RCRA's Statutory and Regulatory Framework

by Susan M. McMichael

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Editors' Summary

Most people are unsure of how to address complicated issues associated with RCRA permitting, federal facilities, and hazardous and radioactive mixed waste. The sheer number of EPA rules alone (over 900) can be mind-boggling, with new rules issued each year. The overall RCRA regime has evolved to address critical issues related to the management and cleanup of hazardous and radioactive mixed wastes. The *RCRA Permitting Handbook*, from which this Article is excerpted, acts as a thorough guide to all aspects of RCRA permit rules, numerous useful references, court cases, and EPA guidance. The *Handbook* is intended to assist a broad audience on how to navigate and better understand RCRA permit requirements and compliance.

Each year, significant amounts of hazardous and radioactive mixed waste must be managed or disposed of in the United States. The U.S. Environmental Protection Agency (EPA) estimated that in 2007, approximately 50 million tons of hazardous waste were managed at 1,395 facilities nationwide annually.[1] Although the precise amount is uncertain, the volume increases with radioactive mixed waste—it is estimated by the U.S. Department of Energy (DOE) that approximately 710,000 cubic meters (m^3) of low-level radioactive mixed waste will require disposal through 2070.[2]

The management and cleanup of these wastes are regulated by EPA and authorized states under Subtitle C of the Resource Conservation and Recovery Act (RCRA).[3] RCRA establishes a framework, described as unparalleled in scope and complexity, for the comprehensive cradle-to-grave management of hazardous waste.[4]

Central to this framework is the RCRA permit, which imposes detailed requirements on persons that own and operate facilities for the safe treatment, storage, or disposal of hazardous waste, including radioactive mixed waste. The RCRA regime developed over decades, but is marked by three key laws discussed below:

- The Resource Conservation and Recovery Act of 1976
- The Hazardous and Solid Waste Amendments (HSWA) of 1984
- The Federal Facility Compliance Act (FFCA) of 1992.

Editors' Note: This Article is excerpted from the RCRA Permitting Handbook *(Susan M. McMichael ed., forthcoming Summer 2010).*

1. U.S. EPA, National Analysis: The National Biennial RCRA Hazardous Waste Report (based on 2007 Data) (2008). EPA data excludes: (1) hazardous waste received from off-site for storage/bulking and subsequently transferred off site for treatment or disposal; and (2) hazardous waste stored, bulked, and/or transferred off-site with no prior treatment/recovery, fuel blending, or disposal at the site. Note that of the 1,395 facilities, 516 reported as hazardous waste management facilities. The National Biennial Report and updates are available at http://www.epa.gov/epawaste/inforesources/data/biennialreport/index.htm.
2. EPA data, extrapolated from a 1990 National Survey, estimates that commercial facilities generate approximately 108,100 cubic feet of radioactive mixed waste annually. U.S. EPA, Regulatory Impact Analysis, Storage, Treatment, Transportation, and Disposal of Mixed Waste, Docket F-2001-MLZF-FFFFF No. 14 (Feb. 2001). DOE's estimate addresses only low-level radioactive mixed waste, and does not include transuranic mixed waste destined for disposal at the Waste Isolation Pilot Plant. Further, the estimated 710,00 cubic meters of low-level mixed waste includes volumes to be disposed at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) disposal facilities. *See* U.S. DOE, Current Planned Low-Level Waste Disposal Capacity Report (Rev. 1) (Apr. 9, 2009).
3. 42 U.S.C. §§6901-6992k, ELR Stat. RCRA §§1001-11011.
4. *See* House Comm. on Energy and Commerce, Hazardous and Solid Waste Amendments of 1984, H.R. Rep. No. 198, 98th Cong., 1st Sess. June 9, 1983 (hearings of U.S. House Energy Committee). *See also* United States v. White, 766 F. Supp. 873, 877, 22 ELR 20050 (E.D. Wash. 1991) (EPA regulations establish a detailed and complex comprehensive hazardous waste management system).

This Article discusses how RCRA evolved to close major loopholes in federal law and, along the way, become a complicated regulatory program of labyrinthine rules and exceptions. The Article introduces the reader to the "big picture" from which RCRA permit requirements derive. It provides a historical overview of RCRA's statutory framework, including its major amendments, such as the HSWA and the FFCA and EPA's cradle-to-grave rules. Finally, the Article discusses the RCRA state authorization process, with an emphasis on state program revisions, new processes to expedite approval, and the tools to better understand the state and EPA roles in this dynamic process.

I. The Historical Driver: RCRA

"We must eliminate the word 'waste' from our vocabulary and substitute the word conservation."

—Statement of Sen. Jennings Randolph (D-W. Va.), in introducing RCRA[5]

In 1976, the U.S. Congress passed Subtitle C of RCRA to establish a national framework to regulate hazardous waste.[6] The Act defined *hazardous waste* as a "solid waste" that "may cause or significantly contribute to an increase in mortality or serious illness, or may pose a substantial threat to human health or the environment."[7] Hazardous waste also includes *radioactive mixed waste*, which is regulated under Subtitle C of RCRA. Radioactive mixed waste contains both hazardous waste and radioactive components regulated under the Atomic Energy Act of 1954, as amended.[8] RCRA recognizes two other types of wastes: *municipal* and *industrial*. Municipal waste, e.g., household and commercial trash and garbage, is primarily regulated by states, Indian tribes, and local governments under the less rigorous standards of Subtitle D of RCRA.[9] Industrial solid waste, some of which may present significant risks to human health and environment, is also regulated by states, Indian tribes, and some local governments under Subtitle D of RCRA (see Box 1.1).[10]

Box 1.1
RCRA Waste Programs

Subtitle C	— Hazardous and Radioactive Mixed Wastes
Subtitle D	— Municipal and Industrial Solid Wastes
Subtitle I	— Underground and Aboveground Storage Tanks

Congress passed Subtitle C of RCRA to address two interrelated policy goals:

- to reduce the generation of hazardous waste by promoting incentives to conserve, recycle, and recover valuable materials; and
- to control land disposal (primarily of hazardous industrial waste) through a regulatory program that sets national and uniform standards for safe waste management.[11]

This policy evolved in response to a particular problem in the mid-1970s, when the nation faced serious environmental issues resulting from the improper management and disposal of solid and hazardous waste. Up to that time, Congress and the environmental movement had focused on air and water problems, while neglecting the "stepchild"—solid and hazardous waste.[12] The "use and discard" attitude prevailed in collective public policy.[13] As a result, by 1975, landfills were reaching their design limits, while the volume of waste was projected to increase by 5-10% annually.[14] Moreover, land disposal of hazardous waste was "essentially unregulated," and considered one of the "last remaining loopholes in environmental law."[15] There was a clear understanding that hazardous waste, unless neutralized or managed, presented a danger to society.[16]

5. 193 Cong. Rec. 23849-50 (daily ed., July 21, 1975).
6. RCRA §1002, 42 U.S.C. §6901, Pub. L. No. 94-580, 90 Stat. 2795 (Oct. 21, 1976). RCRA amended the Solid Waste Disposal Act (SWDA) of 1965, 42 U.S.C. §3251 (1965), Pub. L. No. 89-272. Prior to the SWDA, the federal program was conducted under the Public Health Service Act and consisted primarily of solid waste disposal research. Only 12 states had an identifiable solid waste program. S. Rep. No. 988, 94th Cong., 2d Sess. 5-6 (June 25, 1976).
7. RCRA §1004(5), 42 U.S.C. §6903(5) (2000).
8. RCRA §1004, 42 U.S.C. §6903(41) (2000).
9. 42 U.S.C. §§6941-6949a (1994). In 2007, the United States generated approximately 254 million tons of municipal solid waste, of which 33.4% was recycled. *See* U.S. EPA, Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figure for 2007, EPA530-R-09-010 (Nov. 2008). EPA regulated municipal waste through guidelines until 1993. *See* 40 C.F.R. Part 257 (1996) (guidelines). In 1993, EPA issued regulations for municipal solid waste and established national standards for municipal solid waste landfills that encouraged environmentally safe methods for solid waste disposal that maximizes resource recovery and conservation. EPA rules for municipal solid waste are found at 40 C.F.R. Parts 240 through 258.
10. EPA estimates that industrial facilities in the United States generate and dispose 7.6 billion tons of industrial solid waste each year. EPA has not adopted national standards to regulate industrial solid wastes, but instead issued voluntary national guidelines for industrial waste management. *See* U.S. EPA, *Guide for Industrial Waste Management*, at 1, *available at* www.epa.gov/epaoswer/non-hw/industd/guide.htm.
11. RCRA §1002, 42 U.S.C. §6901 (2000).
12. 122 Cong. Rec. at S33816 (daily ed., Sept. 30, 1976) (statement of Sen. Randolph).
13. *Id.*
14. 122 Cong. Rec. H19764 (daily ed., June 22, 1976) (statement of Rep. Rooney).
15. *Id.* (land disposal of hazardous waste unregulated); H.R. Rep. No. 1491, 94th Cong., 2d Sess. 1 (Sept. 9, 1976), *reprinted in* 5 U.S.C.C.A.N. 6238, 6241 (1976).
16. H.R. Rep. No. 1491, 94th Cong., 2d Sess. 3 (Sept. 9, 1976), *reprinted in* 5 U.S.C.C.A.N. 6238, 6241(1976).

These facts, compounded by a severe recession and impending energy crisis, led to the passage of RCRA. To accomplish its policy goals, Subtitle C of RCRA established a national program containing seven major components with regulatory controls for hazardous waste treatment, storage, and disposal (see Box 1.2). Subtitle C was designed primarily as a "prevention-oriented" program geared to prevent releases from new and existing facilities that managed and disposed hazardous waste, e.g., to prevent the creation of new hazardous remediation sites later known as Superfund sites).[17] Under the Act, the mechanism for controlling hazardous waste disposal was a comprehensive cradle-to-grave federal permitting program. As directed by Congress, EPA developed and promulgated a set of uniform standards it considered very stringent, applicable to all hazardous waste treatment, storage, and disposal facilities (referred to as hazardous waste management facilities or treatment, storage, and disposal facilities (TSDFs)). At the time, EPA considered those standards to be adequate to prevent or minimize releases of a wide range of hazardous waste types, protect environmental conditions, establish operational contingencies, and other factors.

Box 1.2

RCRA Subtitle C Program

Waste listing, identification (*Section 3001*)

Generator/transporter standards (*Sections 3002–3003)*

TSDF standards (*Section 3004*)

Permitting program (*Section 3005*)

State authorization (*Section 3006*)

Inspection *(Section 3007)*

Enforcement *(Section 3008)*

Since 1976, RCRA has been amended numerous times (see Sidebar 1.1). Of particular importance are the congressional amendments under the HSWA (1984) and the FFCA (1992), which transformed RCRA into a prevention *and* cleanup program.

These amendments focused primarily on solving problems—particularly those associated with land disposal of hazardous waste, radioactive mixed waste, and federal facility compliance—that had not been identified at the time of passage of RCRA. While the HSWA and the FFCA did not significantly alter the original goals set by Congress for RCRA, they did result in a fundamental change of approach in *how* to achieve those goals.

17. *See* U.S. EPA, Corrective Action Management Units and Temporary Units; Corrective Action Provisions Under Subtitle C, 58 Fed. Reg. 8658 (Feb. 16, 1993). In December 1980, Congress passed CERCLA, also known as Superfund. While RCRA focuses on proactive measures to ensure no future releases from new and existing facilities managing hazardous waste, CERCA focuses on remediation of hazardous substances from facilities no longer in existence.

II. Major Reform: The HSWA

> *The "current RCRA program is riddled with loopholes," inadequate EPA enforcement and agency delay.*[18]
>
> —Statement of Sen. John Chafee (D-R.I.)

By the late 1970s, EPA had accomplished very little toward meeting RCRA's goals. The environmental harm associated with hazardous waste dumping had gained national attention in the early 1980s with the story of Love Canal,[19] which revealed a serious new issue that had not been evident in 1976 or addressed by RCRA: the problem of abandoned hazardous waste dumps.

The vehicle for RCRA reform was the congressional reauthorization process.[20] This process triggered congressional oversight hearings and investigations that revealed an assortment of problems with the 1976 statute and widespread dissatisfaction with EPA's RCRA program. Congress expressed concern with a large array of major problems that included: (1) *significant loopholes* leading to virtually unregulated small-quantity generators, burning of hazardous waste in boilers, disposal of hazardous waste into domestic sewer systems, and injection of hazardous waste into groundwater; (2) *inadequate technological and regulatory controls of hazardous waste land disposal*; (3) EPA *delay* in implementing congressional mandates and issuing permits[21]; (4) *failure to list many types of hazardous wastes*; (5) *inadequate waste management changes* to encourage recycling and reuse; and (6) *inadequate enforcement*.[22]

In 1984, Congress enacted the HSWA to address those major problems. The HSWA was distinctly different from other environmental statutes. Typically, Congress sets broad policy goals and objectives in its legislation, and the implementing agency, e.g., EPA, is then given broad discretion to establish detailed regulations to accomplish those goals and objectives. The HSWA, however, looks and operates more like a detailed regulatory scheme than a broad congressional mandate.[23] This deviation from the norm is a pointed

18. H.R. Conf. Rep. No. 1133, 98th Cong., 2d Sess. 24449-24579 (Oct. 3, 1984). *See also* 130 Cong. Rec. S13816 (daily ed., Oct. 5, 1984).
19. Love Canal, located in Niagara Falls, New York, was the location of a neighborhood built on top of a former canal containing over 44 million pounds of hazardous waste. In 2004, the site was removed from EPA's Superfund list after 21 years of cleanup activity at costs close to $400 million dollars. N.Y. Times (Mar. 18, 2004).
20. RCRA was authorized for two years to allow Congress the opportunity to scrutinize it to ensure implementation. 128 Cong. Rec. H22858-22888 (daily ed., Sept. 8, 1982).
21. EPA delay created an assortment of problems including litigation. *See* State of Illinios v. Gorsuch, 530 F. Supp. 340, 12 ELR 20101 (D.C. Cir. 1981) (EPA ordered to issue and abide by court-imposed deadlines to issue regulations). The Agency had failed to issue permitting standards for land disposal facilities (it missed two court-ordered deadlines). *See also* S. Rep. No. 284, 98th Cong., 1st Sess. 2-3 (Oct. 28, 1983). For a detailed discussion regarding these issues, refer to Richard C. Fortuna & David J. Linnet, *Hazardous Waste Regulation, The New Era* (McGraw-Hill 1987).
22. H.R. Rep. No. 198, 98th Cong., 1st Sess. 19-20 (May 17, 1983) (large amounts of hazardous waste were estimated to escape regulation (40 million metric tons yearly) through loopholes).
23. H.R. Conf. Rep. No. 1133, 98th Cong., 2d Sess. 2449 (Oct. 3, 1984) (HSWA attempts to write detailed regulations into law). *See also* Richard C.

Sidebar 1.1
RCRA Statutory History

1965 **The Solid Waste Disposal Act (SWDA)**, Pub. L. No. 89-272, 79 Stat. 997, 42 U.S.C. §3251 (1965). Authorized solid waste disposal research, with minimal appropriations.

1970 **The Resource Recovery Act of 1970**, Pub. L. No. 91-512, 84 Stat. 1227, 42 U.S.C. §§3251–59 (1970). Amended the SWDA to direct federal policy away from land disposal and towards maximum recovery of reusable material and energy; transferred federal responsibility for administration of the SWDA to the newly created EPA.

1976 **The Resource Conservation and Recovery Act of 1976 (RCRA)**, Pub. L. No. 94-580, 90 Stat. 2795, 42 U.S.C. §§6901–6981 (1976). Amended the SWDA to establish the primary national framework for the management, treatment, storage and disposal of hazardous waste, including permitting and enforcement.

1978 **The Quiet Communities Act of 1978**, Pub. L. No. 95-609, 42 U.S.C. §4901 (1978). EPA authorized to educate/assist local officials in noise control; enacted numerous technical changes to RCRA.

1980 **The Solid Waste Disposal Act Amendments of 1980**, Pub. L. No. 96-482, 94 Stat. 2334, 42 U.S.C. §§6933, 6934, 6941a, 6955 and 6956 (1980). Enacted numerous changes to RCRA including: (1) "interim status" standards; (2) testing and monitoring requirements; (3) authority to use private contractors for inspections; (4) temporary exemption for certain wastes (e.g., mining); (5) manifest system; (6) inventory for hazardous waste; (7) state authority to impose more stringent standards; (8) public participation requirements; (9) changes in enforcement and penalties; (10) administrative authority to abate imminent hazards; and (11) judicial review.

1980 **Used Oil Recycling Act of 1980**, Pub. L. No. 96-463, 94 Stat. 2055, 42 U.S.C. §§6901a, 6914a, 6932 (1980) (re-designated as Section 3014 by HSWA). Required EPA to issue regulations for recycled used oil and added requirements for used oil.

1984 **Hazardous and Solid Waste Amendments of 1984 (HSWA)**, Pub. L. No. 98-616, 98 Stat. 3221, 42 U.S.C. §§6917, 6936 -6939a, 6949a, 6979a, 6979b, 6991–6991i (1984). Enacted extensive changes to RCRA including: (1) land disposal ban; (2) minimum technology requirements; (3) permit requirements; (4) generator requirements; (5) listing and delisting; (6) standards for burning hazardous waste; (7) exporter provisions; (8) groundwater monitoring, financial assurance requirements; (9) hazardous waste reduction; and (10) enforcement.

1988 **The Medical Waste Tracking Act of 1988**, Pub. L. No. 100-582, 102 Stat. 2950, 42 U.S.C. §§6903 (40), 6992–6992k (1988). Required EPA to issue rules for listing and tracking of medical waste, and to report to Congress on the results of the demonstration program, including the threats to human health and the environment posed by medical waste.

1992 **The Federal Facility Compliance Act of 1992 (FFCA)**, Pub. L. No. 102-386, 106 Stat. 1505, 42 U.S.C. §§6908, 6939c, 6939d, 6939e, and 6965 (1992). Expressly waived federal sovereign immunity from state enforcement, including imposition of civil penalties; DOE immune from RCRA §3004(j) treatment and storage violations so long as it complies with an EPA or State issued order or agreement.

1996 **The Land Disposal Flexibility Act of 1996**, Pub. L. No. 104-119, 110 Stat. 830, 42 U.S.C. §§6921, 6924, 6925, 6947 and 6949a (1996). Authorized land disposal of treated characteristic hazardous waste; exempted underground injection of treated hazardous wastes from land disposal restrictions; directed EPA to study risks associated with new requirements and impose additional requirements to address such risks.

testament to the serious congressional dissatisfaction with EPA's implementation of RCRA at that time. The HSWA is a technology-forcing statute with draconian incentives that incorporates self-implementing "hammer" provisions. The hammer provision is a statutory requirement that takes effect immediately if EPA fails to meet a statutory deadline. The HSWA's self-implementing statutory requirements are identified in Table 2 of 40 C.F.R. §271.1(j). These requirements take effect as soon as they are incorporated into the federal program, regardless of state authorization (see discussion at Section 1.5 below).

The HSWA can be broken down into the following 11 major changes:

Fortuna & David J. Linnet, Hazardous Waste Regulation, The New Era (McGraw-Hill 1987).

- *Land Disposal Ban*

The HSWA's main objectives were to ban land disposal of hazardous waste. This is known as RCRA's "land ban," which was accomplished by shifting the focus of hazardous waste management away from land disposal to treatment alternatives. Land disposal of hazardous waste was banned, unless a facility could meet one of two conditions:

- Land Disposal Restriction (LDR) Treatment. A facility can land-dispose certain hazardous waste if the waste meets specific treatment standards (LDR) to reduce mobility and toxicity of hazardous constituents and minimize both short-term and long-term threats to human health and the environment.
- No Migration. A facility can petition the EPA Administrator to land-dispose specific hazardous wastes without meeting LDR treatment standards if it receives an Agency "no migration determination." The facility must demonstrate, based on a reasonable degree of certainty, that hazardous constituents will not migrate from the disposal unit for as long as the waste remains hazardous.[24]

But there was a problem with this approach. The ban could not be implemented immediately because, at the time, EPA had not completed its list of hazardous wastes and had issued few treatment standards. To address this problem, Congress forged two solutions. First, Congress directed EPA to implement the ban in phases by preparing a schedule, to be met by November 6, 1986, for restricting the land disposal of all hazardous wastes identified or listed as hazardous at the time of the HSWA's 1984 amendments.[25] (Solvents and dioxin-containing wastes were not included, and California-list wastes were covered under another schedule.) EPA was required to set treatment standards by rule for these wastes by specific dates in three phases, known later as the "First-Third," "Second-Third," and "Third-Third" scheduled wastes and rules.[26] For hazardous waste identified or listed after 1984, EPA was required to issue rules on treatment and prohibitions within six months after each waste is identified or listed.[27]

Second, Congress included hammer provisions under the HSWA to force EPA to promptly identify hazardous wastes and issue land disposal treatment regulations. If EPA failed to set treatment standards for First-Third or Second-Third wastes by the statutorily set dates, these wastes were subject to "soft" hammer provisions and could continue to be disposed of in a landfill or surface impoundment until May 8, 1990.[28] If EPA failed to set treatment standards for any scheduled waste by May 8, 1990, a "hard" hammer automatically prohibited disposal of such wastes.[29] EPA could delay the hard hammer land disposal ban by granting either a no-migration variance or extending the hard hammer date by a national capacity variance or on a case-by-case basis.[30] In addition, EPA was authorized to grant a variance from treatment standards where adequate alternative treatment capacity is lacking or treatment technologies are inappropriate.[31]

By establishing a comprehensive LDR program, Congress intended to ensure that hazardous waste was managed properly upfront, thereby reducing the need for costly cleanup, also called corrective action. The LDR program would compel EPA to focus on inherent waste characteristics and long-term uncertainties, in order to identify which wastes can be safely land-disposed or, conversely, land-banned.[32] Later, EPA would find the LDR requirements difficult to implement for certain types of hazardous waste, including radioactive mixed waste, due to limited treatment capacity and standards.

- *Storage Limitations*[33]

The storage of LDR waste was prohibited, except for the sole purpose of accumulating sufficient quantities to facilitate proper recovery, treatment, or disposal of that waste.

- *Minimum Technology Requirements*[34]

To address widespread noncompliance with groundwater monitoring rules, EPA was required to do more than "patch a leaking rowboat"[35] by setting technology-forcing minimum requirements for land disposal units, e.g., landfills and surface impoundments. These requirements include leachate collection and management systems, groundwater monitoring, and double liners. If EPA failed to issue regulations by a specific date, these requirements were imposed as a hammer.

- *Generator Requirements*[36]

Loopholes were closed by: (1) lowering the small-quantity generator exemption from 1,000 kilograms per month to 100 kilograms per month, with discretionary authority to regulate less than 100 kilograms per month; (2) setting management standards for treatment, storage, or disposal of waste; and (3) limiting on-site storage without a permit to up to 180 days.

24. RCRA §3004(m), 42 U.S.C. §6924(m) (2000) (LDR Treatment); RCRA §§3004(d)(1), (e)(1), (g)(5), 42 U.S.C. §§6924(d)(1), (e)(1), (g)(5) (2000) (No Migration).
25. California-list wastes, solvent, and dioxin-containing wastes were banned by statutorily imposed deadlines. *See* RCRA §§3004(e), (f), 42 U.S.C. §§6924(e), (f) (2000).
26. RCRA §3004(g)(4), 42 U.S.C. §6924(g)(4) (2000). EPA issued rules for these wastes during a two-year span. *See* 53 Fed. Reg. 31138 (Aug. 17, 1988) (First-Third rule); 54 Fed. Reg. 26594 (June 23, 1989) (Second-Third rule), and 55 Fed. Reg. 22520 (June 1, 1990) (Third-Third rule).
27. RCRA §3004(g)(5), 42 U.S.C. §6924(g)(5) (2000).
28. *See* U.S. EPA, Land Disposal Restrictions for Third-Third Schedules Wastes, 55 Fed. Reg. 22520, 22526 (June 1, 1990).
29. RCRA §3004(g)(6), 42 U.S.C. §6924(g)(6) (2000).
30. RCRA §3004(h)(2), 42 U.S.C. §6924(h)(2) (2000).
31. *Id. See also* 55 Fed. Reg. 22520, 22526.
32. H. Rep. No. 198, 98th Cong., 1st Sess. 32-33 (May 17, 1983).
33. RCRA §3004(j), 42 U.S.C. §6924(j) (2000).
34. RCRA §3004(o), 42 U.S.C. §6925(o) (2000).
35. H. Rep. No. 198, 98th Cong., 1st Sess. 30 (May 17, 1983).
36. RCRA §3001, 42 U.S.C. §6921(d) (2000).

- *Listing and Delisting Requirements*

EPA was required to make listing determinations for specific hazardous wastes; to revise listings, and to set delisting criteria. Many of these requirements are subject to hammer provisions.

- *Permits*[37]

  - Permit terms were limited to 10 years, not the life of the facility. Land-disposal permits must be reviewed every five years.
  - EPA was required to issue permits according to timetables for all types of hazardous waste facilities.
  - Permits must contain requirements for corrective action for releases from a solid waste management unit (SWMU) at the facility and beyond the facility boundary, regardless of disposal date.[38]
  - Permit applications must contain exposure assessments of potential releases from land disposal and surface impoundments.[39]
  - Research, development, and demonstration permits were authorized to encourage innovative and experimental treatment technology. Each permit is limited to one year, with three one-year renewals available.
  - A permit was required for the construction of any new hazardous waste facility.
  - EPA and authorized states were provided omnibus authority to impose additional permit conditions upon a facility as necessary to protect human health and the environment.
  - Permits were required to address waste minimization for facilities that treat, store, or dispose hazardous wastes onsite where the wastes were generated. These facilities must certify that it has a program in place to reduce the volume and toxicity of the hazardous waste generated to the degree determined by the facility to be economically practicable.

- *Standards for Burning Hazardous Wastes*[40]

EPA was required to set standards for facilities that burn hazardous waste as a fuel source or that blend and burn hazardous waste with other fuel sources, e.g., boilers and industrial furnaces (BIFs).

- *Exporters of Hazardous Waste*[41]

For the export of hazardous waste, specified notice and consent or a bilateral agreement containing specified provisions between the United States and the receiving country were required.

- *Certifications of Compliance*[42]

Facilities were required to certify compliance with groundwater monitoring and financial assurance responsibility requirements by the hammer date, i.e., November 8, 1985. The requirement to obtain liability insurance later became viewed as unrealistic, with the near collapse of the insurance market for hazardous waste management facilities. Subsequent legislation directed EPA to revise interim status requirements to "make it easier" for compliance.[43]

- *Hazardous Waste Minimization*[44]

Large-quantity generators must provide (1) manifests demonstrating that the volume or quantity and toxicity of hazardous wastes has been reduced to the degree economically practical, and (2) biennial reports of waste-reduction efforts.

- *Enforcement*[45]

  - Corrective action. EPA and authorized states can issue interim-status corrective action orders based on a determination that there has been a past release of hazardous waste from a facility into the environment.
  - Corrective action means that facilities seeking an RCRA permit must clean up contamination at the facility and beyond its boundaries from SWMUs as a condition of permit issuance. If cleanup is not possible prior to permit issuance, these facilities can be required to complete corrective action under a schedule of compliance.
  - Imminent and substantial endangerment. This authority was expanded to include the present or future release of hazardous waste disposed of in the past or present, and a citizen suit provision added.
  - Inspections. Annual inspections were mandated for federal, state, and local hazardous waste facilities, and mandatory inspections at least once every two years for other facilities.

37. RCRA §§3005(a), (c), (g-h), 42 U.S.C. §§6925(a), (c), (g-h) (2000).
38. RCRA §§3004(u)-(v), 42 U.S.C. §§6924(u)-(v) (2000).
39. RCRA §3019, 42 U.S.C. §6929a (2000).
40. RCRA §3004, 42 U.S.C. §6924 (2000).
41. RCRA §3017, 42 U.S.C. §6938 (2000).
42. RCRA §§3004(p), (t), 42 U.S.C. §§6924(p), (t) (2000).
43. Christopher Harris et al., Hazardous Waste: Confronting the Challenge 204 (Quorem 1987).
44. RCRA §3005(h), 42 U.S.C. §6925(h) (2000).
45. RCRA §3008(h), 42 U.S.C. §6928(h); RCRA §§3004(u)-(v), 42 U.S.C. §§6924(u)-(v) (corrective action); RCRA §7003, 42 U.S.C. §6973; RCRA §7002, 42 U.S.C. §6972 (imminent and substantial endangerment); RCRA §§3007(c), (d), (e), 42 U.S.C. §§6927(c), (d), (e) (inspections); RCRA §§3012 and 3016, 42 U.S.C. §§6933 and 6937 (inventory); RCRA §§3008(d)-(f), 42 U.S.C. §§6928(d)-(f) (criminal) (2000).

- Inventory. Each state and federal agency must submit to EPA an inventory of hazardous waste facilities.
- Criminal provisions. Criminal penalties were increased; the burden of proof for "knowing endangerment" was lowered; and potential criminal liability was provided for generators, transporters, and exporters of hazardous waste.

III. The FFCA

"Most Americans would be shocked to learn that the federal government is not subject to the same enforcement of environmental laws which the federal government imposes on others, yet that is the case."

—Statement by Sen. George Mitchell (D-Me.), introducing the FFCA[46]

A. Background: The Problem

In 1992, Congress passed the FFCA to require federal facilities to comply with RCRA requirements for hazardous and radioactive mixed waste.[47] After the passage of the HSWA, congressional investigations and reports had revealed a startling oversight: the federal government (primarily DOE) was the worst violator of RCRA. Without a major revision to RCRA, issues surrounding federal facility compliance would continue. The federal government considered its facilities to be self-regulated and, in authorized states, immune from the assessment of civil penalties for past violations. Further, Congress had not previously focused on federal facilities or radioactive mixed waste. Without legal reform, it was unlikely that federal facilities would achieve RCRA compliance and cleanup. But this time, criticism turned from EPA to DOE. These criticisms focused on the following four problems, discussed below, that pointed to the need for legislative action.

- Widespread environmental contamination at federal facilities
- Secrecy and the lack of meaningful oversight
- Sovereign immunity
- The "mixed waste" problem

1. Widespread Environmental Contamination

Congressional hearings revealed a complex and significant problem at federal facilities. It was estimated that the huge defense weapons complex generated some 20 million tons of hazardous and radioactive mixed waste annually.[48] DOE, alone, had approximately 33 facilities located in 15 states, not including Hanford (Washington), Rocky Flats (Colorado) and Savannah River (South Carolina). DOE controlled the defense weapons complex and nuclear weapons production. Its facilities were responsible for the management, storage, and disposal of millions of cubic yards of radioactive mixed waste. As early as 1986, the U.S. General Accounting Office (GAO) had issued a report from its investigations that revealed widespread contamination and compliance issues at federal facilities.[49] In 1989, the Comptroller General of the United States testified before Congress that there is "widespread contamination" at DOE sites, some sites may be irreversibly contaminated, and DOE may have to place them in long-term institutional care.[50] Finally, in 1991, the Office of Technology Assessment (OTA) issued its report, *Complex Cleanup: The Environmental Legacy of Nuclear Weapons Production,* which concluded that DOE facilities produced contamination so severe that many may be permanently off limits to society.[51] DOE was among the "very worst," with compliance rates lagging behind private industry and decades of self-regulation resulting in severe environmental contamination.[52] Cleanup at the DOE sites was either slow or impossible, due to a lack of mixed waste treatment technology or capacity.

2. Secrecy and Lack of Meaningful Oversight

Congressional hearings revealed three factors that contributed to environmental compliance problems at federal facilities. First, considerations of national security and secrecy regarding weapons production contributed to keeping environmental neglect by federal facilities out of sight. Secretary of Energy James D. Watkins stated that "[t]hese problems have resulted from a 40-year culture cloaked in secrecy and imbued with a dedication to the production of nuclear weapons without a real sensitivity to the environment."[53] As described by Deputy Secretary of Energy W. Henson Moore, national security was considered "a secret operation not subject to laws . . . no one was to know what was going on."[54] A study conducted by the congressional OTA showed that DOE noncompliance with RCRA resulted from a "history of emphasizing the urgency of weapon production for national security, to the neglect of health and environmental considerations; ignorance of, and lack of attention to, the consequences of self-regulation, without independent oversights or meaningful public scrutiny."[55]

46. 137 Cong. Rec. 149, S14855 (daily ed., Oct. 17, 1991).
47. The Federal Facility Compliance Act, Pub. L. No. 102-386, 106 Stat. 1505 (Oct. 6, 1992) (codified as amended at 42 U.S.C. §§6901, 6903, 6908, 6939c-6939e, 6961, 6965 (1994)).
48. H.R. Rep. 102-111, 102d Cong., 1st Sess. 2 (June 13, 1991).
49. The GAO concluded that out of 17 federal agencies in 12 states, almost one-half were cited by EPA for RCRA violations. Over one-quarter were out of compliance for six months or more, and some for as long as three years. *Id.* at 3 and 137 Cong. Rec. 149, S14883, 14899.
50. 137 Cong. Rec. 149, S14898 (daily ed., Oct. 17, 1991).
51. *Id.*
52. H.R. Rep. 102-111, 102d Cong., 1st Sess. 2-3 (June 13, 1991).
53. H.R. Rep. 102-111, 102d Cong., 1st Sess. 3 (June 13, 1991) (quoting statement of Secretary Watkins before the Senate Committee on Energy and Natural Resources, Oct. 5, 1989)).
54. Quoted in the *Washington Post*, June 17, 1989.
55. H.R. Rep. 102-111, 102d Cong., 1st Sess. 3 (June 13, 1991) (citing from U.S. Congress, Office of Technology Assessment, Complex Cleanup: The En-

The second factor that contributed to problems with federal facility compliance was an outgrowth of the first—DOE's history of self-regulation and its inability to perform meaningful oversight of its own facilities. Policy and legal constraints amplified the problem. The U.S. Department of Justice (DOJ) had long taken the position that EPA cannot sue another federal agency in court, and at one point, questioned EPA's statutory authority to issue administrative compliance orders to federal facilities under §3008(a) of RCRA.[56] This was due to the "unified executive theory," a DOJ policy drafted during the Ronald Reagan Administration that interpreted the U.S. Constitution to bar EPA from bringing a judicial enforcement action against another federal agency, i.e., DOE, on the ground that the "executive cannot sue itself."[57] Moreover, at least one court questioned the effectiveness of EPA enforcement in an action where the Agency had authority.[58] As a result, there was a general concern that EPA could not effectively enforce RCRA at federal facilities.

> *"'Do as I say and not as I do,' is the old political adage. The federal government follows that in spades when in come to environmental regulation."*
>
> —Statement of Sen. Hank Brown (R-Colo.)[59]

3. Sovereign Immunity

The third factor was sovereign immunity, which, in turn, created federal resistance to state enforcement. Since the unified executive theory prevented EPA from suing DOE, environmental enforcement was left to the states and citizen activist groups. State enforcement officials, in turn, stumbled directly onto sovereign immunity as a new obstacle challenging state authority. Attorney General Hubert Humphrey III of Minnesota stated:

> [F]ederal facilities are among the most heavily contaminated sites, and the federal agencies have been reluctant to acknowledge state authority over hazardous waste compliance and management activities.[60]

Sovereign immunity is an ancient common-law doctrine derived from the English fiction that "the King can do no wrong."[61] In order to bring a lawsuit for punitive penalties against the federal government, including DOE, Congress must express a "clear and unequivocal" intent to waive sovereign immunity in a manner construed "strictly in favor of the sovereign."[62] RCRA §6001 contained a waiver of sovereign immunity, but the scope of this waiver with regard to punitive penalties was contested. DOE initiated a flood of litigation challenging state authority to assess civil penalties for past environmental liability. On behalf of DOE, the DOJ argued that RCRA §6001 did not provide states authority to sue for those civil penalties because the federal government enjoyed sovereign immunity. Federal courts were divided on the issue, with several circuits (the Sixth, the Ninth, and the Tenth) holding that states could not seek punitive civil penalties from federal facilities for past violations of RCRA.[63] The U.S. Supreme Court, only months before passage of the FFCA, agreed with those circuits in *United States Dep't of Energy v. Ohio*.[64] This decision, as well as EPA's policy constraint on enforcement, prodded states to urge Congress to address the glaring oversight through the FFCA. The FFCA, in turn, became a "state rights" banner issue.

4. The Mixed Waste Problem: Catch 22

A final issue that arose during the FFCA hearings in Congress was the so-called mixed waste problem. RCRA §3004(j) prohibits the storage of hazardous and radioactive mixed wastes, unless the waste has been treated to meet land-disposal standards, and provides that untreated wastes can be stored only to allow sufficient quantities to accumulate for treatment. But radioactive mixed waste did not quite fit the regulatory picture. First, treatment technology and/or capacities did not exist for most types of mixed waste. Second, regulations for treatment of mixed waste did not exist. Third, there were few disposal options.[65] Numerous federal agencies presented

vironmental Legacy of Nuclear Weapons Production, OTA-484 (Washington, D.C., U.S. GAO, February 1991)).

56. U.S. EPA, Federal Facility Compliance Act; Enforcement Authorities Implementation, 58 Fed. Reg. 49044 (Sept. 21, 1993) ("According to the Department of Justice's 1987 testimony before the House Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, EPA lacked the statutory authority necessary to issue administrative compliance orders pursuant to RCRA section 3008(a)."). *See also Environmental Compliance by Federal Agencies: Hearings Before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce*, 100th Cong., 1st Sess. 182, 206 (1987) (statement of F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division ("[DOJ]) has consistently taken the position that under our constitutional scheme, disputes of a legal nature between two or more executive branch agencies whose heads serve at the pleasure of the President are properly resolved be the President or by someone with authority delegated from the President."). Later, however, EPA set up procedures whereby the Agency could issue administrative compliance orders to a federal facility. *See* Rebecca Heintz, *Federal Sovereign Immunity and Clean Water: A Supreme Misstep*, 24 Envtl. L. 263, 282 (1994) (providing detailed analysis of the history of sovereign immunity under environmental laws).
57. Under the unitary executive theory, there is no justiciable "case or controversy" that can be resolved under Article III of the U.S. Constitution. The theory provides that the Constitution creates a unitary executive branch, headed by the president, as one legal entity. The president alone is responsible for the activities of the executive branch, and federal agencies as part of the executive branch cannot sue each other because the executive cannot sue itself. *See* U.S. EPA, 58 Fed. Reg. 49044-02 (Sept. 21, 1993); 137 Cong. Rec. 149, S14898 (Oct. 19, 1991) (jawboning under unified executive theory is not enough). *See also* In the Matter of United States Air Force Tinker Air Force Base, UST-6-98-002-AO-1, 1999 WL 362884 (Adm'r 1999); Michael W. Steinburg, *Can EPA Sue Other Federal Agencies?*, 17 Ecology L.Q. 317 (1990).
58. Colorado v. United States Dep't of Army, 707 F. Supp. 1562, 1570, 19 ELR 20815 (D. Colo. 1989) (EPA's potential monitoring of the U.S. Army's cleanup operation under CERCLA does not serve as an appropriate or effective check on the Army's efforts with no independent advocate for the public interest).
59. 137 Cong. Rec. No. 149, S14898 (daily ed., Oct. 17, 1991).
60. H.R. Rep. 102-111, 102d Cong., 1st Sess. 2, at 8 (June 13, 1991).
61. Seminole Tribe of Florida v. Florida, 517 U.S. 44, 170-71 (1996) (Souter, J. dissenting) (sovereign immunity derives from the ancient myth that the "[K]ing can do no wrong," and discussing history of the doctrine).
62. U.S. Dep't of Energy v. Ohio, 503 U.S. 607, 615, 22 ELR 20804 (1992).
63. *See, e.g.,* United States v. Washington, 872 F.2d 874, 19 ELR 20755 (9th Cir. 1989); State of Maine v. Dep't of Navy, 973 F.2d. 1007, 23 ELR 20211 (1st Cir. 1992); Mitzenfelt v. Dep't of Air Force, 903 F.2d. 1293, 20 ELR 21138 (10th Cir. 1990).
64. *Ohio*, *supra* note 61.
65. 137 Cong. Rec. 149, S14900 (daily ed., Oct. 17, 1991).

testimony that radioactive mixed waste created a "Catch-22" situation because RCRA compliance would be impossible,[66] yet DOE facilities could be fined up to $25,000 a day for storing untreated mixed waste. Because little or no technology existed to treat the waste, and disposal options were limited, DOE argued that the only realistic alternative was to store mixed waste onsite at great expense and in violation of then-existing law.[67]

EPA had addressed the mixed waste problem in 1991 by issuing a civil enforcement policy for RCRA §3004(j) storage violations where there existed no available treatment technology or disposal capacity.[68] The policy, upheld by the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit, reaffirmed that storage of mixed wastes in the absence of adequate treatment or disposal capacity was unlawful, and established a "lower civil enforcement priority" for violators of §3004(j) .[69] The fix was temporary and inadequate. Thus, the mixed waste problem emerged at the center of the FFCA debate.

> *"It is idiotic. It is a nation wrapped in navel gazing that cannot lift its eyes from its technology . . . to the reality of a world where there are some things we do not know how to do yet. So we fine ourselves for not knowing how to do it. We prohibit ourselves from doing it."*
>
> —Sen. Malcolm Wallop (R-Wy.),
> in describing the "mixed waste problem"[70]

B. Congressional Response: Equal Footing

> *"The federal government should be held to the same standards of accountability as everyone regarding hazardous waste. This legislation places private industry . . . on equal footing."*
>
> —Statement by Sen. George Mitchell (D-Me.),
> during the FFCA debates[71]

On October 6, 1992, Congress passed the FFCA in a strikingly nonpartisan manner. Everyone agreed that RCRA needed reform to address compliance issues at federal facilities. For the most part, Congress could easily make those reforms with one significant exception: how to address the mixed waste problem. This section describes how the mixed waste problem was addressed, and includes a description of key FFCA amendments.

1. The Waiver of Sovereign Immunity[72]

To ensure that federal facilities were placed on an "equal footing" with private industry, Congress adopted language that expressly waived federal sovereign immunity with respect to punitive civil fines and penalties. The amendment also effectively overruled *United States Dep't of Energy v. Ohio*, issued only months prior to the passage of the FFCA.[73] Significantly, Congress amended only RCRA, leaving the question of federal sovereign immunity under other major environmental statutes open for future litigation (see Sidebar 1.2). Congress amended RCRA §6001 to state:

> The federal, state, interstate, and local substantive and procedural requirements referred to in this subsection include, but are not limited to, all administrative orders and all civil and administrative penalties and fines, regardless of whether such penalties or fines are punitive or coercive in nature or are imposed for isolated, intermittent, or continuing violations. The United States hereby expressly waives any immunity . . . with respect to any such substantive or procedural requirement . . . (including, but not limited to, any injunctive relief, administrative [order or civil or administrative] penalty or fine referred to in the preceding sentence, or reasonable service charge) . . . .[74]

Congress also "reaffirmed" and "clarified" that RCRA §6001 required federal agencies to pay "reasonable service charges," which it defined to include fees and charges assessed in connection with the processing and issuance of permits, permit modifications, review of plans, studies and other documents, inspection and monitoring of facilities, or other nondiscriminatory charges assessed in connection with a federal, state, interstate, or local solid waste hazardous waste regulatory program.[75] In a committee report, these fees and charges were described as "nondiscriminatory" to ensure that federal facilities are not singled out for payment on the basis of their status as federal entities.[76] Further, the committee recognized that federal facilities and private entities differ, and that some federal facilities may generate unique or unusually toxic wastes that may require special oversight and warrant imposition of "differential fees" that, in turn, would not be considered discriminatory.[77]

2. Definition of Person[78]

The citizen suit provision of RCRA was amended by defining *person* to "include each department, agency, and instrumentality of the United States." This amendment was in response to the decision in *United States Dep't of Energy v. Ohio*, discussed above. The amendment intended to clarify existing

66. *See id.*, at S14870, 14893 (describing RCRA storage prohibitions as creating a Catch-22 situation, whereby it is illegal to store it, illegal to transport it, and subjects facilities to $25,000 per day in fines for having it).
67. *Id.* at S14870.
68. U.S. EPA, EPA Policy on Enforcement of RCRA Section 3004(j) Storage Prohibition at Facilities Generating Mixed Radioactive and Hazardous Waste, 56 Fed. Reg. 42730 (Aug. 29, 1991).
69. *See* Edison Electric Institute et. al, v. EPA, 996 F.2d 326, 23 ELR 21006 (D.C. Cir. 1993) (upholding EPA's mixed waste storage civil enforcement policy as consistent with RCRA's highly prescriptive, technology-forcing statute).
70. 137 Cong. Rec. S14867 (daily ed., Oct. 17, 1991).
71. 137 Cong. Rec. 149, S14897 (daily ed., Oct. 17, 1991).
72. RCRA §6001, 42 U.S.C. §6961(a) (2000).
73. 503 U.S. 607, 22 ELR 20804 (1992).
74. RCRA §6001(a), 42 U.S.C. §6961(a) (2000).
75. RCRA §6001(a), 42 U.S.C. §6961(a) (2000). *See* H.R. Rep. 102-111, 102d Cong., 1st Sess. 6-7 (June 13, 1991).
76. H.R. Rep. 102-111, 102d Cong., 1st Sess. 6 (June 13, 1991).
77. *Id.*
78. RCRA §1004(15), 42 U.S.C. §6903(15); RCRA §7002(a), 42 U.S.C. §6972(a) (2000).

law and prior "misunderstandings" that led some courts to the "erroneous conclusion" that federal agencies were not "persons" under existing law and immune from certain sanctions and enforcement mechanisms.[79] The result was to thwart any attempt by attorneys to make an end-run around sovereign immunity.

3. Federal Administrative Enforcement[80]

EPA may take administrative enforcement actions against other federal agencies. This amendment was in response to the "unified executive theory," a DOJ policy that prohibited EPA from enforcing RCRA against another federal agency through judicial or administrative action.

4. The Mixed Waste Problem: Storage and Treatment[81]

Congress resolved the mixed waste problem by creating a three-step process that effectively required DOE to negotiate with authorized states or EPA. First, DOE was directed to inventory its mixed waste at 40 facilities, and for each facility, develop a site treatment plan (STP) with a schedule to treat mixed wastes to LDR standards for safe land disposal. Second, DOE was required, with one exception, to submit each STP to an authorized state or EPA for review and approval, modification, or disapproval.[82] Third, EPA or the authorized state would issue an FFCA order or agreement to implement the STP. DOE was given a three-year waiver from the assessment of fines and penalties for RCRA §3004(j) storage prohibitions for radioactive mixed waste (until October 1995). At the end of the three-year time period, e.g., October

Sidebar 1.2

Federal Sovereign Immunity Under Other Environmental Statutes

Safe Drinking Water Act (42 U.S.C. §§300j–6(a))

In 1996, Congress amended the Safe Drinking Water Act (SDWA) in the wake of *United States Dep't of Energy v. Ohio,* 502 U.S. 607 (1992) as it did with RCRA, to provide a clear and unequivocal waiver of federal government immunity from punitive civil penalties. Safe Drinking Water Act Amendments of 1996, Pub. L. No. 104-182, §129, 110 Stat. 1613 (1996). Like RCRA, the SDWA now expressly subjects federal agencies to the imposition of "all administrative penalties and fines, regardless of whether such penalties or fines are punitive or coercive in nature or are imposed for isolated, intermittent, or continuing violations." 42 U.S.C. §300j-6(a).

Clean Water Act (33 U.S.C. §1323(a))

After *Ohio*, there have been several failed legislative attempts to amend the Clean Water Act (like RCRA and the SDWA). *See, e.g.,* Federal Facility Compliance Act of 1998, S.1923, 105th Cong. §§2, 3 (1998); Clean Water Act Amendments of 1995, H.R. 961, 104th Cong. 1st Sess. (1995); Water Pollution Prevention and Control Act of 1994, S. Rep. 103-257, 103d Cong., 2d Sess. (1994) (S. 2093 proposed to amend Section 313 to clarify the intent to waive the United States' sovereign immunity for violations of the Clean Water Act by Federal facilities). See *United States Dep't of Energy v. Ohio and Sierra Club v. Lujan,* 972 F.2d 312 (10th Cir. 1992) (based on the *Ohio* decision, Congress did not waive the United States' sovereign immunity against the assessment of punitive civil penalties for past violations).

Clean Air Act (42 U.S.C. §7418(a))

Federal courts are split on whether Section 118(a) of the Clean Air Act waives sovereign immunity to allow punitive penalties to be assessed against the federal government for past violations following *Ohio*. See *United States v. Tennessee Air Pollution Control Bd.,* 185 F.3d 529 (6th Cir. 1999) (holding that federal sovereign immunity is waived under the Clean Air Act, and declining to follow *Ohio* in view of the language differences between the Clean Water Act and the Clean Air Act). *Contra City of Jacksonville v. Dep't of the Navy,* 348 F.3d 1307, 1317 (11th Cir. 2003) (holding that federal sovereign immunity from punitive penalties for past violations is not waived based on Ohio); *Sierra Club v. Tennessee Valley Authority,* 430 F.3d 1337 (11th Cir. 2005) (holding that the Clean Air Act does not waive federal sovereign immunity against punitive fines for past conduct).

Note: The sovereign immunity issue addresses only whether Congress waived the United States' sovereign immunity for punitive penalties for past violations. Under each of these federal statutes (including RCRA), the federal government is nevertheless required to comply with federal, state and local requirements.

79. H.R. Rep. 102-111, 102d Cong., 1st Sess. 18 (June 13, 1991).
80. RCRA §6001(b), 42 U.S.C. §6961(b) (2000).
81. RCRA §6001, 42 U.S.C. §6961 (2000).
82. The exception was for DOE facilities that had a permit establishing a schedule for the treatment of mixed wastes, or any existing agreement or administrative or judicial order governing the treatment of such wastes and to which the state was a party. 42 U.S.C. §6939c(b)(A)(ii) (2000).

1995, DOE's sovereign immunity would extend so long as it remained in compliance with EPA or state-issued FFCA order or agreement implementing an STP (see Sidebar 1.3). By October 1995, DOE entered into orders or agreements with authorized states for each of its facilities. For this reason, a DOE facility cannot be sued for §3004(j) violations, so long as it complies with the state-issued FFCA order or agreement. This remains true today. Although Congress addressed the "mixed waste problem" for DOE facilities, commercial facilities that stored mixed waste were faced with a substantially similar problem that was not resolved until 2001 (see Box 1.3).

Box 1.3
What About Commercial/Non-DOE Facilities That Manage Mixed Waste?

The "mixed waste problem" also existed for commercial facilities that managed mixed waste. In 2001, EPA provided these groups "regulatory relief" through its Mixed Waste Rule 66 Fed. Reg. 27218 (May 16, 2001) (see Chapter 10.3.2). Prior to that rule, EPA provided relief from RCRA §3004(j) violations through mixed waste enforcement policies.

5. Limitation on State Funds (Environmental Projects)[83]

Congress required that fines and penalties collected by states for violations of RCRA may only be used for environmental projects designed to improve or protect the environment or to defray the costs of environmental protection or enforcement, unless the state's constitution or statute requires that these funds be used in a different manner. The amendment was intended to alleviate concerns about potentially excessive fines and to comport with congressional intent that federal funds for fines be used for projects designed to improve the environment.[84]

6. Facility Environmental Inspections[85]

EPA or an authorized state must conduct an annual inspection and environmental assessment of each federal facility located in its state. The department, agency, or instrumentality owning the facility, e.g., DOE, must reimburse the Agency for the costs of conducting the inspection. The first inspection was required to include a comprehensive evaluation of groundwater monitoring.

7. Definition of Mixed Waste[86]

Congress defined mixed waste as a waste that contains both hazardous waste and source, special nuclear, or byproduct material subject to the Atomic Energy Act of 1954, as amended. The definition "reflects the meaning of the term as used in current Nuclear Regulatory Commission and EPA guidance, practice and policy."[87]

8. Public Vessels[88]

Congress created a limited exemption for so-called public vessels that generate and store hazardous waste during performance of their duties. "Public vessel" generally means military vessels, and is defined at RCRA §6939d(c)(1) as a "vessel owned or bareboat chartered and operated by the United States, or by a foreign nation, except when the vessel is engaged in commerce." The FFCA exempts public vessels that generate hazardous wastes on a vessel from RCRA storage, manifest, inspection, and recordkeeping requirements until the waste is transferred to a facility. To avoid "floating, unregulated hazardous waste storage facilities," the exception does not apply if the waste is stored for more than 90 days after being placed into reserve or if the vessel is no longer in service.[89]

9. Military Munitions[90]

To avoid litigation, the FFCA directed EPA to issue a rule identifying when military munitions become hazardous waste and to provide for the safe transportation and storage of that waste.[91] The definition of military munitions was expanded to include chemical and conventional munitions.

10. Federally Owned Treatment Works[92]

This amendment to RCRA closed a loophole in the domestic sewage exclusion that allowed large amounts of hazardous materials to enter municipal sewage systems. It narrowed the domestic sewage exclusion to allow the introduction of any "solid or dissolved material" by a source into federally owned treatment works only in certain circumstances, including where the material is subject to pretreatment under §307 of the Federal Water Pollution Control Act and the source is in compliance with that act. The amendment made it unlawful to introduce any pollutant that is a hazardous waste into federally owned treatment works.

83. RCRA §6001(c), 42 U.S.C. §6961(c) (2000).
84. H.R. Conf. Rep. No. 102-886, 102 Cong., 2d Sess. 17-18 (Sept. 22, 1992).
85. RCRA §6001(c), 42 U.S.C. §6961(c) (2000).
86. RCRA §1004(41), 42 U.S.C. §6903(41) (2000).
87. H.R. Conf. Rep. No. 102-886, 102 Cong., 2d Sess. 27 (Sept. 22, 1992).
88. RCRA §3022, 42 U.S.C. §6939d (2000).
89. H.R. Conf. Rep. No. 102-886, 102 Cong., 2d Sess. 26-27 (Sept. 22, 1992).
90. RCRA §3004(y), 42 U.S.C .§6924(y) (2000).
91. H.R. Conf. Rep. No. 102-886, 102 Cong., 2d Sess. 28-29 (Sept. 22, 1992).
92. Sess. 28-29 (Sept. 22, 1992).

Sidebar 1.3

How Do FFCA Orders and STPs Work?

- **FFCA Orders & Agreements**

A FFCA order or agreement is the legal document governing DOE compliance with Section 3004(j). This document implements the STP. FFCA orders or agreements contain the following: enforceable compliance schedules to implement the STP; deadlines; mechanisms for amendments; extensions; dispute resolution; and some may contain stipulated penalty provisions. They also contain mechanisms for DOE to request approval for deletion or addition of "mixed waste" streams subject to public notice and comment.

- **Site Treatment Plans (STPs)**

The STP contains the schedules for treatment and developing capacities and technologies to treat mixed waste for Section 3004(j) compliance. The STP includes two components: (1) a compliance volume, and (2) a background volume. The compliance volume provides the overall compliance schedules, including dates, for achieving Section 3004(j) compliance. It includes compliance schedules for treatment where technology either has or has not been developed; schedules for submitting permit applications; completion of treatment; and off-site transportation for treatment and preferred treatability options. The background volume contains updated information on the estimated volume of mixed waste; progress reports; and status reports on applicable characterization and treatment capabilities. Most changes to the STP require prior state approval.

DOE has a website containing some FFCA orders or agreements at http://www.em.doe.gov/em75/cca/index.html.

IV. Regulatory Framework—The Fundamentals

EPA's Subtitle C program contains nine components, each divided by separate rules, as described below. These rules consist of regulatory and technical standards and requirements found at 40 C.F.R. Parts 124, 260-272, and can be accessed online. Central to EPA's federal program is the issuance and enforcement of the RCRA permit, which prescribes compliance with EPA rules. EPA issued its first set of rules on May 18, 1980. The next major set of rules was issued in 1986, in response to the HSWA. LDR standards for hazardous and radioactive mixed waste were issued in phases throughout the 1990s. In total, the Agency has issued over 300 RCRA rules since 1980.

EPA's rules are implemented and enforced by EPA or by authorized states under their own hazardous waste management program in lieu of the federal program. RCRA and state hazardous waste permits may incorporate all, some, or additional regulatory requirements for the management of hazardous waste. This section provides a short overview of EPA's RCRA rules that constitute minimal federal requirements. If state law provides, states can impose broader or more stringent requirements. For this reason, state law must be consulted.

The following outlines the nine components of EPA's Subtitle C program:

1. Identification and Listing of Hazardous Waste (40 C.F.R. Part 261)

These rules are the heart of the RCRA regime because they address a threshold question: is the material regulated under RCRA, i.e., is it a hazardous waste? In 1980, EPA issued Part 261 rules identifying and listing hazardous wastes. These rules have since been amended numerous times for differing reasons, including HSWA requirements, court mandates, and EPA policy.[93]

2. Generator Standards (40 C.F.R. Part 262)

Generator standards address the requirements for hazardous waste at the point of generation, including hazardous waste determinations; standards for small- and large-quantity generators of hazardous waste; manifests; pretransport requirements; recordkeeping; and the import and export of hazardous waste.

3. Transporter Standards (40 C.F.R. Part 263)

Transporter rules were issued in 1980 to set standards for hazardous waste transporters, including manifest and recordkeeping requirements.[94]

93. *See* U.S. EPA, Hazardous Waste Management Systems, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, 45 Fed. Reg. 33119 (May 19, 1980), as amended at 46 Fed. Reg. 2849 (Jan. 12, 1981); 46 Fed. Reg. 7678 (Jan. 23, 1981); 48 Fed. Reg. 14293 (Apr. 1, 1983); 50 Fed. Reg. 4514 (Jan. 31, 1985); 50 Fed. Reg. 18374 (Apr. 30, 1985); 50 Fed. Reg. 28746 (July 15, 1985); 50 Fed. Reg. 663 (Jan. 4, 1985); 51 Fed. Reg. 10174 (Mar. 24, 1986); 51 Fed. Reg. 40636 (Nov. 7, 1986); 52 Fed. Reg. 21016 (June 4, 1987); 53 Fed. Reg. 31211 (Aug. 17, 1988); 54 Fed. Reg. 26647 (June 23, 1989); 55 Fed. Reg. 25494 (June 21, 1990); 57 Fed. Reg. 3487 (Jan. 29, 1992); 59 Fed. Reg. 62926 (Dec. 6, 1994); 62 Fed. Reg. 64656 (Dec. 8, 1997); 62 Fed. Reg. 26018 (May 12, 1997); 63 Fed. Reg. 65938 (Nov. 30, 1998), and 71 Fed. Reg. 16903 (Apr. 4, 2006); 73 Fed. Reg. 64668 (Oct. 30, 2008).

94. *See* 45 Fed. Reg. 33151 (May 19, 1980).

4. Hazardous Waste Management (TSDF) Standards (40 C.F.R. Part 264)

Part 264 contains the technical and regulatory permitting standards for hazardous waste management facilities. It imposes general and specific technical standards for treatment, storage, and disposal activities, including requirements for training, preparedness and prevention, monitoring, controls for airborne emissions, closure, financial assurance, and cleanup.

5. Interim Status Standards (40 C.F.R. Part 265)

These rules apply to hazardous waste management facilities that are eligible for interim status, i.e., those in existence on November 19, 1980, or when new waste codes are added.

6. Special Rules for Certain Wastes (40 C.F.R. Part 266)

Part 266 includes rules for materials used in a manner constituting disposal (Subparts A and B); precious metal recovery (Subpart F); spent lead-acid batteries reclamation (Subpart G); hazardous waste burned in boilers and industrial furnaces (Subpart H); military munitions (Subpart M); and low-level radioactive mixed wastes (Subpart N).

7. Land Disposal Restrictions (LDR) (40 C.F.R. Part 268)

EPA issued LDR rules for hazardous wastes contained in spent solvents, dioxins, and California-list waste in injection wells.[95] The remaining wastes were placed into categories known as the First-Third, Second-Third, and Third-Third.[96]

8. State Authorization (40 C.F.R. Parts 271 and 272)

The authorization process for state hazardous waste programs is discussed below.

9. Permit Requirements (40 C.F.R. Part 270)

EPA's permit rules are divided into eight subparts, and are the heart of the RCRA permit program. Part 270 sets forth both the general and specific requirements for obtaining, maintaining, and changing RCRA permits. EPA has modified, or proposed changes to, some of these requirements in order to streamline them, avoid duplication, and reduce regulatory burden.

V. RCRA Authorization: Overview

EPA's authorization process sets a "floor" not a ceiling for federal requirements.[97]

—Judge Max Rosenn, Third Circuit Court of Appeals

Under RCRA, Congress intended that states assume primary responsibility for hazardous waste management. State authorization is grounded in principles of federalism that balance the need for state autotomy and flexibility with minimum national standards to protect human health and the environment. To achieve this goal, RCRA §3006 provides that EPA may authorize eligible states and U.S. territories to administer and enforce their own hazardous waste programs in lieu of the federal Subtitle C program.[98] The process to achieve this eligibility is called "state authorization." Indian tribes, however, are not eligible to receive EPA authorization as a state (see Sidebar 1.5). States that receive final authorization are responsible for issuing and enforcing RCRA permits. As a practical matter, states have the bulk of the responsibility for administering hazardous waste programs and issuing RCRA permits. These authorized states may issue RCRA permits that incorporate federal and state requirements, and are enforceable by the state, EPA, or both. The role of the state and EPA in RCRA permitting and enforcement depends upon the nature of the requirement and status of state authorization. The authorization process, described below, can be complex, due to the dynamic nature of state program revisions and state variability in response to the more than 300 rules that EPA has issued since the program began. As of 2009, for example, only 35 states with an EPA-approved program had authorization to administer Subpart CC restric-

Sidebar 1.4

The Eight Parts to EPA's Permitting Rules (Part 270)

Subpart A — General information (§§270.1 – .6)
Subpart B — Permit application (§§270.10 – .29)
Subpart C — Permit conditions (§§270.30 – .33)
Subpart D — Permit changes (§§270.40 – .43)
Subpart E — Expiration and continuation of permits (§§270.50 – .51)
Subpart F — Special forms of permits (§§270.60 – .68)
Subpart G — Interim status (§§270.70 – .73)
Subpart H — Remedial action plans (§§270.79 – .230)

95. RCRA §3004(f), 42 U.S.C.§6924(f) (2000). LDR rules were first issued in 1986. *See* 51 Fed. Reg. 40638 (Nov. 7, 1986).
96. *See* 53 Fed. Reg. 31138 (Aug. 17, 1988) (First-Third rule); 54 Fed. Reg. 26594 (June 23, 1989) (Second-Third rule), and 55 Fed. Reg. 22520 (June 1, 1990) (Third-Third rule).
97. Old Bridge Chem., Inc. v. New Jersey Dep't of Envtl. Protection, 965 F.2d 1287, 1296, 22 ELR 21142 (3d Cir.), *cert. denied,* 506 U.S. 1000 (1992).
98. RCRA §3006(d), 42 U.S.C. §6926(d) (2000). Note, the term "state" includes all 50 states, the District of Columbia, Puerto Rico, and certain U.S. territories (American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands).

Sidebar 1.5

What About Indian Tribes?

Unlike states and U.S. territories, federally recognized Indian tribes are not currently eligible to receive authorization for RCRA Subtitle C. In 1996 the D.C. Circuit Court of Appeals ruled that EPA lacked authority to approve the Campo Band Indian Tribe's Subtitle D solid waste permitting program on the ground that RCRA defines "Indian tribe[s]" as a municipality, not a state. *Backcountry Against Dumps v. EPA*, 100 F.3d 147 (D.C. Cir. 1996). EPA did not finalize its rule to authorize Tribal Subtitle C programs (see 61 Fed. Reg. 30472 (June 14, 1996)).

EPA and the U.S. Indian Health Service are responsible under various federal laws (see list below) for supporting the tribes in implementing their own hazardous waste management programs. Those laws are:

- Resource Conservation and Recovery Act (42 U.S.C. §6948(a)(2)(A) (authorizing EPA to provide financial assistance for implementation of solid waste management programs).
- General Assistance Act of 1992 (42 U.S.C. §4368(b) (providing general assistance to develop and implement solid and hazardous waste programs on Indian lands under the Solid Waste Disposal Act).
- Indian Sanitation Facilities Act (42 U.S.C. §2004(a) (reaffirming that primary responsibility and authority of the Indian Health Service is to provide necessary sanitation facilities to avoid a human health hazard).
- Indian Lands Open Dump Cleanup Act of 1994 (25 U.S.C. §3908) (directing the IHS to develop a 10-year plan to address solid waste disposal on Indian lands, and provide financial and technical assistance).

For more information, please see USEPA's Office of Solid Waste, Tribal Waste at www.epa.gov/tribalmsw

tions for organic air emissions from containers, tanks, and surface impoundments.[99]

A. Final Authorization and Program Revisions

EPA's authorization process, set forth under §271, includes two major components: (1) final authorization; and (2) program revisions. Final authorization is the process in which EPA reviews and approves a state's "base program," which consists of the initial federal RCRA program and rules as of July 26, 1982, i.e., pre-HSWA. To receive final authorization, EPA must determine that a state program is "consistent," "equivalent," and "no less stringent" than the federal RCRA program, and that the state provides adequate enforcement and public participation, including availability of information.[100] If state law provides, states may adopt hazardous waste rules that are broader in scope, more stringent, or both, than EPA rules.[101] State rules that are broader in scope, however, are not federally enforceable. EPA has authorized all states (except Alaska and Iowa), the District of Columbia, and Guam to run a base program. EPA administers its federal program in Alaska and Iowa, U.S. Commonwealth Territories, including American Samoa, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands, and upon Indian lands.

1. State Program Revisions

After final authorization, a state must continuously review its base program through an ongoing process called program revisions in response to EPA's adoption of new rules. EPA's federal program undergoes continuing changes due to statutory mandates, e.g., the HSWA, court decisions, regulatory relief efforts, and technical and scientific progress. The revised federal rules can be either more or less stringent than an existing federal requirement. To maintain authorization, a state must ensure that any change in its own program is not less stringent than the federal analogue. State program revisions are reviewed by EPA to determine if they are equivalent to and consistent with the federal program. The failure of a state to maintain authorization can result in withdrawal of the program by EPA.

There are three types of EPA rule changes: (1) required rules (non-HSWA); (2) HSWA rules; and (3) optional rules, outlined below. EPA's State Authorization Tracking System (StATS) tracks EPA rules and denotes whether a specific rule is "optional" or "required" under the HSWA or non-HSWA authority.

- *Required Rules*

Required rules must be adopted by an authorized state to maintain authorization. If EPA issues a new federal rule that is more stringent or broader in scope than the existing federal standards, the state must revise its program under §§271.21(e)(1) and (2). These federal rules must be adopted by July 1 of the following year, calculated as July 1 to June 30.[102] The deadline is determined by the promulgation date of the final rule under §271.21(e)(2).

99. *See* U.S. EPA, Authorization Status of All RCRA/HSWA Rules, Checklist 154 (35 states were authorized as of September 30, 2008; an additional five states adopted the rule but had not received authorization) (*see* Appendix 2).

100. RCRA §3006(b), 42 U.S.C. §6926(b) (equivalent, consistent, adequate enforcement); RCRA §3009, 42 U.S.C. §6929 (no less stringent); RCRA §7004(b), 42 U.S.C. §6974 (public participation); and RCRA §3006(f), 42 U.S.C. §6926(f) (2000) (state availability of information), 40 C.F.R. §§271.1 and .271.3.

101. 42 U.S.C. §6926(b) (2000), 40 C.F.R. §271.1(i)(1). *See also Old Bridge Chem., Inc.,* 965 F.2d at 1296 ("RCRA sets a floor not a ceiling for state regulation of hazardous waste.").

102. 40 C.F.R. §271.21(e). A state may have an additional year if the change necessitates a state statutory amendment.

- *HSWA Rules*

RCRA §3006(g) provides that new requirements and prohibitions imposed under the HSWA, unlike required rules, take effect immediately. These rules are self-implementing, regardless of whether the state is authorized or adopts them.[103] For this reason, EPA is required to administer HSWA rules until a state is authorized to implement them. HSWA rules are identified in Table 1 of 40 C.F.R. §271.1(j).

- *Optional Rules*

Optional rules are discretionary, that is, they are not required to be adopted by an authorized state. In the last decade, the majority of EPA rule changes have been optional. Because RCRA §3009 allows states to impose (or retain) standards that are more stringent than the federal program, new federal rules that reduce an existing requirement are referred to as "reduced requirements." Optional rules can also result from a new federal rule that does not affect an existing requirement. Optional and reduced requirements are federally enforceable once adopted and approved by EPA in an authorized state..[104]

2. More-Stringent and Broader-in-Scope Rules

A state program can adopt a rule that is more stringent or broader in scope than the federal analogue. The distinction between the two is important. State program revisions that are more stringent than EPA's rules may be authorized, and are federally enforceable. On the other hand, state rules that are broader in scope are allowed under state law, but they cannot be authorized and are not federally enforceable.[105] A state rule that is broader in scope is one that either: (1) regulates more entities or wastes than the federal regulations; or (2) adds an aspect to a state's regulations for which there is no federal counterpart in the RCRA regulations.[106] EPA rules do not define the terms "equivalent" or "stringent." EPA has published guidance on how it makes equivalency determinations, stating that "equivalent" implies that the state must regulate at least the same universe of waste and handlers, whereas "no less stringent" signifies that each aspect of the state regulations must be at least as stringent.[107] The decision involves an analysis of whether the state rule creates or increases an environmental or health risk, or a legal or enforceability problem. EPA publishes its decision about whether a specific state rule is at "least as stringent," "more stringent," or "broader in scope" than the EPA analogue in the *Federal Register*.

B. Authorization Process

EPA's process for reviewing state program revisions can be both time-consuming and cumbersome. Authorized states submit a program revision package based on "revision checklists" and "clusters" that identify rule changes as federally required, optional, or reduced requirement. A cluster is a set of checklists developed for EPA rules issued between July 1 and June 30 of any given year. Due to the extensive number of HSWA-mandated changes, EPA developed a streamlined rulemaking process whereby it implements new rules through HSWA and non-HSWA checklists and clusters. Each year, EPA publishes the State Program Advisory (SPA), which describes what documents have been developed for a particular cluster. The documents in each SPA include new revision checklists, changes to existing checklists from a previous cluster, a model attorney general's statement, consolidated checklists, and other guidance materials (see Sidebar 1.7).

1. Abbreviated Authorization

In 1998, EPA developed a procedure called "abbreviated authorization," found at §271.21(h). The procedure was developed in response to an RCRA implementation study that identified the authorization process as "too slow and cumbersome."[108] The abbreviated process is limited to state program revisions for certain rules designated as "minor" or "routine" by EPA in Table 1 to §271.21.[109] States can also request that EPA use abbreviated procedures for certain designated minor or routine rules issued between July 1, 1990, and December 31, 1998, and earlier rules under special circumstances.[110] Abbreviated authorization consists of a short application and an expedited process, as the name suggests (see Sidebar 1.8).

2. Express Authorization

In January 2003, EPA developed a second procedural tool, Express Authorization, to provide a streamlined process that reduces a state's time and money spent in reviewing applications for program revisions. Express Authorization is not a regulation and does not impose requirements. It offers the distinct advantage of being applicable to state program revisions for all rules (minor, routine, and major). Express Authorization restructures the revision application process by providing new model documents for parts of the application based upon approaches used successfully by some states.

103. RCRA §3006(g)(1), 42 U.S.C. §6926(g)(1) (2000).
104. RCRA §3006, 42 U.S.C. §6926 (2000).
105. *See, e.g.,* U.S. EPA, Washington: Final Authorization of State Hazardous Waste Management Program, 71 Fed. Reg. 63253 (Oct. 30, 2006) (discussion on the distinction between state rules that are more stringent or broader than EPA rules). *See also* U.S. EPA, Codification Workbook, Creating a Regulatory Crosswalk, ch. IV-18 (1998).
106. U.S. EPA, Introduction to State Authorization Training Manual, Lesson I at 1-8 and 1-9.
107. *See id.* Lesson I. *See also* Memorandum from Matthew Hale, EPA Director, Office of Solid Waste, to RCRA Directors, Regions I-X, Determining Equivalency of State RCRA Hazardous Waste Programs (Sept. 7, 2005), *available at* www.epa.gov/epawaste/laws-regs/state/policy/policies.htm.
108. 63 Fed. Reg. 65927 (Nov. 30, 1998).
109. U.S. EPA, Memorandum from Cotsworth, OSW, to RCRA Senior Policy Advisors, Guidance for Using New Streamlined Authorization Procedure for the Approval of Previously Promulgated Rules (Apr. 28, 1999) (EPA guidance explicitly identifies previously issued rules considered "minor" or "routine" that may warrant use of these abbreviated procedures).
110. According to EPA, most states are authorized for pre-1990 rules. 63 Fed. Reg. at 65931 (Nov. 30, 1998).

Sidebar 1.6
Examples of More-Stringent and Broader-in-Scope State Rules

More-Stringent State Rules

- Annual report required rather than biennial report for generators;
- Limited financial assurance options for facility closure;
- Permit expiration of less than 10 years (e.g., 5 years); and
- Restriction on location and environmentally sensitive environments.

Broader-in-Scope State Rules

- "State only" hazardous wastes (more listed wastes);
- State rules with fewer facility exemptions or exclusions than EPA rules (e.g., exclusions from hazardous waste rules, recycled wastes);
- Waste fees;
- Permits or licenses for transporters;
- Controls of traffic outside of hazardous waste facility or transport routes; and
- Environmental impact statements or siting board approval as part of permit issuance.

Source: U.S. EPA, Introduction to State Authorization, Lesson I, Ex. I-1 (2008)

Sidebar 1.7
RCRA's Program Revision Process

- Checklists. EPA provides each state with checklists that contain the federal requirements. The checklists indicate whether a rule is: required or optional under federal law, and equivalent to, more stringent than, or broader in scope than the federal analogue. (see Appendix 2).
- Package Submittals. States must submit an authorization package for EPA approval of a program revision that meets the requirements of §271.5, including:
  - A letter from the state governor requesting program approval;
  - A description of the state program (program description);
  - The rule or statute, and a rule checklist;
  - An Attorney General's statement confirming authority to implement the program revisions; and
  - A Memorandum of Agreement.
- Public Notice and Comment. All requests for EPA approval of program revisions require public notice and comment.
- EPA Review. Based upon the application and public comment, EPA decides whether to approve or disapprove the application. EPA's decision is published in the federal register.

Sidebar 1.8
The Abbreviated Authorization Procedure
40 C.F.R. §§271.21(g–h)

The Application Process — Simplified

- State submits a signed statement that the laws and rules for which it seeks authorization are equivalent to, and no less stringent than, the designated minor rules specified in Table 1 to §271.21. The statement must include citations to specific statutes, administrative laws, and, if appropriate,judicial decisions.
  - No requirement to provide for revised Program Description, Memorandum of Agreement, or Attorney General Statement.
- State provides copies of all applicable state statutes and regulations.

EPA Review and Approval — Expedited

- Completeness decision within 30 days
  - If an application is incomplete, EPA must send the State a notice of deficiency and explanation. The State must address deficiencies, and can re-submit application to receive final approval.
- Final decision within 60 days after receipt of complete and final application.
  - EPA provides for 30-day comment period, and authorization takes effect 60 days after publication unless adverse comments are received.

The EPA guidance document, *Roadmap to Express Authorization,* states that, "if the current authorization process works well for a State and Region, there is no need to change it in order to conform with the new model documents."

The most significant component of Express Authorization is a streamlined approach to the Attorney General's Statement (AGS), which comprises a major portion of a state's authorization application. Previously, a state was required to submit a lengthy and complex AGS with each revision application, detailing state statutory authority for each proposed rule. The new model AGS is a one-page document that attests to compliance with regulatory requirements, and references a statutory checklist. The statutory checklist is prepared only once (except where EPA recommends a new checklist due to a major statutory or program change or gap in time). Most states prepare a statutory checklist as part of the application for base program authorization. Once prepared, the statutory checklist would be amended only when necessary to reflect state statutory changes affecting authorization, by attaching an addendum or changing the original document. Generally, no amendments would be necessary; the AGS could simply reference the checklist on file with EPA, or attach it. (Note: A new rule checklist must still be included with each application). The model Statutory Checklist is available in two versions, standard and abbreviated, tailored to states with specific and broad statutory authority.

C. EPA's Role in Authorized States

EPA retains significant involvement in authorized states. The federal-state division of authority permeates a state hazardous waste program's permitting, enforcement, and program administration. This section outlines the four broad components of EPA authority in RCRA permitting:

• State-Issued RCRA Permits

EPA retains some degree of oversight of state-issued RCRA permits. EPA may review a state-issued RCRA draft permit and, if it is inconsistent with the federal program, require the state program to take action, including adding permit conditions under §271.19. EPA may also revoke or terminate a state-issued RCRA permit (although this is not common) if the permittee fails to comply with RCRA §§3004 or 3005.[111]

• EPA Implements the HSWA and Required RCRA Rules

EPA must implement all HSWA and required federal rules in an RCRA permit until the state receives authorization. This means that a facility located in an authorized state with no HSWA authority must obtain permits from both the state and EPA.[112] For example, the HSWA requires all regulated units to comply with applicable air emission requirements under Subparts AA, BB, and CC. Subpart X regulations for miscellaneous units under Part 264 require the permitting agency to include applicable air emission requirements. A state may be authorized to issue a Subpart X permit under Part 264, but not authorized to implement air emission standards. In this circumstance, EPA must write the applicable air emission standards, e.g., Subpart CC tank standards, into the Subpart X permit, and be responsible for implementing these specific requirements until the state receives EPA authorization.[113] In addition, dual permits may be required for states that have not received corrective action authority under the HSWA. Dual permits have resulted in litigation over federal-state division of responsibilities for RCRA permitting, and create the potential for overlapping and conflicting requirements. As the Second Circuit has written: "It is not uncommon for the state and EPA to have different views on the same substantive issue. When this occurs, the applicant may get whipsawed between the two agencies."[114]

• Overfiling

EPA has independent authority to enforce a RCRA permit and bring enforcement actions, or "overfile," under 42 U.S.C. §§6928 and 6973, and to inspect and monitor sites.[115] Overfiling means that EPA has initiated an enforcement action after an authorized state has began enforcement on the same matter. EPA's enforcement authority allows the Agency to step in and take over enforcement of a federal requirement where the state fails to enforce or fails to take timely and appropriate action. To overfile, EPA must provide the state at least 30 days' notice prior to issuing a compliance order or starting a civil action. EPA's authority to overfile and enforce federal requirements has been controversial and subject to conflicting opinions in federal court.[116]

• Withdrawal of Authorization

RCRA §3006 allows EPA to withdraw state authorization upon notice, comment, and an opportunity for a hearing if a state program fails to meet certain requirements and appro-

111. RCRA §3005, 42 U.S.C §6925(d) (2000).

112. *See* American Iron & Steel Institute v. EPA, 886 F.2d 390, 403, 20 ELR 20027 (D.C. Cir. 1989), *cert. denied*, 497 U.S. 1003 (1990).

113. *See* U.S. EPA, Subpart CC and Miscellaneous Unit Permitting, Faxback 14347, RCRA/Superfund Hotline Monthly Reporting, EPA530-R-99-012e (May 1999).

114. *See* Ciba-Geiby Corp. v. Sidamon-Eristoff, 3 F.3d 40, 43, 23 ELR 21340 (2d Cir. 1993) (quotations omitted) (EPA not required to terminate HSWA permit immediately upon state authorization); Northside Sanitary Landfill, Inc. v. Thomas, 804 F.2d 371, 381-82, 17 ELR 20215 (7th Cir. 1986) (EPA may not issue new permits in authorized states when those permits concern only those regulations the state is authorized to administer).

115. RCRA §§3007 and 3013, 42 U.S.C. §§6927, 6934. *See also* Wyckoff Co. v. EPA, 796 F.2d 1197, 1200-01, 16 ELR 20866 (9th Cir. 1986) (EPA may issue order requiring operator to perform monitoring and report results to EPA even after state authorization).

116. *See* United States v. Power Eng'g, 303 F.3d 1232, 33 ELR 20027 (10th Cir. 2002), *cert. denied*, 538 U.S. 1012 (2003) (Congress did not intend to limit EPA's ability to take enforcement action and overfile after state has done so when it authorized EPA to grant state authorization "in lieu" of federal program under §6928(b)); Harmon Indus. v. Browner, 191 F.3d 894, 899, 29 ELR 21412 (8th Cir. 1999) (RCRA allows EPA to overfile after providing notice to the authorized state only if EPA withdraws authorization or if the state fails to initiate enforcement action).

Sidebar 1.9

EPA Withdrawal of State Authorization

EPA may withdraw state authorization after notice and opportunity for hearing, for any of the following reasons listed in 40 C.F.R. §271.22, if the state fails to take corrective action:

- Inadequate legal authority to administer or enforce the program, including:
  - failure to issue or enact new authority when necessary; or
  - action by a state legislature or court striking down or limiting state authority.
- Inadequate operation of program requirements, including:
  - failure to exercise control over regulated activities, including failure to issue permits;
  - repeated issuance of permits that do not meet Part 271, including public participation requirements.
- Failure to meet the terms of the state's Memorandum of Agreement.
- Inadequate enforcement of program requirements, including:
  - failure to act on permit violations, seek adequate enforcement penalties, or to collect administrative fines when imposed; or
  - failure to inspect and monitor activities subject to regulation.
- Failure to operate a state program in accordance with federal requirements, including:
  - the state program unreasonably restricts, impedes, or operates as a ban on the free movement of hazardous waste across the state border for treatment, storage, or disposal;
  - the state program has no basis in human health or environmental protection and prohibits the treatment, storage, or disposal of hazardous waste in the state; or
  - the state manifest system does not meet the requirements of Part 271.

priate action is not taken. EPA withdrawal of authorization has been described as an "extreme" and "drastic" step that requires the state program to be replaced with the federal program.[117] In practice, however, the Agency rarely commences withdrawal proceedings.[118] If state authorization is threatened, the Agency is more likely to inform the state by written notice that authorization may be withdrawn if certain (usually legislative) changes are not made within a specified time period (see Sidebar 1.9).

D. Understanding Authorization

EPA's authorization process is a moving target. EPA issues rules, but states do not always adopt. Due to the time period associated with the authorization process, states that decide to adopt federal rules inevitably lag behind EPA for many major and nonmajor post-HSWA rules. This is particularly true for federal rules that EPA considers to be optional under federal law. States may take years to receive authorization to implement federal rules, particularly where a statutory change is necessary. State variation also exists due to broader or more stringent state requirements. State-issued RCRA permits may incorporate none, some, or all of those requirements. Following are four factors to consider in understanding EPA's authorization process:

• RCRA Sets a Floor, Not a Ceiling

As discussed above, states can adopt rules that are both broader in scope or more stringent than EPA rules. Notably, however, some state laws prohibit the state hazardous waste program from adopting a state rule that is more stringent than EPA.

• Not All EPA Rules Can Be Authorized

Certain federal requirements that affect "national concerns" cannot be delegated to authorized states. These include the following:

• *Imports/Exports*

International exports, imports, and trans-frontier shipments of hazardous waste (40 C.F.R. Part 262, Subparts E, F, and H);

• *Land Disposal Restrictions*

Decisions concerning: (1) case-by-case effective date extensions for LDRs (§268.5); (2) applications for alternate treatment methods (§268.42(b)); and (3) general treatment standard variances (§§268.44 (a-g)). EPA noted that general treatment variances, which cannot be delegated to states, differ from site-specific variances.[119]

117. *Power Eng'g*, *supra* note 116, at 1238-39 (citations omitted); Waste Mgmt. of Illinois, v. EPA, 714 F. Supp. 340, 341, 19 ELR 21465 (N.D. Ill. 1989).

118. *See, e.g.,* U.S. EPA, In the Matter of Proceedings to Determine Whether to Withdraw Approval of North Carolina's Hazardous Waste Management Program, No. RCRA-SHWPAW-IV-01-87, 1990 WL 754772 (Adm'r 1990).

119. U.S. EPA, Guidelines for State Adoption of Federal RCRA Regulations by Reference, at 16 (2002) (also called 2002 IBR Guidance Document, *available at* www.epa.gov/epawaste/laws-regs/state/policy/policies.htm).

• State Authorization Status Varies Considerably

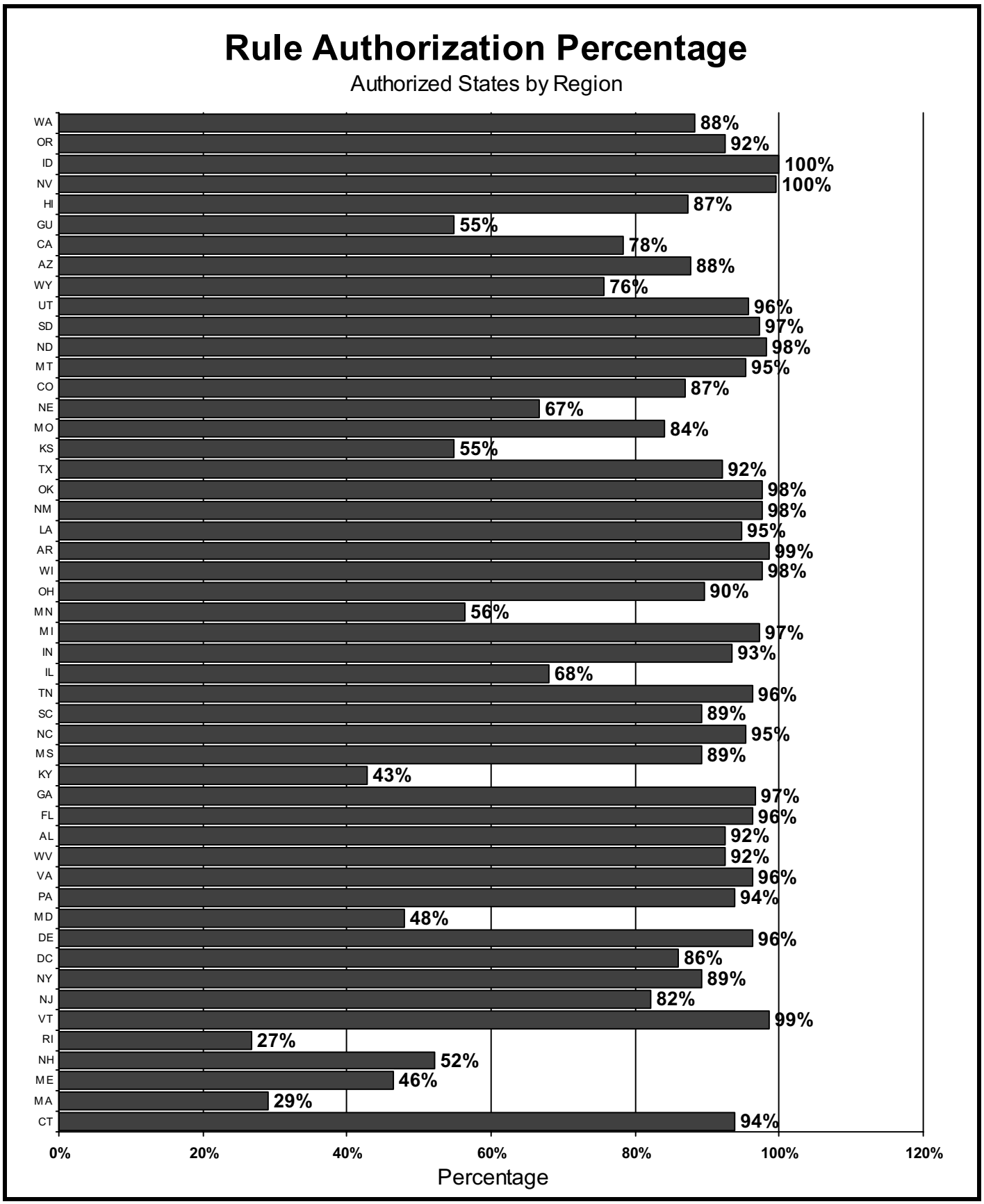
Each year, EPA proposes and/or finalizes new rules for its federal RCRA program. Since 1980, more than 300 rules have been issued, while others have been proposed and will continue to change the federal program. EPA's StATS tracking system provides a reasonably up-to-date status of state authorization. Review of StATS shows two distinct trends: first, the status of state authorization varies considerably, and tends to lag behind EPA (see example, at Figure 1.1). Out of 50 states, the vast majority of states, e.g., 39, were authorized for over 75% of EPA rules, with only a handful of states, e.g., less than six, authorized for less than 50% (data through June 30, 2009). Second, the large majority of EPA rules are optional (see list StATS). States that do not adopt EPA's optional rules can do so for many reasons. One primary reason is to maintain a more stringent state program. For example, California appears to lag behind other states in authorization rate, e.g., at 78%. However, this could be attributed to California's decision to maintain a more stringent state program by not adopting a specific EPA rule that reduces federal requirements. On the other hand, the apparent lag can be due to the simple fact that the authorization process takes time. StATS is an excellent tool to review this type of data (see below). Appendix 2, Select EPA Rules and Checklists, contains a list of EPA rules discussed in this Article, along with the applicable checklist, and can be used to determine the current status of state authorization.

• Many States Adopt EPA Rules by Reference

Numerous states simply adopt the majority of EPA's permitting and interim status requirements (40 C.F.R. Parts 264, 265, and 270) by reference or verbatim.[120] The authorization process can be facilitated and expedited by directly incorporating federal rules, by reference or verbatim, into a state program.

120. *Id.*

StATS Data as of June 30, 2009



Percentage based on total number of required rules through RCRA XVII = 213