of considerable amounts of time and resources. Indeed, development of a comprehensive strategy for avoiding potential liability may well require the use of specialized expertise for many firms. Proper planning and prompt action are essential ingredients for development of cost-effective management techniques assuring continued RCRA compliance. □

FOOTNOTES

[1] *Section 9001(2) of the Act states:*

The term "regulated substance" means—

(A) any substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C), and (B) petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

[2] *In addition to the Subtitle I provisions, the amendments specify that EPA was to promulgate final permitting standards by March 1, 1985, for underground storage tanks that cannot be entered for inspection. 42 U.S.C. Section 6924(w). EPA was unable to meet that deadline because issuance of the proposed regulations was delayed by the Office of Management and Budget.*

[3] *EPA issued proposed notification forms on May 20, 1985. 50 Fed. Reg. 21772 (1985).*

[4] *RCRA permit applications consist of two parts, Parts A and B. Submittal of a Part A application is necessary to obtain interim status under RCRA. See 42 U.S.C. Section 6925(e); 40 CFR Section 270.70. A final permit can be obtained only by submittal of a Part B application. See 40 CFR Part 270, Subpart B.*

[5] *Section 3008(h) provides EPA with authority to issue orders requiring corrective action at facilities that are operating under interim status. 42 U.S.C. Section 6928(h).*

[6] *EPA's interpretation is contained in the following two memoranda: 1) Jack McGraw (Acting Assistant Administrator), Guidance on Corrective Action for Continuing Releases to all Offices and Regional Administrators (January 30, 1985); 2) Jack McGraw, RCRA Reauthorization Statutory Interpretation #3 Immediate Implementation of New Corrective Action Requirements (February 5, 1985).*

[7] *The term "facility" is not limited to the area where wastes are currently managed, but is defined by EPA to include all contiguous property under the control of the owner or operator. 40 CFR Section 260.10. EPA is proposing to consider a facility's property boundary to be the boundary that existed on November 8, 1984, the date of the amendments' enactment.*

[8] *Jack McGraw (Acting Assistant Administrator), RCRA Reauthorization Statutory Interpretation #3 Immediate Implementation of New Corrective Action Requirements (February 5, 1985).*

[9] *A permit can be issued to a facility prior to institution of corrective measures, although the permittee would have to provide assurance of financial responsibility in connection with those measures.*