EPA's MUNICIPAL SOLID WASTE LANDFILL REGULATIONS: IMPACT OF THE NEW STANDARDS IN INDIAN COUNTRY

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The Environmental Protection Agency recently issued Municipal Solid Waste Landfill (MSWLF) regulations under subtitle D of the Resource Conservation and Recovery Act (RCRA). These regulations, which become effective between October 9, 1993 and October 9, 1996, impose obligations on the owners and operators of solid waste land disposal facilities. The environmental protection standards contained in the new regulations apply to facilities located in Indian country, including those that are owned or operated by tribal governments. The regulations require not only that open dumps be closed, but also that existing landfills that do not meet federal standards be upgraded; where this is not feasible, the sites must be closed and solid waste management alternatives that comply with the new standards developed. New landfills and new expansions of existing landfills must meet detailed design and performance standards.

Most tribes have limited financial and personnel resources for undertaking these obligations, and many lack the governmental infrastructure to implement and enforce the standards. These limitations will be of concern not only to tribes, but also to EPA, since the agency sees approval of tribal MSWLF programs as a key to being able to implement the new regulations in Indian country. Tribes with "adequate" solid waste management

1 42 U.S.C. §§6941-6949.


programs are intended by EPA to serve as primary enforcers of the new requirements. EPA will have enforcement authority on Indian lands without "adequate" programs, once the agency has made a determination that the program is inadequate. EPA's regulatory approach is therefore dependent on both the tribes' interest in obtaining program approval from EPA, and their capacity to implement a MSWLF program.

This paper looks at the effects of EPA's new MSWLF regulations on tribes and the obstacles faced by tribes in taking action to address solid waste management problems. Section I provides background on the types of solid waste disposal used on Indian lands. Section II gives an overview of the MSWLF regulations and how they apply to tribes. In Sections III and IV, the paper examines the implications of the new regulations for tribes, and some of the approaches tribes are taking to meet their solid waste management needs.

I. SOLID WASTE DISPOSAL ON INDIAN LANDS

The effective implementation and enforcement of MSWLF standards on Indian lands requires an understanding of the solid waste management systems currently in use on these lands. Unfortunately, information on this subject is limited. No comprehensive inventory of solid waste facilities, disposal practices, and dumpsites exists for Indian lands, primarily because the terrain of much of "Indian country" makes unlawful waste dumps difficult to detect, because other important health and environmental threats overshadow solid waste issues, and because financial resources are limited. The more immediate threats posed by

4 According to the EPA, the agency will publish a notice of program inadequacy prior to assuming enforcement authority. This will be done on a cases-by-case basis. See RCRA § 7003, 42 U.S.C. § 6973; Fed. Reg. 33314, 33382 (Aug. 30, 1988).
inadequate water and sewage facilities in some Indian communities have deferred any significant study of their waste disposal practices.

A. Solid Waste Disposal Practices

Solid waste disposal and management vary widely from one Indian community to the next. Differences in climate, topography, community infrastructure, governance, and proximity to non-Indian communities create significant variations in disposal techniques as well as in the extent of official tribal involvement in solid waste management.

A 1986 study performed by Americans for Indian Opportunity (AIO) at the request of EPA displayed the wide range of disposal methods used by tribes. One-half of the 48 tribes responding to the survey reported that they used a "community dump site" to meet their solid waste disposal needs, while another 18 noted the extensive use of a "community landfill." Although ten tribes utilized a community-sanctioned incinerator, nearly twice that number mentioned individual garbage-burning as a common method of waste disposal. Eight of the responses -- including some for reservations which had operating landfills or incinerators -- mentioned the widespread use of unauthorized dumps on roadsides, isolated vacant lots, and other open areas. A handful of other tribes used systems that involved either the integration of reservation waste into the disposal system of the surrounding community or the use of private haulers and landfills.

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5 United States Environmental Protection Agency, Survey of Environmental Protection Needs on Reservation Lands, 1986 (hereinafter "AIO/EPA Survey"). AIO conducted its study by sending brief surveys to 74 tribes. Forty-eight (69%) of the survey forms were completed and returned, including at least one from each EPA region in which a federally-designated reservation exists. The reservations accounted for by the returned surveys include 79% of the "total trust acreage" in this country and house just over half of the population living on reservations.

6 Obviously, some of these totals represent overlap: many of the surveys reported extensive use of two or more of these disposal methods. See page 49 of the AIO/EPA report.
Perhaps most significantly, 21 of the tribes answering the survey had no official plan for dealing with solid waste, and two others labelled their existing plans as "inadequate or ineffective." On these reservations, individuals are responsible for solving their own solid waste disposal problems, and often rely heavily on burning and on open dumps of various sizes. Despite this wide variation, several trends in disposal methods can be identified.

Open dumping on Indian lands

Studies of solid waste disposal on Indian lands demonstrate that most reservations have a number of open dumps. In 1990, one-half of the Indian Health Service (IHS) Area Coordinators for solid waste described open dumping as the most prevalent type of solid waste disposal in their region, and all but two mentioned that such dumps existed in significant numbers. The responses submitted by tribal authorities to AIO also testify to the extent of open dumping, as many of those surveyed complained about abandoned cars and garbage piles in yards, the lack of a sufficient sanitary landfill, and the regularity and acceptance of open dumping practices. Most of the 600 sites identified by IHS as tribal areas reserved for solid waste disposal do not meet the minimum EPA requirements for sanitary landfills and have therefore been classified as "open dumps."

A general lack of data about these dump sites prevents detailed analyses of their size, location, and use. Interviews with IHS program officers and sanitarians do, however, reveal

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7 EPA/AIO report, p. 12

8 This information is based on interviews conducted by ELI with staff working on solid waste issues in all 12 IHS area offices, October-December 1990.

9 EPA/AIO report, p. 16

that open dumping is practiced on reservations in every region of the country, including those on which organized disposal systems are accessible. These dumps sometimes take the form of a large community site used by thousands of people; others are merely uncovered trenches or ravines used by the inhabitants of several dwellings. While most IHS staff interviewed noted that there are generally two to five of these sites per reservation, several area coordinators described reservations with as many as 25 surface dumps.

*Landfills on Indian lands*

Landfills and community dumpsites continue to dominate official solid waste plans, largely as a legacy of the Indian Health Service’s Sanitation Facilities Construction (SFC) Program. Authorized as part of the Indian Sanitation Facilities Act (P.L. 86-121) of 1959, this program has allowed IHS to construct over one hundred sanitary landfills on reservations, and subsequently to transfer these facilities to tribal authorities for operations and maintenance. The mere presence of these landfills, however, does not equate with Indian communities having adequate waste disposal systems. The IHS itself has noted that of the 108 tribally-owned landfills constructed under the SFC program, none would be in compliance with the more stringent MSWLF criteria. The IHS has estimated that to address the 600 waste sites on Indian lands, roughly $140 million is needed to both close some sites and bring others into compliance with EPA standards.

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12 *Hearing Before the Select Committee on Indian Affairs, 30 (May 14, 1992).*

13 Telephone conversation with Gary Hartz, IHS (March 31, 1994).
Private contractors and transfer systems

Some communities use private contractors to remove solid waste from tribal lands. Under these plans -- which are popular in the West and northern Midwest -- tribal authorities either contract with an outside hauler to remove trash from the reservation or set up "green boxes," transfer stations from which the surrounding community's disposal system accepts solid waste from the reservation. The IHS has been particularly active in promoting this type of solid waste plan.

B. Solid Waste Disposal and Threats to Public Health and the Environment

Evidence is sparse concerning the extent to which poorly-developed waste disposal systems on Indian lands represent a serious current risk to health. Many IHS staff working on solid waste issues express concern that existing disposal systems are not conducive to health, but admit that they are unable to back their concern with documentation. Only a few studies on the public health impacts of solid waste practices have been performed on reservations; for the most part, these limited analyses have produced inconclusive or negative results. A bill now pending in Congress would require the IHS to determine the severity of the public health and environmental threats posed by open dumps on Indian lands.14

Nevertheless, virtually all IHS solid waste coordinators contacted expressed some concern about the potential threats posed by widespread open dumping and garbage burning. Many dumps attract large numbers of rats, flies, and other scavengers, and may...

14 See S.720, the Indian Lands Open Dump Clean-Up Act of 1993, sponsored by Senators McCain, Inouye and Reid. See also, H.R. 1267, sponsored by Representative Richardson, which contains a similar provision.
also attract people, possibly increasing the rate of enteric disease. Potential air quality problems are created by blowing debris and garbage burning, and a few dump sites are in positions which potentially threaten major sources of groundwater. IHS and EPA staff note, however, that the unique features of some Indian lands -- especially those with low population density and vast expanses of potential dumping grounds far from human communities -- may mitigate some of the risks normally associated with unsanitary disposal practices.

II. MUNICIPAL SOLID WASTE LANDFILL REGULATIONS

A. RCRA Subtitle D Regulation of Indian Lands

In general, RCRA subtitle D requires the federal government to issue minimum standards for disposing of solid waste that will protect human health and the environment. It also directs the federal government to provide financial assistance for implementation of solid waste programs to "states" with federally approved solid waste management plans, although this funding has not been available for a number of years.

The federal regulations apply directly to owners or operators of MSWLF units. However, EPA may approve a state (or tribal\textsuperscript{15}) permit program if that program will ensure that MSWLF units will meet EPA's minimum criteria.\textsuperscript{16} Enforcement is to be conducted by a state or tribe having an "adequate" program. EPA's primary enforcement authority will be limited to states and tribes with inadequate programs, although EPA can

\textsuperscript{15} See discussion, infra.

\textsuperscript{16} EPA expects that any MSWLF facility complying with a state or tribal program approved by EPA should be considered to be in compliance with the federal criteria. 56 Fed. Reg. 50995 (Oct. 9, 1991).
take enforcement action in states and tribes with approved programs where there is an imminent and substantial danger to health or the environment.\footnote{42 U.S.C. §6973.}

While RCRA explicitly requires states to develop permit programs to ensure that solid waste facilities comply with the federal standards, the statute does not expressly require tribes to submit permit programs for approval.\footnote{42 U.S.C. §6945(c)(1)(B).} Several environmental statutes have provisions clarifying that tribes may be delegated responsibility for implementing environmental programs on the same terms as states.\footnote{Indeed, the sole mention of tribes in RCRA is in the definition of “municipality.” In an effort to include all public entities with jurisdiction over solid waste management in the grant program, “municipality” was defined to include “city, town, borough, county, parish, district, or other public body created by or pursuant to state law with responsibility for the planning or administration of solid waste disposal, or an Indian tribe or authorized tribal organization or Alaska village or organization.” 42 U.S.C. 6903. Under this definition, tribes have been held liable in court for violations of RCRA. \textit{See} Blue Legs v. Bureau of Indian Affairs, 867 F.2d 1094 (8th Cir. 1989) (tribe -- as well as IHS -- held liable for maintaining garbage dump on reservation in violation of RCRA); \textit{see also} Washington Dep’t of Ecology v. EPA 752 F.2d 1465, 1469 (‘municipality’ included in definition of ‘person’ to which enforcement provisions apply).} Although RCRA does not contain such a provision,\footnote{See Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9626; Federal Water Pollution Control Act, 33 U.S.C. § 1377; Safe Drinking Water Act, 42 U.S.C. § 300j-11; Clean Air Act Amendments of 1990, § 107. These statutes grant the Administrator discretion as to when the tribes should be treated as states for delegation purposes and when more individualized treatment is necessary.} EPA has taken the position that under subtitle C of the statute (dealing with hazardous wastes) a partial program could be delegated to an Indian tribe.\footnote{Legislation pending before Congress proposes to amend the statute to include such a provision. \textit{See} H.R. 1267, sponsored by Representative Richardson.} Similar reasoning would support approval of tribal programs under subtitle D. Moreover, EPA has

\footnote{See Memorandum from Bertram C. Frey, Acting Regional Counsel to Valdas V. Adamkus, Regional Administrator re: Delegation of Partial RCRA Program to Menominee Indian Tribe of Wisconsin (Nov. 3, 1989). EPA has also created its own federal programs for tribal lands, adopting tribal standards. \textit{See} Phillips Petroleum v. EPA, 803 F.2d 545 (10th Cir. 1986) (upholding EPA’s promulgation of a UIC program for tribal lands that incorporated the tribe’s standards).}
delegated some other environmental programs or program functions to tribes in the past without explicit statutory authorization. 22

EPA is currently planning to extend to tribes the opportunity to submit for approval permit plans to implement and enforce the new MSWLF criteria -- in essence, to treat tribes in a similar manner as states for purposes of program approval under subtitle D. 23 EPA notes that such an approach is consistent with the agency’s existing policy for other environmental programs and with its Indian Policy, issued in 1984, which both recognizes Indian tribes as the primary sovereign entities for regulating the reservation environment and commits EPA to working with the tribes on a government-to-government basis. 24

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22 See Nance v. EPA, 645 F.2d 701 (9th Cir. 1981) (upholding EPA’s authorizing a tribe to reclassify its air quality for PSD purposes); see also 40 C.F.R. § 171.10(authorizing tribes to develop certification programs under FIFRA when the statute provided that 'states' could submit certification plans.)

23 EPA has prepared a draft of a proposed regulation entitled "State and Tribal Implementation Rule" (STIR), which describes the process for tribes to seek permit program approval. The draft identifies the technical and procedural requirements for a determination that a state or tribe’s permit program is adequate. According to EPA officials the agency expects to publish the STIR as a proposed rule in the summer of 1994. Although the STIR has not been promulgated yet, it provides guidance in interpreting statutory requirements for MSWLF program approval. See the following section for further discussion of the draft STIR.

24 EPA Draft "State and Tribal Implementation Rule" at 29.
B. General Elements of the MSWLF Program

The new subtitle D regulations apply to publicly or privately owned MSWLF units that receive household waste, and that may also receive other subtitle D waste. The MSWLF regulations apply to any lands that receive waste on or after October 9, 1993. Under the regulations, new MSWLF units (that is, landfills or lateral expansions of landfills, which have not received waste prior to October 1, 1993) are required to meet detailed design and performance standards, including liners and leachate collection systems. Both new and existing MSWLF units are required to:

- comply with specified siting criteria;
- monitor and control methane;
- control disease vectors, such as rats;
- limit and control public access to the site;
- conduct random inspections of loads deposited at the site in order to prevent disposal of hazardous wastes;
- cover waste daily with at least 6 inches of earthen material or the equivalent;
- install and operate a groundwater monitoring system;
- control water run-on and run-off;
- prepare and implement a closure and postclosure plan;
- provide financial assurance; and
- clean up contaminated groundwater.

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25 MSWLF units are defined as "a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile" as those terms are defined in the regulations. 40 C.F.R. 258.2. According to the regulations, MSWLF units may receive other types of subtitle D wastes, including commercial solid waste, nonhazardous sludge and industrial solid waste.

26 MSWLF units that received waste after October 9, 1991, but that ceased receiving by October 9, 1993 are exempt from all requirements except the installation of a final cover system that is designed to minimize infiltration and erosion. This cover system must be installed by the applicable date that is specified in the regulation. If an owner/operator fails to install cover by the deadline, the unit is subject to all regulatory requirements. 40 C.F.R. 258.1(d)(2).
Exemptions

When EPA published its MSWLF regulation in 1991, the agency provided for certain exemptions from the MSWLF criteria. The original rule allowed an exemption from the design and groundwater monitoring requirements for certain specified small MSWLF units. This exemption was successfully challenged in court,\(^{27}\) and as a result EPA has removed the groundwater monitoring exemption provision. The regulations now provide for an exemption from only the requirements relating to design of the MSWLF unit. This means that new landfills that qualify for the exemption are not required to be built to meet the specific construction (composite liner and leachate collection system) or performance (groundwater contamination) criteria specified in the regulations.

This exemption may be granted to municipal solid waste units that meet the "small landfill exemption," defined as follows: (1) the unit must receive fewer than twenty tons of waste per day, (2) there must be no evidence of ongoing groundwater contamination, and:

(3)(a) the unit must serve a community that experiences an annual interruption of surface transportation of at least three months (for example, certain Alaska communities);

or

(3)(b) the unit must serve a community with no practicable waste management alternative that is located in an area with less than or equal to 25 inches of annual precipitation.

Much of the western United States (not including eastern Minnesota, eastern Oklahoma, northern California or the Pacific Northwest) receives less than or equal to 25 inches of

\(^{27}\) Sierra Club v. U.S. Environmental Protection Agency, 992 F.2d 337 (D.C. Cir. May 7, 1993). EPA is studying potential groundwater monitoring alternatives for small communities, and the agency plans to hold public hearings on this issue.
annual precipitation. Therefore, this exemption could apply to a substantial percentage of small MSWLF units on Indian lands, since many Indian lands are located in these low rainfall areas. According to EPA, a tribe would need to document the basis for the exemption, and place this information in the operating record.

The small landfill exemption does not affect RCRA’s prohibition of open dumps.\textsuperscript{28}

\textit{Effective Dates}

The general effective date for compliance with the new MSWLF regulations is October 9, 1993. However, extensions have been provided for particular regulatory requirements or for certain types of landfills.

- **MSWLF units receiving less than 100 Tons Per Day (TPD).** For such units that (1) are not on the Superfund National Priorities List and (2) are located on Indian lands or in a state that has submitted an application for permit program approval by October 9, 1993, the general effective date for the MSWLF regulations is April 9, 1994.

- **MSWLF units granted the "small landfill" exemption (described above).** For these units, the general effective date of any applicable requirements, such as the financial assurance requirements, is October 9, 1995.

- **MSWLF units receiving flood-related wastes from the 1993 Midwest floods.** For these units, the general effective date of the regulations is no later than October 9, 1994.

\textsuperscript{28} 42 U.S.C. §6945(a). According to the statute, an "open dump" is a site where solid waste is disposed; that is not a sanitary landfill which meets EPA general criteria for protecting health and the environment. 42 U.S.C. §6903(14). These general criteria relate to disease control, and to adverse effects on groundwater, air and endangered species. 40 C.F.R. 257.2.
· **Financial Assurance Requirements.** The effective date of the financial assurance
demands is April 9, 1995, except that for units meeting the small landfill exemption, the
effective date is October 9, 1995.

· **Groundwater Monitoring Requirements.** The effective date for these
requirements is between October 9, 1994 and October 9, 1996, depending on the unit’s
proximity to a drinking water source.

### III. IMPLEMENTATION OF MSWLF REGULATIONS IN INDIAN COUNTRY

Given that the stringent standards in the MSWLF regulations apply to solid waste
sites in Indian country, who will implement and enforce these standards? This section
reviews the legal doctrines governing environmental regulatory jurisdiction over Indian lands,
and then describes EPA’s current policy for approving tribal MSWLF permit programs and
for implementing and enforcing the new standards in the absence of an approved tribal
program.

#### A. Regulatory Jurisdiction over Lands in Indian Country

A threshold task in evaluating the legal bases for implementing and enforcing solid
waste management regulatory programs in Indian country is to determine what
governmental entity has, or may have, jurisdiction over Indian lands. This is a complex
matter involving patterns of land ownership, trusteeship, and occupation. Indian lands are
not simply unified reservations with clear exterior boundaries around lands owned only by
the tribe.\textsuperscript{29} While some reservations conform to this pattern, many consist of a "checkerboard" of federal land, tribal land, member-owned land, and non-Indian land.

The checkerboard pattern of land ownership on many reservations is the legacy of federal laws enacted during the "allotment" period of federal policy, which began in the late nineteenth century.\textsuperscript{30} In the General Allotment Act of 1887 (Dawes Act) Congress adopted a comprehensive policy of trying to assimilate reservation Indians into the larger American society by breaking up tribal landholdings and allotting parcels of land to individual Indians. The allotment policy was carried out through numerous acts of Congress and agreements with tribes that applied to specific reservations, with some reservations escaping the application of the policy altogether. Although the individual allotments were subject to federal restraints on alienation for a term of years (typically 25 years), when the trust period expired the allotments became both freely transferable and subject to state taxation. This is one way in which the allotment policy resulted in land passing out of

\textsuperscript{29} For purposes of this report, the term "Indian lands" means and includes Indian reservations, allotments, and Indian communities under federal jurisdiction and protection. In another context, Congress has defined "Indian country" as:

(a) all land within the limits of any reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation,

(b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of the State, and

(c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.


Indian ownership. The allotment policy also resulted in the alienation of Indian land by the practice of treating tribal lands as "surplus" after allotments had been made to eligible tribal members, and making these "surplus" lands available to non-Indians through sale or homesteading. The Supreme Court upheld allotment legislation as constitutional despite the involuntary conversion of tribal property into individual property without compensation to the tribe. 31

After nearly 90 million acres of land had passed out of Indian ownership, Congress put an end to the allotment policy through the enactment of the Indian Reorganization Act of 1934. This Act marked a fundamental shift in Indian policy away from forced assimilation and toward support for tribal self-government. In addition to provisions recognizing tribal powers of self-government and encouraging tribes to adopt written constitutions, the IRA prohibited future allotments and provided that federal restraints on the alienation of existing allotments would not expire but rather would continue in effect.

Against this historical background, the current patterns of land ownership within reservation boundaries may include several permutations, including:

- lands owned outright ("in fee") by non-Indians and by Indians who are not members of the tribe that exercises governmental authority over the reservation;
- allotted lands held by individual tribal members in federal trust (or subject to a federal restraint against alienation);
- lands owned outright ("in fee") by tribal members;

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lands held by the United States in trust for the tribe ("tribal trust lands") or subject to a federal restraint on alienation;

lands owned by the federal government or by a state; and

Indian lands over which rights-of-way have been granted pursuant to federal law.

Some lands held in trust (or subject to a restraint on alienation) by the tribe or individual Indians are leased, and the lessees include non-Indian individuals and non-Indian owned corporations.

Whether communally held by a tribe or individually held by Indian allottees, most Indian land is held in trust. The United States holds the legal title while the tribe or individual allottees hold the beneficial interest, which is quite similar to the proprietary interest of a private landowner.

Jurisdiction over lands within Indian reservations is divided among three sovereign governments -- federal, state, and tribal -- that have a range of exclusive and overlapping jurisdictions. Indian tribes' authority over tribal lands and over their own members is relatively clear. However, the extent to which states and tribes may exercise exclusive or concurrent jurisdiction over non-members or non-Indians within the exterior boundaries of a reservation is less clear and depends upon a variety of legal and factual determinations. The following sections delineate the jurisdictional authority of the federal government, tribes, and states, respectively, over activities occurring on Indian lands.

1. Federal Authority

Federal power over Indians is plenary and derives from several sources. First, the Constitution grants Congress the power to regulate commerce with tribes and the President
the power to make treaties. Second, the Property Clause of the Constitution also confers indirect power over Indians -- the federal government holds much reservation land in trust for tribes and individuals. Finally, federal power derives from the trusteeship doctrine, formulated by the courts.

In general, absent a treaty or federal statute to the contrary, federal laws of general applicability (such as environmental laws) apply on Indian lands. Accordingly, federal environmental laws apply on reservations, and may be administered and enforced by federal officials.

The trusteeship doctrine circumscribes the exercise of federal power. The federal government is held to strict fiduciary standards in its interactions with tribes. According to the leading treatise on Indian law, "federal action toward Indians as expressed in treaties, agreements, statutes, executive orders, and administrative regulations is construed in light of the trust responsibility." Among the consequences of this responsibility is the general rule that ambiguities in federal statutes are to be resolved in favor of the Indians. Also, where compliance by a tribe is required, the doctrine may require the federal government to assist the tribe in meeting its obligations.

33 U.S. Constitution, art. IV, §3.
34 See Cherokee Nation v. Georgia, 30 U.S. (5 Pet.) 1, 17 (1831); see also Santa Rosa Band of Indians v. Kings County, 532 F.2d 655, 660 (9th Cir. 1975), cert. denied, 429 U.S. 1038 (1977).
36 See, e.g., Phillips Petroleum v. EPA, 803 F.2d 545 (10th Cir. 1986).
Recognition of tribal sovereignty is also an important element of the exercise of discretionary federal jurisdiction. While federal Indian policy has for two centuries vacillated between support for a measured separatism and forced assimilation, modern policy has stressed self-determination. The Indian Self-Determination and Educational Assistance Act endorses a general policy of self-determination and recognizes that a transition from federal administration of programs to tribal administration is the most effective means of fostering self-determination.\(^{38}\)

The same policy is reflected in EPA's Indian Policy of November 1984. Promising to work with tribes on a "government-to-government" basis, the EPA Indian Policy looks to the tribes to play a lead role in environmental affairs on Indian lands and contemplates tribes' assuming many responsibilities traditionally carried on by states. EPA jurisdiction, while plenary, must recognize to the extent possible a role for tribes.\(^{39}\)

The implication of these doctrines for implementation and enforcement of MSWLF program requirements are (1) that federal power reaches activities on Indian lands, (2) that federal authority must be exercised for the benefit of the tribe and tribe members to the extent possible, and (3) that the tribe should be authorized to assume responsibility to the extent authorized by law.

\(^{38}\) 25 U.S.C. §§ 450a-h; see also President’s 1983 Statement on Indian Policy. On April 29, 1994, President Clinton held a meeting with tribal leaders during which he reaffirmed the federal government’s commitment to self determination for tribal governments. Following the meeting, the President signed a government directive requiring all federal agencies to remove barriers to working directly with tribes and to consult with tribes before taking any actions affecting tribal trust resources.

\(^{39}\) The Draft State and Tribal Implementation Rule takes this approach by proposing to recognize tribal programs as "adequate" for purposes of implementing the MSWLF rule.
2. Tribal Authority

Tribes’ authority to regulate activities on Indian lands derives primarily from their inherent sovereign powers. Tribes retain those attributes of national sovereignty that have not been ceded by treaty, removed by Congressional act, or divested by courts as inconsistent with the federal government’s assertion of sovereignty. Tribes therefore retain authority to regulate environmental matters on reservations. Tribal regulatory authority is preeminent over tribal members and tribal land.\textsuperscript{40} Tribal regulatory authority may not be inconsistent with federal law, but may impose duties that are more stringent than federal law.

It is more difficult to ascertain when tribal jurisdiction may operate to the exclusion of state jurisdiction. In general, tribes may exclude states’ jurisdiction over activities on Indian lands on three bases: First, state jurisdiction can be excluded when the federal government directly regulates (thus preempts the state) and/or delegates such preemptive federal authority to tribal governments. Second, the exercise of tribal self-governmental functions may bar state jurisdiction over activities that are integrally related to self-government. Finally, tribes have the power to exclude non-members from tribal lands and, in many instances, to condition non-members’ entry on compliance with tribal laws; in some instances this power may preclude some exercises of state jurisdiction. All three of these bases are relevant to tribal enforcement of the MSWLF regulations on Indian lands.

\textsuperscript{40} \textit{See} New Mexico v. Mescalero Apache Tribe, 103 S.Ct. 2378, 2384 n. 12 (1983).
Several problem areas often arise in connection with assertions of tribal jurisdiction. These include: (1) what authority does a tribe have to regulate the activities of non-members? and (2) what is the extent of tribal jurisdiction to prosecute criminal offenses?

Authority to Regulate the Activities of Non-Members

As distinct political communities, tribes may assert regulatory authority over non-members' activities when they occur on tribal-owned land. In this case, tribal jurisdiction excludes state jurisdiction.

Under some circumstances, tribes may also assert authority over non-members' activities on lands owned outright ("in fee") by non-members. Here, the extent of tribal jurisdiction is far less clear. In Montana v. United States,\textsuperscript{41} the Supreme Court considered the scope of tribal authority over hunting and fishing by non-Indians on Crow reservation lands owned by non-Indians in fee. The Court found no basis for tribal jurisdiction over non-member activities on private lands in the relevant treaty terms, noting that the tribe had historically accommodated Montana's previous near-exclusive regulation of hunting and fishing on privately owned fee lands. The Court further found that the "regulation of hunting by non-members of the tribe on lands no longer owned by the tribe bears no clear relationship to tribal self-governance or internal relations."\textsuperscript{42} Absent these bases for excluding state jurisdiction, the Court found the Crow regulation (prohibition) of non-

\textsuperscript{41} 450 U.S. 544 (1981).

\textsuperscript{42} 450 U.S. at 564.
member hunting and fishing on private lands unlawful given Montana’s assertion of jurisdiction.\textsuperscript{43}

Nevertheless, the Montana decision expressly recognized that some exercises of tribal authority over non-members on reservations are authorized. First, the case explicitly recognized and reaffirmed the validity of tribal jurisdiction over activities of non-members on lands belonging to the tribe or held in trust by the United States for the tribe. Second, the Court noted that:

\begin{quote}
Indian tribes retain inherent sovereign power to exercise some forms of civil jurisdiction over non-Indians on their reservations, even on non-Indian fee lands.\textsuperscript{44}
\end{quote}

The Court identified two circumstances for the exercise of this kind of jurisdiction over non-members on fee lands: (1) the existence and conditions of a commercial relationship; and (2) non-member activities on fee lands directly affecting the well-being of the tribe. The Court said:

\begin{quote}
A tribe may regulate, through taxation, licensing, or other means, the activities of non-members who enter consensual relationships with the tribe or its members, through commercial dealings, contracts, leases, or other arrangement.... A tribe may also retain inherent power to exercise civil authority over the conduct of non-Indians on fee lands within its reservation when the conduct threatens or has some direct effect on the political integrity, the economic security, or the health or welfare of the tribe.\textsuperscript{45}
\end{quote}

\textsuperscript{43} The Court relied in part on a factual finding that the Crow Tribe had not been engaged in managing fish and wildlife resources on non-Indian lands within its Reservation. In a later case the Supreme Court upheld tribal regulatory authority over reservation hunting and fishing including a small area of fee lands, exclusive of the state, where the tribe had established, with federal support, a wildlife management program. \textit{New Mexico v. Mescalero Apache Tribe}, 462 U.S. 324, 338-44 (1983).

\textsuperscript{44} \textit{Id.} at 565 (emphasis added).

\textsuperscript{45} \textit{Id.} at 565-66.
Either of these bases may provide sufficient authority for a tribe to regulate non-member solid waste landfills on private (fee) lands within the boundaries of the reservation. The first would clearly authorize regulation under a tribe’s contract with a commercial waste disposal firm, for example. The second would authorize regulation where management of a facility located on fee lands was directly affecting the health and welfare of the tribe and its members. Under the identified *Montana* bases, federal courts have affirmed such things as tribal authority to impose taxes on non-members, and to regulate activities of non-members on fee lands with respect to tribal health, building, and safety codes.

The Supreme Court has held, however, that under some circumstances, a tribe lacks authority over non-member activity on lands owned in fee. In *Brendale v. Yakima Indian Nation*, a 1989 case challenging the applicability of tribal zoning regulations, the Court was deeply divided in both its rationale and holding. By a 5-4 vote, the Court held that the tribe *has* exclusive zoning authority over non-member fee lands in areas of the reservation held almost entirely in trust for the tribe, and by a 6-3 vote that the state (and not the tribe) has exclusive zoning authority over non-member fee lands in an area within the reservation owned largely by non-members. Although the Court’s decision raised new uncertainties about the scope and extent of potential tribal jurisdiction over activities occurring on non-


47 See e.g., *Confederated Salish and Kootenai Tribes v. Damen*, 665 F.2d 951 (9th Cir.); *Cardin v. De La Cruz*, 671 F.2d 363 (9th Cir. 1982).

member fee lands, it did not impair tribes’ exclusive jurisdiction over activities on tribal lands and allotted lands held in trust for tribe members. 49

To summarize: (1) Tribes have jurisdiction over non-members operating on tribal lands or trust lands. (2) Tribes have jurisdiction over non-members operating on private (fee) lands if jurisdiction is imposed as the condition for a commercial relationship or if it directly affects the self-government, stability, health, or welfare of the tribe. (3) A tribe may have jurisdiction if the tribe has been delegated such jurisdiction under a federal scheme that has preempted state jurisdiction, or in cases where a state has not successfully demonstrated its jurisdiction. 50

**Criminal Jurisdiction of Tribes**

Tribal criminal jurisdiction is limited. In 1978, the Supreme Court held that Indian tribes had been implicitly divested of criminal jurisdiction over non-Indians. 51 In 1990, the Supreme court held that tribes also had been implicitly divested of criminal jurisdiction over nonmember Indians, 52 but Congress subsequently overruled the Court by enacting a law expressly recognizing "the inherent power of tribes to exercise criminal jurisdiction over all

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49 It also did not abrogate the Montana exceptions. A subsequent Supreme Court case suggests that the Montana analysis remains intact. Duro v. Reina, 495 U.S. 676, 110 S. Ct. 2053, 109 L. Ed. 2d 693 (1990).

50 The MSWLF program does not appear to be a program where the federal government has preempted state authority. Thus, tribes may not be able to oust state jurisdiction on the theory that the tribe is the agent of the U.S. government. Accordingly, the issue may be whether the state has authority to assume jurisdiction over certain lands within a reservation.


Indians."\textsuperscript{53} Even when tribes do have criminal jurisdiction, Congress has limited the
punishment that tribes can impose to no more than one year imprisonment and a fine of
$5,000.\textsuperscript{54} These limitations on tribal criminal jurisdiction may have some relevance for the
implementation of MSWLF programs by tribes.\textsuperscript{55}

3. State Authority

With federal or tribal law controlling on reservations, subject to the limitations noted
above, state law is generally inapplicable within reservation borders unless Congress has
decreed otherwise.\textsuperscript{56} Where a state does assert authority, preemption of state authority
is determined by using a balancing test which weighs state, federal, and tribal interests
against a "backdrop" of tribal sovereignty.\textsuperscript{57} Under this analysis, the Supreme Court has


\textsuperscript{54} 25 U.S.C. § 1302. Congress has asserted federal jurisdiction over certain listed felonies committed
within Indian country. 18 U.S.C. §1153. Tribes may exercise concurrent criminal jurisdiction over acts that
are felonies under federal law. \textit{See} United States v. Wheller, 435 U.S. 313 (1978) (holding that double
jeopardy does not prevent the United States from prosecuting criminal conduct that had previously been
prosecuted the tribe.)

\textsuperscript{55} A bill pending in Congress, H.R. 1267, provides that, for purposes of solid waste program approval,
tribes "shall not be required to exercise criminal jurisdiction" in order to demonstrate that they are able to
carry out enforcement responsibilities in as protective a manner as states. The federal Safe Drinking Water
Act contains similar language.

In addition, EPA's preamble discussions of treatment of tribes as states for the Clean Water Acts's
NPDES and section 404 programs, EPA has determined that limitations on tribal criminal jurisdiction do not
prevent a tribe from assuming primary authority for either NPDES or section 404. \textit{See} 58 Fed. Reg. 8172,
8179-80 (Feb. 11, 1993 (section 404 regulations); 58 Fed. Reg. 67966, 67978 (Dec. 22, 1993) (NPDES
regulations).


Cabazon Band of Mission Indians}, 107 S.Ct. 1083, 1092 (1987), the Supreme Court articulated the balancing
test:
upheld state authority primarily in allowing state taxation of non-Indians on the reservation. 58 Outside the tax realm, the Court struck down California's assertion of regulatory authority over bingo on reservations. 59

In the environmental context, two cases have touched on the issue of state jurisdiction over reservations. In Washington v. EPA, 60 the Court of Appeals for the Ninth Circuit considered the question under RCRA. When the State of Washington sought approval of its subtitle C program, EPA denied the part of the application seeking to regulate hazardous waste-related activities on Indian lands. Finding that Washington had no jurisdiction on Indian lands, the Ninth Circuit upheld EPA's interpretation of RCRA as not conferring state jurisdiction over Indian lands. 61 In Nance v. EPA, 62 the court found that states lack jurisdiction to redesignate air quality over Indian lands under the Clean Air Act, even though the Act delegates initial responsibility to the states for regulating air pollution within their entire geographic area.

State jurisdiction is preempted...if it interferes or is incompatible with federal and tribal interest reflected in federal law, unless the state interests at stake are sufficient to justify the assertion of state authority.... The inquiry is to proceed in light of traditional notions of Indian sovereignty and the congressional goal of Indian self-government, including its "overriding goal" of encouraging tribal self-sufficiency and economic development.


60 752 F.2d 1465 (9th Cir. 1985)

61 The court declined to address the State of Washington's jurisdiction over non-Indians in Indian country because Washington did not present that program to EPA. When the state did present that program to EPA, EPA nevertheless retained federal jurisdiction for regulation of hazardous waste management activities on Indian lands. See 51 Fed. Reg. 3782, 3783 (Jan. 30, 1986).

62 645 F. 2d 701 (9th Cir. 1981).
B. EPA Policy On Tribal Implementation of the MSWLF Permit Program

1. Introduction

Although RCRA does not explicitly provide for approval of tribal permit programs, EPA has determined that such a policy is reasonable in light of the goals and purposes of the statute as a whole, as well as the general principals of tribal sovereign authority outlined above. Therefore, EPA is prepared to approve tribal MSWLF programs. Tribes will enforce the MSWLF criteria on Indian lands with approved programs. EPA's direct enforcement powers in these areas will be limited to enforcement against owners and operators whose actions present an imminent endangerment to public health or the environment. 63

In states (and presumably tribes) without adequate MSWLF programs, RCRA §4005(c)(2)(A) provides for direct federal enforcement by EPA using the authority of §3007 and §3008. 64 These authorities include inspection, information gathering, compliance orders, administrative and judicial penalties, permit revocations, civil remedies, and criminal remedies. However, EPA will have authority to enforce the federal standards on Indian lands once it has determined that the program is inadequate. 65

In addition to this federal government enforcement, RCRA subtitle D authorizes citizens to file suit to bring about compliance with the new standards. The Blue Legs

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64 42 U.S.C. §§ 6927, 6928.

decision held that such suits can be brought against tribes who own or operate sites that are not in compliance with the regulations.\textsuperscript{66}

2. **Federal Approval of Tribal MSWLF Programs**

In 1993, EPA drafted a "State and Tribal Implementation Rule" (STIR), which it intends to propose in 1994. The STIR sets out the agency’s criteria for approving state and tribal permit programs for MSWLFs, to ensure that those programs satisfy the new subtitle D regulations.

According to the draft STIR, tribes may demonstrate the existence of an adequate permit program in the same manner as a state. Unlike states, however, tribes may but are not required to submit permit programs for approval. The draft STIR, alternatively, allows states to demonstrate that they can ensure MSWLF compliance on Indian lands; the agency notes, however, that in doing so, a state would have to meet a high standard in demonstrating its authority to regulate MSWLFs on Indian lands. In the event that no adequate tribal or state permit program is demonstrated, EPA could enforce the MSWLF regulations directly after determining that the program is inadequate.

In order to demonstrate an adequate permit program, tribes are first required under the draft STIR to show authority over the regulated activity, in light of the case law as reflected in the \textit{Montana} and \textit{Brendale} decisions. In this regard, EPA’s draft proposed rule sets out an "interim operating rule" that requires a factual showing by the tribe "that the potential impacts of regulated activities of non-members on the Tribe are serious and

\textsuperscript{66} The court reasoned that, by including tribes in the definition of "municipality" and by including municipality in the definition of "person," Congress had intended to waive tribal sovereign immunity for purposes of citizen suits. See 867 F.2d 1094 (8th Cir. 1989). The 8th Circuit is the only Circuit in which this issue has been ruled on.
substantial."\(^{67}\) The agency expects that tribes will normally be able to meet this standard, and avoid "checkerboarding" of reservations, since the activities regulated under RCRA generally have substantial impacts on health and welfare. Indeed, EPA may use general information about the impacts of solid waste activities to supplement the showing required by a tribe in a particular case. In effect, the tribe would need to show that there is or may be solid waste within the meaning of Subtitle D on Indian Lands and that the Tribe or Tribal members could be subject to exposure to that waste.... [and that the] activities of non-Indians regarding that waste would have a serious and substantial effect on the health and welfare of the Tribe.\(^{68}\)

In general, EPA has integrated into the draft STIR the criteria used in other environmental statutes to evaluate the adequacy of tribal programs. The tribe must be federally recognized, have a government that exercises substantial governmental powers and duties, have adequate civil regulatory jurisdiction, and be reasonably expected to have the capability to manage the MSWLF permit program.

The basic requirements for an adequate program are as follows:

- permitting procedures;
- compliance monitoring;
- enforcement authority; and
- opportunity for public intervention in civil enforcement proceedings.

Generally speaking, tribes must meet the same criteria for approval that are required of states. One notable exception is that tribes who own or operate an MSWLF remain subject to the financial assurance requirements. (State owners/operators of landfills are exempted

\(^{67}\) Draft State and Tribal Implementation Rule, 39.

\(^{68}\) Draft State and Tribal Implementation Rule, 43.
from this requirement under the regulations.) Thus, tribes are treated like local
governments for purposes of the financial assurance requirements. 69

While the MSWLF criteria function as minimum standards that apply in the absence
of state or tribal programs, EPA seeks to offer states and tribes some flexibility in designing
their programs to ensure compliance with the new regulations. For example, EPA notes in
its draft STIR that while states and tribes may adopt the federal standards, they also "have
the flexibility of demonstrating that their own design standards, performance standards or
a combination of those two approaches ensures compliance with" the regulations, given site-
specific conditions. 70

All states have now submitted a request for program approval to EPA, only two
tribes -- the Cheyenne River Sioux Tribe and the Campo Band of Mission Indians -- have
submitted complete applications to EPA. Several other tribes are in the process of
submitting applications.

On April 7, 1994, EPA published a notice of tentative approval of the application of
the Cheyenne River Sioux Tribe. 71 In making this tentative determination, EPA stated that
(1) the tribe has adequate authority over the activities regulated by the permit program
(including activities of non-Indians on fee lands within the reservation); and (2) the tribe has

69 EPA recently proposed an amendment to the MSWLF regulations with respect to local governments
that own and operate landfills. The proposal would add a self-implementing financial assurance test; if the
government passes the test, it does not need to have a third party assure that it can meet the financial

70 Draft State and Tribal Implementation Rule, 7.

adequate authority to manage a MSWLF permit program and adequate authority to issue permits to ensure compliance monitoring and enforcement.

On May 11, 1994, EPA also published a tentative adequacy determination of the application of the Campo Band of Mission Indians.\textsuperscript{72}

IV. IMPLICATIONS OF MSWLF REGULATIONS FOR TRIBES

A. Barriers to Implementing Solid Waste Programs in Indian Country

Where there is no federally approved tribal MSWLF permit program, owners and operators of landfills in Indian country must nevertheless comply with the standards contained in the regulations, by the deadlines noted above. MSWLF units failing to meet these new standards are deemed open dumps, which are prohibited by RCRA. Civil and criminal penalties apply, as do cleanup and closure responsibilities. In the \textit{Blue Legs} decision, the court found that tribal governments could be sued under RCRA to enforce this prohibition.

A number of factors have, in the past, restricted the ability of tribal governments to address solid waste issues effectively. These will continue to be important as tribes consider the development of new solid waste management programs to comply with the federal standards. Few, if any, landfills currently used for the disposal of municipal solid waste in Indian country meet the new, stricter standards. The MSWLF regulations will require the closing or upgrading of existing facilities.

\textsuperscript{72} 59 Fed. Reg. 24427.
Perhaps the most significant barrier to improved solid waste management on Indian lands is the inadequacy of financial resources. For example, tribes need millions of dollars to close open dumps and to close existing landfills that do not meet the new RCRA standards. Most tribes lack not only the financial, but also the technical expertise necessary to develop new solid waste management initiatives. Many tribal, federal and state officials point out that most tribes do not have the infrastructure necessary to organize and operate large-scale disposal systems. Where tribes do not operate landfills, they will incur increasingly large costs associated with collection and disposal at solid waste management sites that must comply with the new standards.

Moreover, many tribes lack the resources necessary to create the tribal governmental programs for implementing and enforcing solid waste regulations. While some solid waste management functions could conceivably be contracted out, enforcement and other governmental functions could not be handled in this manner. According to a recent survey by the National Tribal Environmental Council, more than 50 percent of 84 tribes who responded have no environmental program at all.73 Tribes that do have environmental programs may be without a solid waste officer, may lack adequate laboratory facilities and may have only limited monitoring capacity.

Financial and technical assistance to tribes is potentially available from a number of federal agencies, including the EPA, IHS, Administration for Native Americans (within the Department of Health and Human Services), Bureau of Indian Affairs (BIA), and the Department of Housing and Urban Development (HUD). However, it is widely

acknowledged that existing regulatory and assistance programs for providing financial and technical resources for tribal solid waste management activities suffer from a general lack of funding. As noted earlier, legislation has been introduced in Congress to provide federal funding for closure of open dumps as well as for implementation of federally approved tribal solid waste programs.

Although EPA is so far only minimally involved in enforcement and regulatory activities relating to MSWLFs, its technical assistance programs can provide some help to tribes for managing their solid waste problems. EPA’s Office of Solid Waste funds the EPA regional offices to provide technical training or assistance to tribes, and to provide a variety of other solid waste outreach, education, training, and educational activities, including a few projects which help establish pilot recycling programs. Overall, however, EPA’s solid waste activities are severely restricted by limited funding and staffing levels. Under current programs, the Agency can provide only piecemeal assistance to a small number of tribes in selected areas, and can provide direct financial assistance to an even smaller number.

In the 1980s, the Indian Health Service surveyed 450 waste disposal sites and helped tribal authorities in the preparation of project documents for solid waste facilities funding

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74 According to Senator McCain, testimony before the Senate Committee on Indian Affairs during the past few years revealed "serious deficiencies in Federal efforts to assist tribal governments." Congressional Record, S4283 (April 1, 1993).

75 See S.720, the Indian Lands Open Dump Clean-Up Act of 1993, sponsored by Senators McCain, Inouye and Reid; see also, H.R. 1267, sponsored by Representative Richardson. However, the prohibition on open dumps and the new MSWLF standards still apply whether or not these are enacted or fully funded.

through HUD's Community Development Block Grant Program. The IHS also provided ongoing technical assistance to tribes, helping to create pilot projects for recycling and landfill monitoring, developing awareness of the impacts of solid waste decisions among tribal authorities and reservation residents, aiding tribes in identifying needed resources (such as equipment and contractors) for waste management, working to integrate tribal waste into the disposal system of the surrounding community, and even providing financial assistance for the purchase of "green boxes" and for landfill improvements. Despite the successes of several of these pilot assistance programs, IHS assistance efforts continue to address only a small fraction of Indian solid waste management and disposal needs.

The IHS places relatively low emphasis on its solid waste planning and management programs in comparison with other public health efforts. The IHS has spent almost all of its limited amount of infrastructure funding on water and sewer projects.

This pattern of risk-prioritization and spending seems likely to continue. A 1990 report issued by the IHS and the Department of Health and Human Services identified a "priorities list" of 2000 sanitation projects, the vast majority of which deal with safe drinking water. IHS and HHS agreed that, "[p]rojects for solid waste disposal facilities, for small, rural isolated communities, are of very low priority on the basis of immediate health

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77 IHS, Responses to the Select Committee on Indian Affairs, August 1989.

78 Since the passage of the Indian Sanitation Facilities Act of 1959, the IHS' Indian Sanitation Construction Program has spent over $870 million on sanitation programs serving over 200,000 Native American homes; virtually all of this money has been spent on a relatively-successful water quality and sewage program. Annual Report: Sanitation Facilities Deficiencies for Indian Homes and Communities, prepared by the Department of Health and Human Services and the Indian Health Service for the President and Congress, March 1990.
effects. IHS officials attribute this prioritization to both federal statutory mandates and the priorities expressed by tribes themselves.

In addition to the lack of financial resources and the general lack of program infrastructure facing many tribes, geography frequently limits a tribe’s solid waste management options. The sparsely populated and rural nature of much of Indian country creates problems for the organization of solid waste programs. Because a small number of homes are often scattered over a large area, waste collection is usually difficult and often virtually cost-prohibitive.

The experience of the White Earth Reservation in Minnesota demonstrates the effects these land use patterns can have on waste management. The 1986 AIO study indicated that this reservation’s low population density, together with estimates that waste collection would cost up to $120 per household annually, prevented tribal authorities from adopting a plan for solid waste disposal and led to the creation of between 50 and 80 small, open dump sites on the reservation. At the same time, low population density creates troubling enforcement dilemmas: IHS officials expressed concern that strict enforcement of RCRA and prosecution of tribes with out-of-compliance landfills would only lead to a proliferation of open dumps in desolate reservation areas.

79 IHS and HHS, *Annual Report*, p. 2


81 Narrative profile of White Earth Reservation, in EPA/AIO report.
B. Tribal Programs and Solid Waste Management Options

Against this background of inadequate financial and technical resources and geographic limitations on solid waste management options, tribes historically have placed less emphasis on solid waste programs than on other activities. Given many competing demands on tribal resources, tribal authorities may find it hard to justify greater expenditures on solid waste projects. Nevertheless, most tribal authorities responding to the AIO/EPA survey did express concern over the problem. Respondents classified solid waste issues -- along with water quality, sewage treatment, and hazardous waste management and disposal -- as among the most pressing environmental problems facing Indian communities.\(^8^2\)

Many tribes have begun to implement solid waste plans, although few have effective enforcement or monitoring programs in place yet. In recent years, some reservation governments have attempted to control solid waste problems through ordinances which ban open dumping and littering, regulate landfill siting and operation, and even impose fines and penalties for violations. Some tribes, such as the Menominee Tribe of Wisconsin, have developed a broad regulatory approach to solid waste, coordinated with the state's county-based system. In 1987, the tribe passed a solid waste management ordinance and prepared a comprehensive plan for management of the tribe's solid waste.

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82 Solid waste problems were identified as an environmental issue more frequently than any other problem except for water quality, with 75% of the questionnaires returned making at least some mention of disposal or management problems. 44% of tribal authorities cited solid waste as a "major" environmental problem, while two in five labelled it as a "growing" problem. Some cited it as both. See Executive Summary of the EPA/AIO report (p. vii), as well as the ranking of tribal environmental priorities on p. 51.
Other tribes are in the process of creating broad environmental and solid waste programs. The Red Lake Band of Chippewa Indians is currently developing an environmental infrastructure to provide comprehensive environmental regulatory authority and standards. The tribe received a grant from EPA to develop a solid waste management plan. The White Mountain Apache Tribe also has recently stepped up its environmental management efforts. The tribe has hired an environmental planner, a new position funded through an EPA multi-media grant.

The decision by a tribe to apply for MSWLF permitting program approval will depend in part on the adequacy of the tribe’s resources and infrastructure for doing so. Whether or not tribes apply for program approval, however, most face the task of developing plans for safely disposing of the reservation’s solid waste. The following paragraphs describe some of the initiatives that are being considered or implemented by tribes around the country.

1. Independent Tribal Solid Waste Management Options

Some tribes have begun to address their solid waste problems through independent approaches -- that is, plans which are not based on cooperative relationships with other governments or with commercial waste companies, and which address only reservation-generated solid waste.

\textit{Tribal Landfills}

A principal option is the construction of a new landfill on the reservation to handle only solid waste that is generated by the tribe. This approach has the advantage of ensuring greater tribal autonomy and control in managing its solid waste, while addressing the
problem in a manner that can utilize state-of-the-art technology to meet current federal environmental standards. Potential problems with this approach are the expense, technical expertise and infrastructure required to construct and manage such a facility.

The White Mountain Apache tribe recently was awarded a HUD Community Development Block Grant, which will be used in conjunction with BIA, IHS and tribal funds, to construct a new landfill that will accept only wastes from the tribe and from federal facilities located on the reservation. The tribe now expects to be able to comply with its October, 1995 deadline under the new MSWLF regulations. In conjunction with the construction of the landfill, the tribe is working with the BIA and IHS on closure of existing sites. The federal CDBG funding is critical to this project.

The Red Lake Band of Chippewa is also exploring the possibility of constructing its own landfill using state-of-the-art technology. However, the tribe has not yet obtained funding for the project, and it is uncertain whether this will be a viable alternative in the near term.

Recollecting

Recycling represents another possible strategy for dealing with solid waste generated by a tribe. Some tribes have worked with IHS or EPA to develop pilot recycling programs. The Bad River Band of Chippewa in Wisconsin has set up a recycling project and has reduced the waste stream by 23 percent. However, only a small number of tribes nationally have any type of program for aluminum, paper, or copper recycling. The high

83 Testimony of Gary Hartz, IHS, Hearing Before the Senate Select Committee on Indian Affairs, 30 (May 14, 1992).

84 EPA/AIO, p. 13.
unit cost of shipping recyclable items to markets may make such projects financially nonviable. It remains to be seen whether tribes can develop the organizational structure necessary for a recycling program, and whether markets for recycled goods can be created in or around reservations. The White Mountain Apache Tribe, for example, has been trying to work recycling into its solid waste plan. The tribe has developed a paper recycling project for tribal offices and is looking at aluminum can recycling. Due to the tribe’s remote location, however, the economic feasibility of this project is hindered by the distance to markets for the recyclables. Recycling alone does not account for a tribe’s remaining solid waste, which must be disposed of in accordance with the MSWLF regulations.

2. Regionalization of Solid Waste Management

Many tribes are sparsely populated and generate relatively little solid waste. This makes it difficult to achieve economies of scale in developing effective solid waste management strategies that are contained within the reservation. Moreover, patterns of land ownership for many tribes is such that non-Indian residents are interspersed with tribe members in a checkerboard fashion. This may make it more likely that the tribes would consider joint projects with neighboring governments to handle solid waste. Some tribes have begun to enter into cooperative arrangements with neighboring jurisdictions to manage their solid waste. These arrangements may include the use by tribes of existing facilities in surrounding counties or the siting of a regional facility on Indian lands.
Off-reservation transfer

A central option in this regard is transfer of the tribe's waste to an off-reservation landfill through a private hauler or construction of a transfer station. The factors stimulating the move toward off-reservation disposal differ according to the particular history and problems of each tribe. For reservations and other communities which are already fairly well-integrated into a surrounding municipality, solid waste integration has been common for the past fifty years. For other tribal authorities, inability to maintain a sanitary landfill has combined with the proliferation of open dump sites to create the impetus for off-reservation disposal. Most recently, the rising costs of landfill maintenance under expected EPA regulations and the additional liability fears created by the Blue Legs decision have forced both tribes and IHS personnel to question their traditional reliance on tribally-supported landfilling and to explore off-reservation options.

Potential problems with this approach are the large disposal fees and transportation costs that might be involved.

Tribal regional landfill

This option involves the disposal of reservation and off-reservation solid waste in a landfill located on Indian lands. Such a project might be developed jointly by the tribe and neighboring jurisdictions, and managed by the tribe. For example, the Cherokee Nation of Oklahoma owns and operates a landfill on the tribal lands, which the public (i.e., surrounding municipalities) is allowed to use. This arrangement is facilitated by the fact that land ownership is a checkerboard of tribal owned land interspersed with fee lands.
Commercial regional landfill

A regional landfill located on the reservation might alternatively be constructed and managed by a private company. This option has received considerable attention from Indian activists, environmental groups, and the national media. In some parts of the country, solid waste crises in non-Indian communities have combined with the serious economic difficulties facing tribes and the large amount of open space on reservations to produce these "cash-for-dumping-rights" swaps. Some of these schemes include plans for subsidizing disposal of tribe-generated wastes as an inducement for the siting of disposal sites on Indian lands.

Nearly all tribes have rejected such overtures by waste management companies. One notable exception is the Campo Band of Mission Indians in California. Campo Band actually initiated discussion with several waste companies about siting a landfill on the reservation as an economic development project. The tribe had already established the Campo Environmental Protection Agency and had developed tribal environmental codes and mechanisms for enforcing the codes. The tribe recently applied to EPA for MSWLF program approval.

In 1990, the tribe entered into an agreement with Mid American Waste Systems to design, build and operate a state-of-the-art landfill on the reservation. The project was approved in 1993 by the U.S. Department of the Interior. The tribe recently won a legal victory in a case brought by San Diego county, which claimed that the project did not meet federal environmental standards.
V. CONCLUSION

The new MSWLF regulations under RCRA subtitle D focus attention on the solid waste management problems currently encountered by tribes. These include a proliferation of illegal open dumps and the existence of landfills that do not meet the stricter federal standards. The issues facing tribes with respect to the implementation of the new federal MSWLF regulations include the closure or upgrading of sites; the development of new solid waste alternatives, including the development of the infrastructure necessary to manage solid waste facilities; and the question of whether to seek program approval from EPA in order to gain greater flexibility in implementing the new solid waste criteria.

Underlying all of these issues is the need for additional resources -- both technical and financial -- to carry out these tasks. The extent to which EPA can rely on tribes to implement and enforce the new federal MSWLF criteria will depend heavily on the availability of resources to develop tribal solid waste management programs. Yet, despite the existence of a trust relationship between Indian nations and the federal government, federal funding to support environmental programs in Indian country has not been sufficient to address more than a fraction of the tribes’ needs. Legislation pending in Congress would establish mechanisms for funding tribal solid waste cleanup and program development. However, it remains to be seen whether these proposals will succeed, and at what levels the new and existing programs will be funded.

In light of these resource constraints, tribes are increasingly looking to regional solid waste management as a means of developing more cost-effective alternatives. For many tribes, however, such an approach is neither feasible nor desirable for political, geographic
or economic reasons. Regardless of the particular strategy adopted by the tribe, new solid waste management initiatives will compete with other serious environmental, health and social welfare needs until funding is better coordinated and targeted directly at the development of solid waste facilities and programs in Indian country.