

Building a Self-Sustaining Tribal Solid Waste Program: Recommended Phases and Activities to Consider

Primary Tool: *Tribal Decision Maker's Guide to Solid Waste Management*

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

WHY BUILD A SELF-SUSTAINING SOLID WASTE PROGRAM?

When the new GAP Guidance was finalized in May 2013, some notable changes in allowable solid waste implementation activities were included. One of the changes is that beginning in FY18, operations and maintenance activities such as sorting, processing, staging, and transporting solid waste/recyclables will no longer be funded under the IGAP program. During the transition period of FY15 – FY17, it is important to determine your tribe's current solid waste management capacity and how it can be developed to move towards self-sustainability.

BEFORE YOU BEGIN PLANNING:

Prior to beginning your review and implementation of Phase I activities for developing an internally sustainable solid waste program, an evaluation of your tribe's readiness and current financial environment should be done to determine whether the tribe will be able to successfully pursue and set up such a program at this time. This evaluation could be done through a cost/benefit analysis where the tribe evaluates the cost and prerequisites for pursuing a self-sustaining solid waste program versus the potential to develop and maintain the program. You may want to use the [Tribal Solid Waste Costing Tool](#) below or another resource that helps you compare the costs and challenges in making this program sustainable.

Tool: Tribal Solid Waste Costing Tool

<http://www.epa.gov/region9/waste/tribal/pdf/Tribal-Solid-Waste-Program-Costing-Tool.pdf>

Section I: Elements and Sequence for Building a Self-Sustaining Tribal Solid Waste Management Program

PHASE I

Develop qualified personnel

- Establish a tribal waste program staffing plan for managers and staff
- Train managers and staff in baseline knowledge and skills related to RCRA (become familiar with the major goals, program and requirements of Subtitle D; the national EPA structure for implementing RCRA Subtitle D; and the EPA regional personnel and organizations)
- Provide solid waste personnel with planning, code writing, and administration training
- Obtain landfill operator training, transfer station operator training
- Instruct staff on safe and legal burning practices
- Provide guidelines and training to staff on weighing and monitoring loads
- Ensure staff have training on operating and maintaining heavy equipment
- Establish a program for tribal personnel to meaningfully participate in waste management programs administered by other tribal, federal, state or local governments (including reviewing/commenting on waste disposal facility permits, waste management regulations)

- Establish co-management roles through an intergovernmental agreement with a municipal government (e.g. Memorandum of Understanding or other mechanism) regarding landfill management where both governments have a stake

Engage Tribal Leaders and the Community

Tool: *Tribal Decision Maker's Guide to Solid Waste Management*

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

Create a Solid Waste Committee

- Ask elders, youth, tribal staff, council members, tribal clinic staff and reps from other tribal departments to participate
- Establish regular meetings

Task committee with asking the community about solid waste

- How do people feel about waste? What are they concerned about/biggest problems?
- What do they want in a waste program?
- What are their top priorities?
- Are there past questionnaires, reports or other information to use as resources?

Develop an Integrated Solid Waste Management Plan – Update, reinvigorate periodically. This is especially important, as noted in the 2013 GAP Guidance.

Tools:

Tribal Decision Maker's Guide to Solid Waste Management

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

[Zender Environmental Health Alaska Solid Waste Planning Template](#)

Tribal Solid Waste Costing Tool- <http://www.epa.gov/region9/waste/tribal/pdf/Tribal-Solid-Waste-Program-Costing-Tool.pdf>

Research your community and local environment

- Understand your community, population, geography, economy, and geology
- Consult other planning documents
- Interview tribal planners, natural resources staff and scientists
- Do a waste assessment
- What waste types are generated on the reservation or in the community?
- How much waste is generated and from where?
- Include tribal government offices, businesses, and casino/event facilities
- Use tools in planning templates to make the waste assessment job easier
- Consider calling an EPA or a TSWAN circuit rider for help
- Gather solid waste information on how local, non-tribal communities manage their wastes

Evaluate the current solid waste system

- How is waste managed?
- Is there burning?

- Dumping?
- Recycling?
- What are the biggest problems?
- What is being done to prevent waste?
- What is working?
- What is not working?

Assess waste options and recommend best options

- What are the possibilities?
- What options protect the health of the community?
- What options protect the air, soil, and water?
- What is affordable and sustainable?
- Evaluate options for an integrated waste management program which may include: waste minimization; recycling; household hazardous waste collection; used oil collection; *junk vehicle removal; bulk waste/appliance/electronic waste collection, and composting
- Recommend best options

Funding and sustainability

- How will tribe pay for the system?
- Evaluate costs of recommended options
- Include capital costs and ongoing operations and maintenance costs
- Equipment and labor costs
- Closure and post-closure care costs
- Propose a fee structure
- Estimate revenue to be generated
- Estimate tribal subsidies and other sources of funding

Establish fee structure

- Calculate total costs to operate system – including O&M, capital costs and contingencies
- Calculate revenues from solid waste program going back into solid waste program
- How much will the tribe subsidize?
- Calculate fees based on expected costs, revenues and subsidies
- Consider collection fees (monthly, pay as you throw, etc), tipping fees, and other fees
- Consider bundling utilities fees together (water, sewer, solid waste)

Obtain Tribal Council approval of plan

- This is usually a tribal council resolution
- Approval is seen as commitment to work to implement the solid waste plan

A plan can become a living document, being revised and edited as conditions and goals change. Getting approval of the plan and subsequent revisions can be a good way to keep leaders informed and invested in the process of safe waste management.

PHASE II

Conduct Feasibility Studies and Facility Planning

Tools:

Tribal Decision Maker's Guide to Solid Waste Management -

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

Tribal Solid Waste Costing Tool - <http://www.epa.gov/region9/waste/tribal/pdf/Tribal-Solid-Waste-Program-Costing-Tool.pdf>

[*Waste Transfer Stations: A Manual for Decision Making*](#)

[*Site Specific Flexibility Requests for Municipal Solid Waste Landfills in Indian Country*](#)

Evaluate the feasibility of building and operating programs and facilities

- What would it take to get a collection, recycling, and/or composting program up and running?
- What would it take to build and operate a transfer station, or landfill?
- What kind of equipment is needed?
- How many staff needed to keep the system running efficiently?
- How much would the tribe have to charge for collection and/or tipping fee to cover O & M?
- How much is the tribe able to subsidize?

Select Preferred Waste Alternative(s)

- Work with the Solid Waste Committee and community members to recommend a waste alternative(s)
- Obtain Tribal Council approval for preferred alternative(s)
- Include minimizing waste in the overall approach (e.g. buying fewer packaged items; household hazardous waste collection; used oil collection;* junk vehicle removal; bulk waste/appliance/electronic waste collection, and; composting).
- Document the reasons why a waste alternative is selected.
- Keep other alternatives in the wings in case new information comes to light or barriers get in the way of the preferred alternative.
- Plan to collaborate with multiple partners (other tribes, consortia, agencies, nonprofits, businesses, and other organizations)
- Brainstorm to develop creative, outside the box waste solutions

Create Open Dump Inventory

Tools:

[*Open Dump Form \(PDF\)*](#)

Locate dump sites

- GPS latitude and longitude for each dump
- Estimate the size of the site and the volume of waste on the surface
- Assess the contents and types of waste
- Estimate distance to nearest homes, surface water, and depth to groundwater
- Look at access controls.

- Are wastes burned? How often? Is cover material used?
- Take pictures of the site and waste present
- Share dump inventory with EPA and Indian Health Service – to be a part of the national dump inventory
- Receive a hazard ranking score

Develop Waste Enforcement Program

Tools:

Tribal Decision Maker's Guide to Solid Waste Management

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

[*Model Tribal Solid Waste Disposal Ordinance – National Indian Justice Center*](#)

Develop codes and ordinances - fees, penalties

- Obtain Tribal Council support and approval
- Partner with tribal police, natural resources staff, tribal housing authority, county, city or other jurisdictions
- Work together to respond to and resolve complaints in a timely and effective way
- Work with EPA on inspections, compliance assistance, and enforcement on illegal open dumping and waste burning, where applicable
- Develop compliance monitoring and enforcement strategy for the tribe's solid and hazardous waste laws, codes, and/or regulations
- Fine violators where possible
- Publicize successes – post signs, send out flyers, notices, write newspaper articles, etc.
- Obtain Hazardous Waste Inspector credentials, if applicable

Maintain partnerships and support

- Conduct regular meetings to keep key tribal departments and staff in touch as the enforcement program evolves
- Provide training sessions to key staff
- Create incentives for working together
- Keep leaders informed about the program and successes
- Make the general public aware of the efforts and the health and environmental results of the work

PHASE III

Program Implementation

Tools:

Tribal Decision Maker's Guide to Solid Waste Management

<http://archive.epa.gov/wastes/wyl/web/pdf/trib-dmg.pdf>

Tribal Solid Waste Costing Tool - <http://www.epa.gov/region9/waste/tribal/pdf/Tribal-Solid-Waste-Program-Costing-Tool.pdf>

[*EPA Developing an Abandoned Vehicle Program for Tribal Governments*](#)

Alaska DEC Class3 Landfill Manual (Currently not available online; check with your EPA Project Officer)

Once a tribe has established a waste management program which is generally consistent with Appendix I, Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia, Sections E.2 and E.3, GAP funds may be used for the following implementation activities in order of priority: program administration; compliance and enforcement; solid waste management, resource recovery, resource conservation support, and cleanup and closure.

Tribal Waste Management Administration

Program administration generally includes all administrative oversight functions to ensure proper program implementation (e.g. financial management, human resources management, program performance evaluation, scheduling).

Program administration and oversight do not generally include the costs of facility operation and maintenance or general government services normally provided to the general public, such as fire and police. This restriction includes trash collection, transportation, backhaul and disposal services. In certain circumstances, EPA may grant an exception to this prohibition. (See Section II, below for more information.).

Tribal Compliance and Enforcement Program

GAP may fund tribes to support compliance with federal requirements, including: (1) compliance assurance (including inspections under tribal authority at non-hazardous waste disposal facilities to help verify that such facilities are in compliance with 40 C.F.R. Part 257 and/or Part 258; (2) compliance assistance and inspections to help verify that hazardous waste generators are in compliance with 40 C.F.R. Parts 261 and/or 262; or (3) compliance assurance (including inspections) to help verify that hazardous waste transporters are in compliance with 49 C.F.R. Parts 172, 173, 178, and 179.

Local solid waste management laws, codes and ordinances with local enforcement provisions may also apply. For example, Tribes in Alaska should refer to the Alaska Administrative Code 18 AAC 60. (Go to <http://www.legis.state.ak.us/basis/aac.asp> and search for 18 AAC 60.)

Solid Waste Management, Resource Recovery and Resource Conservation Activities:

Activities that are part of a sustainable waste management program designed to increase source reduction, recycling, composting and sustainable materials management are also allowable under GAP.¹

Develop and Implement the following programs/activities:

- Waste minimization program;

¹ U.S. Environmental Protection Agency, Appendix I, Guidebook for Building Tribal Environmental Program Capacity, May 15, 2013, page 31.

- Household hazardous waste collection program;
- Recycling program;
- Sustainable materials management programs;
- Used oil collection program;
- *Junk vehicle removal program;
- Bulk waste/appliance/electronic waste collection program;
- Composting program.
- Purchase, repair, upgrade and replace resource recovery, resource conservation and source separation supplies and equipment (e.g. vehicles, scales, containers, crushers, shredders, sheds, fencing, and signage)²
- Construct, repair, upgrade, and replace source separation facilities (e.g. transfer stations, recycling centers, compost facilities, household hazardous waste collection facilities; construction and demolition debris facilities, used oil collection station and other similar facilities).³ Note: construction activities require regional and EPA headquarters review and approval.
- Conduct community education *and* outreach activities to assess community knowledge and interest in source reduction, alternatives for managing household hazardous waste, recycling, composting and the use of green materials in tribal construction and to promote the use of such integrated solid waste management systems.

Cleanup and Closure

Landfills - Obtain needed land-use and construction permits

- Work with EPA on site-specific flexibility for landfills
- In Alaska villages, work with ADEC on landfill siting and permitting
- Conduct a solid waste facility plan/study

Improve existing landfill facilities

- Focus on site management, access, monitoring, waste separation
- Ensure equipment is the right size and reliable
- Establish equipment maintenance schedule

Clean Up and Close Open Dumps

Tools:

[Technical Advice for Cleanup of Accumulated Waste Sites](#)

[Waste Management Index - Part 1 Dump/Landfill O&M \(PDF\)](#)

[Waste Management Index - Part 2 Waste Separation, Staging, Recycling, Backhauling \(PDF\)](#)

[Closing Small Tribal Landfills and Open Dumps](#)

Prepare and train staff

- Purchase personal protective equipment

² [Ibid.](#)

³ [Ibid.](#)

- Train staff on hazards/safety
- Call in the State Patrol or EPA Emergency Response Program if site appears hazardous or dangerous

Contact your GAP Project Officer to discuss the use of GAP funds for open dump cleanup activities. See Section III. GAP-funded Activities Requiring AIEO Approval.

Section II: Listing of Tribal Waste Management and Underground Storage Tank (UST) Program Capacity Indicators

The 2013 GAP Guidance (Appendix 1, Section E) contains a listing of capacity indicators for tribal waste management and UST programs. All activities designed to achieve these indicators are allowable under GAP (unless otherwise prohibited). Indicators from Section E include:

- E.3.1 Tribe has established a staffing plan (position description and recruitment/retention/promotion plan) for who will serve as tribal waste management program coordinator(s).
- E.3.2 Staff has completed appropriate training and acquired baseline knowledge and skills related to the relevant areas of RCRA (become familiar with the major goals, programs, and requirements of the RCRA; the national structure for implementing the RCRA; and the EPA regional personnel and organization).
- E.3.3 Tribe has established a program to meaningfully participate in waste management programs administered by other tribal, federal, state, or local governments (including reviewing and commenting on waste disposal facility permits and applicable waste management regulations).
- E.3.4 Tribe is receiving funding under the RCRA or other related EPA media specific program.
- E.3.5 Tribe is conducting community education and outreach activities to assess community knowledge and interest in source reduction, alternatives for managing household hazardous waste, recycling, composting, and the use of green materials in tribal construction and to promote the use of such integrated solid waste management systems.
- E.3.6 Tribe has completed a waste assessment (e.g., a waste stream characterization study of the solid and hazardous waste management practices, facilities, and issues in the community; effectiveness of current waste management system(s); waste collection and disposal options; and associated costs).
- E.3.7 Tribe has a tribally-approved Integrated Waste Management Plan (IWMP).
- E.3.8 Tribe has established a program to provide waste minimization, recycling, household hazardous waste collection, used oil collection, junk vehicle removal, bulk waste/appliance/electronic waste collection, and/or composting.
- E.3.9 Tribe has established co-management roles through an intergovernmental agreement with a municipal government (e.g., Memorandum of Understanding or other mechanism) regarding landfill management where both governments have a stake.
- E.3.10 Tribe has completed a solid waste facility plan/feasibility study.
- E.3.11 Tribe has completed an open dump inventory and submitted to EPA and IHS for inclusion in the w/STARS database (including: GPS location; estimated size/volume; contents/type of waste; estimated distance to nearest homes, surface water and groundwater; estimated project costs; and site name).

- E.3.12 Sites included in the open dump inventory have a health hazard ranking score.
- E.3.13 Tribe has coordinated with EPA to ensure accuracy of EPA's regulated hazardous waste facility inventory and operating status.
- E.3.14 Tribe has coordinated with EPA to ensure accuracy of EPA's regulated UST & LUST facility inventory and operating status.
- E.3.15 Tribe has established capacity to provide information to EPA that may be used to conduct compliance monitoring inspections or in a RCRA § 3008, § 7003, § 4005(c)(2), or § 9006 enforcement action.
- E.3.16 Tribe has established a program to assist EPA with implementing the federal RCRA program(s) (e.g., assisting the Agency to conduct compliance assistance activities for regulated entities, obtaining federal inspection credentials to inspect regulated entities, and assisting EPA to draft permits for regulated entities).
- E.3.17 Tribe has enacted waste management and/or UST laws, codes, and/or regulations with effective compliance assurance and enforcement mechanisms (including anti-littering provisions and protocols to address small-scale dumping/burning activities; siting/operating requirements for USTs that are at least as stringent as the federal program).
- E.3.18 Tribe has established a compliance monitoring and enforcement strategy for the tribe's solid and hazardous waste management laws, codes, and/or regulations.
- E.3.19 Tribe has established mechanisms to assure a financially sustainable waste management program, including financing for trash collection services (e.g., fee for service, tribal government funding of trash collection services, or other cost recovery systems).
- E.3.20 Tribal staff is leading circuit rider, train the trainer, and peer-match programs.

Section III: GAP Funded Activities Requiring AIEO Approval

Exception for Government Services (e.g. Backhauling/Trash Collection):

*In limited circumstances, EPA may exercise discretion and grant an exception on government services by approving the use of GAP funds for waste management services for up to two years for a grant recipient that has established a waste management program which is consistent with sections E.2 and E.3, page 30 of 42, Guidebook for Building Tribal Environmental Program Capacity. An applicant seeking approval to use GAP funds for waste management services under this exception must demonstrate that no other resources for such services are currently available and document the actions they will take during the approved grant period to establish sustainable funding for collection, transportation, backhaul and/or disposal services. Note: AIEO has provided a three year transition period (FY15 – FY17) during which tribes may continue solid waste operations and maintenance activities without submitting an exception request. Beginning October 1, 2017, exception requests for such activities will be required as follows. If your tribe is seeking an exception, be sure to discuss your request with your GAP Project Officer. Regional offices will evaluate requests to use GAP resources for solid waste services and will submit the request to the AIEO Director and their justification for a recommended approval or non-approval of the request. AIEO will make the determination on the recommendation within 30 days and in consultation with the Office of Solid Waste and Emergency Response (OSWER).⁴

⁴ Ibid.

Clean-up and Closure Activities

Regional Offices will evaluate tribal requests to use GAP resources for open dumps cleanup activities and will submit such requests to the AIEO for a final determination. Tribes interested in using GAP funds for open dump cleanups, closure, or upgrade should read the EPA Guidebook for Building Tribal Environmental Program Capacity, Section E.4(d)(i-iii).and confer with their GAP Project Officer prior to making such a request.