

(Tribe) Solid Waste Management Plan

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I. Introduction.

With Assistance from the Environmental Protection Agency (EPA), this Solid Waste Management Plan was developed by the (Tribal Agencies).

A. Purpose

The (Tribe), in an effort to reduce the impact of Solid Waste on Tribal Trust land, will utilize this Solid Waste Management Plan. The (Tribe) will address the areas of the Resource Conservation and Recovery Act (RCRA) Subtitle D which pertain to the (Tribe) Landfill, as well as illegal dumps on trust land, and possible diversion alternatives to existing practices. Along with addressing these areas the (Tribe), more specifically the (Tribal Environmental Office), will implement an alternative, cost effect solid waste management system. This waste management plan will address: waste disposal, waste collection, waste diversion, community education, regulatory capacity development for RCRA Subtitle D, and program administration.

B. Development of Plan

In determining the best alternative for the Solid Waste Management Plan, the (Tribal Environmental Office) reviewed solid waste management Codes and Regulations set forth by the EPA and other tribal entities dealing with tribal trust land. An (Tribal Oversight Committee) has been assembled to work with (Tribal Environmental Office) to assist and promote waste management alternatives, and activities and to approve codes and regulations to be submitted to the Tribal Council.

The (Tribal Oversight Committee) will provide regulatory assistance in the following areas: management plans, outreach and networking to tribal, state and federal departments; and provide technical review and comment on codes and regulations of the RCRA Subtitles and implementation of the Tribal codes and regulations. The (Tribal Oversight Committee) will be comprised three members appointed by the (Tribal Executive Branch), with one member elected to chair the Commission. The (Tribal Oversight Committee) will have monthly meetings and will have final approval of codes and regulations to be submitted to the Tribal Council. The (Tribal Environmental Office) staff will be responsible for coordinating activities throughout the entirety of the project and upon continuation of the waste program. In addition, the (Tribal Environmental Office) and (Tribal Oversight Committee) may look to other entities for technical assistance and program guidance.

C. Goals and Objectives

The following summarizes the waste management plan focus:

- The (Tribe) will administer the EPA (Grant Awarded) Grant awarded and signed on October 1, 200X.
- The (Tribal Environmental Office) will work toward meeting the solid waste goals outlined in the office's five-year strategic plan.
- The (Tribe)/(Tribal Environmental Office) will fulfill the goals and objectives outlined in the (Grant Awarded) Grant.

- The (Tribe) intends to provide its Communities a practical, cost-effective alternative for managing their wastes.
- The (Tribe) will implement diversion strategies (e.g. recycling, composting, salvaging, etc.) to help defray annual operating costs for waste management.
- The (Tribe) will enforce waste management codes, regulations, policies and procedures as they pertain to waste management of the (Tribal) Trust lands.
- The (Tribe) will utilize educational outreach to inform its member of the dumpsites being cleaned by the (Grant Awarded) grant, and the importance of keeping them closed.

D. Community participation

The (Tribe)/(Tribal Environmental Office) recognizes the importance of community involvement in the process of developing this plan. The following section will identify the areas of community outreach utilized to facilitate the project.

1. Goal of the Community Participation Plan

The ultimate goal of the Community Participation Plan is to create program support through awareness and acceptance regarding the new integrated waste management program. The Community Participation Plan will focus on the following areas:

Provide information to (Tribal) residents and surrounding communities regarding solid waste problems and potential solutions.

- Obtain feedback regarding recommended or preferred options and/or solutions.
- Encourage active participation in the decision-making process.
- Work with individual communities on preparing an education packet to address the issues mentioned above
- Prepare a record of community activities and results.

Input and participation from the community should be solicited through the (Tribal) County Strategy Teams simultaneously as the plan is being developed.

2. Community Participation Approaches

In the development of the plan, various activities and events will be scheduled to provide for community input. The (Tribal Environmental Office) shall be utilized in assisting with these approaches to waste management. The following approaches will be taken:

Community Education and Information - Meetings, school and group presentations, brochures, and public announcements will be used to disseminate information of the changes regarding waste management throughout the development of the plan.

Feedback - In the series of outreach meetings to be conducted, the audience will have the opportunity to present questions and comments to management changes. In addition, these sessions will help foster a community wide acceptance, and most importantly generate support for the new waste program.

Evaluation - An evaluation survey will be provided to the audience and participants of this information sharing and educational meetings. The survey will help enhance the level of community education assure adequate information is shared. It will also give the audience a chance to ask questions that may arise later that may have not been asked

II. Existing Approaches (Present Current Tribal Approaches – Below are examples)

A. Solid Waste Disposal

1. Landfill/Transfer Stations

Place Description of Landfill or Transfer Stations owned/operated by the Tribe. Be descriptive of the daily operations and regulations controlling the site. Include a brief description of the location and directions to the facility.

2. Unauthorized Dumps

Due to lack of Tribal Solid Waste Codes, Regulations and Enforcement, tribal and non-tribal residents have been disposing wastes along roadsides, ditches, gullies, lakes, etc. The littering laws concerning tribal trust land are not strictly enforced and need to be amended so the codes are consistent. With the amendment of the codes and the creation of the solid waste code, there will clearly be an enforceable, consistent law against illegal dumping. In order to decrease the amount of illegal dumping, strict enforcement must occur on tribal trust land. Solid and hazardous waste codes have been developed and proposal to the (Tribal Oversight Committee) is pending.

Currently, Open dumps are cleaned as money comes available. (Tribal Resources Department), in cooperation with the (Tribal Environmental Office), has to date cleaned up (Number) major dumpsites, as well as (Number) smaller dumpsites. Future Cleanups will be done according to priority of impact on trust land. Degree of impact will be determined using an existing Open Dump assessment tool developed by the (Tribal Oversight Committee).

3. Source Reduction and Recycling

Environmental concerns have always been a high priority for Native American tribes; the (Tribe) is no exception. (Insert Current Tribal Recycling and Reduction Programs. If none exist, then insert possible future Recycling and Reduction Programs.)

Involvement of Communities and (Tribal) Groups

List other programs within the Tribe, as well as outside communities which would be willing to assist in Recycling and Reduction Programs.

Sustainability of Project

List ways in which projects can be sustained and supported. Example:

By having a dedicated location for the paper recycling program, we ensure its continued existence. With existing infrastructure and support, no further costs are required past the initial build. Although the amount of money to be made in this endeavor is small, the cost of failing to progress with it is large.

The waste diversion tactics are not moneymakers, but they are money savers

III. Regulatory Framework

This section is an overview of the federal and tribal statutes and regulations that apply to the management of Municipal Solid Waste on Indian Lands. These statutes and regulations relate to the protection of human health and the environment. The sovereign status of Indian Lands precludes the application of state or non-tribal local statutes or regulations on federally established Tribal Trust lands. The (Tribe), more specifically the (Tribal Oversight Committee) and the Environmental Programs Group, is creating codes and regulations for addressing wastes management issues on the (Tribal) trust land. However, if wastes are transported off trust land, state and/or local regulations related to its transport and to disposal in a state-regulated facility apply.

A. RCRA Subtitle D

RCRA, as amended, provides the statutory basis for federal regulation of solid and hazardous waste. Subtitle D of RCRA applies specifically to Municipal Solid Waste landfills. EPA promulgated regulations on October 9, 1991, to address Subtitle D requirements. These regulations are found in Volume 40 of the Code of Federal Regulations, Part 258 (40 CFR, Part 258) and are commonly referred to as Subtitle D. The regulations apply to most landfills that accepted wastes after October 9, 1993. They also apply to smaller landfills accepting waste after April 9, 1994 and to very small landfills accepting wastes after October 9, 1997

1. Federal Requirements

The (Tribal) Landfill currently operates under RCRA Subtitle D requirements.

2. Tribal Regulations

Presently, Tribal Solid Waste Codes and Regulations that address solid waste have been created and will be submitted to the (Tribal Oversight Committee) for approval. It is vital these codes be enacted to lend support to the new management system.

3. State of (State) Regulations

State solid waste regulations are administered by the (State) Department of Environmental Quality. These regulations are not enforceable on Tribal trust land. However, transportation of wastes from trust land to the (Tribal) landfill or processing facility site become subject to state regulation. The state-governed regulations for transporting wastes are found in the (State) Solid Waste Management Regulations. The portions of the state regulations that pertain to transportation are summarized as follows: (Refer to appropriate state regulations, examples follow)

3a. Vehicles used for transportation shall have covers or enclosures to prevent the solid waste from blowing from the vehicle, the vehicle shall be cleaned sufficiently to prevent odors and unsightliness, and devices shall be used to retain or control free liquids.

3b. No person shall dispose of any solid waste in a place other than at a solid waste facility that meets the requirements of state regulations.

3c. Any commercial hauler that disposed of solid waste in a solid waste facility shall allow inspection of his vehicles, transfer stations, collection facilities or any other facilities designed for the collection and transportation of solid waste. A commercial hauler is defined as any person transporting solid waste generation or from his residential premises.

3d. All commercial haulers of solid waste shall register with the ODOT and submit certain information regarding their solid waste operations.

3e. Any person who provides hauling shall transport solid waste so as to prevent environmental, safety, and public health or welfare hazards and nuisance, including but not limited to leaking equipment, littering, unclean equipment, clean up of spills, and labeling the hauling vehicle with the name of the company, municipality, county or other entity.

3f. The owner or operator of a commercial hauling system shall maintain a continuous operating record to include the type and weight or volume of waste hauled, community in which the solid waste originated, and the solid waste facility to which the waste was delivered.

IV. Diversion Alternatives

Waste diversion includes a variety of practices that successfully reduce the amount of material that may be disposed of in the landfill. Typical techniques include waste prevention or source reduction, recycling and composting. Practices and policies that help create or stabilize markets for recyclables are often considered a part of waste diversion

A. Waste Prevention

The most cost-effective method for reducing waste disposal is programs that prevent waste from being generated. Two approaches that should be considered to reduce the amount of waste generated are education and financial incentives. The first is to provide education to residents and businesses on how they can prevent waste by modifying their purchasing or product utilization decision. The second is to provide financial incentives that motivate generators to produce less waste. The twin concepts of reducing the use of products and packaging materials and of maximizing the reuse of items and materials are key to effective waste prevention.

Advantages - Prevention makes good economic sense because the costs for collecting and disposing of waste may be avoided and because less may need to be paid initially for resource-waste products, for less of a product, or for replacing products that cannot be reduced. The higher the cost of managing wastes becomes through new collection, transfer, or disposal system developments, the more sense it makes to spend money and effort on preventing waste from being generated.

Disadvantages - Habits, behaviors and attitudes need to change as people consider how to reduce their generation of wastes. Providing motivation for reducing waste generation will experience resistance because generators do not know the cost for managing their waste in the past. To require residents and businesses to pay a fee for waste disposal may increase the number of illegal dumpsites on trust lands.

B. Waste Diversion Options

The following are examples of approaches that are available to the (Tribe) for encouraging the reduction of waste:

1. Home Composting

With adequate space, residents may be able to develop composting areas where organic materials (i.e. food, paper and yard wastes, etc.) are effectively managed to produce a compost or mulch product that can be used to improve gardening or other agricultural purposes. Public education, training and encouragement are generally required for those that wish to develop the necessary skills. Providing bins will be helpful in getting people started.

Advantages - This is an effective form of waste prevention because a large percentage of the waste stream is compostable. The finish product can help reduce the need to purchase fertilizers or soil amendments. The compost waste is very heavy and when removed from the waste stream, it will in turn cut the cost of disposal fees. The hauling fee is based largely on weight.

Disadvantages - Not every household has adequate amount of space for a composting site. If not properly educated residents may fail or create a health or fire hazard or other nuisance situations as a result of improper handling of wastes. Investment of equipment materials may pose a problem for individual residents.

2. Centralized Composting

A specific area, possibly near a landfill or transfer station may be a great location for a composting site. Many organic material including yard debris, food wastes, paper wastes and more can be delivered and processed through grinding or mixing and with the addition of water, control of temperature managed into a compost or mulch product. The final product may be used in small or large landscaping, agriculture and/or gardening. The types of material used and how well the process is managed will dictate the quality and the use of the final product.

Advantages - The organic materials that breakdown the fastest would be diverted from the transfer station or landfill. The cost of composting this material would cost much less then it would to haul and landfill. These types of wastes are often the easiest to separate from the municipal solid waste. If the project becomes large enough, it may be sold to offset the cost of operation.

Disadvantages - Developing a high quality process and product require experience, equipment and a commitment of time to manage the project and develop a useable product.

3. Green Box Collection

Currently (Possible example of Community) utilizes Green Box Collection sites for household wastes. Residents are provided bins in central locations which are available at all times. Regularly scheduled pick ups are made by (Community) and taken to landfills for processing. Clear instruction and a promotional effort have made this used by every household to maximize participation in the collection effort. A clear impact of the surrounding community is evident by the reduction of illegal dumpsites in (Community). A similar Collection setup could be implemented by the (Tribe).

Advantages – A reduction in illegal dumpsites would be achieved. Less money would be required for testing and cleanup of illegal dumpsites.

Disadvantages - The cost for the equipment such as the special truck and bins may pose a problem,

4. Household Hazardous Waste Collections

The (Tribe), in conjunction with the EPA and the (Contributing Agencies), currently provides county specific Household Hazardous Waste Collections. County residents are encouraged to drop off household pollutants at a central location to a Hazardous Waste Handling contractor. Wastes collected are diverse and range from used oil and paints, to pesticides and old Computers. The utilization of these events has led to the reduction of pollutants into the watershed and landfills. A continuation of this practice would only lead to a lessening of environmental impact, and an increase of community understanding.

Advantages – A reduction of overall pollutants in the environment as well as increased educational benefits concerning generation and flow of hazardous wastes.

Disadvantages- The Cost of the disposal of hazardous waste is high and money received through outside agencies such as the EPA is not guaranteed.

5. Waste Reduction from Tribal Offices and Programs

The Tribal Administration, IHS Medical Clinic, the Schools, Businesses, and other government offices in the (Tribe) can set an example for residents on waste diversion by entering into a Memorandum of Agreement with each to provide the recycling center with their respective recyclables. Provide bins such as old boxes at each desk for paper and a central place to collect the used paper. All Tribal offices need paper and in exchange for the used paper, the recycling program can offer recycled paper in return. Once again, a pick up schedule must be created and adhered to. Each facility has a unique waste stream to be considered; however, they all can participate in diversion by identifying specific steps as follows:

Consider how recyclables are collected at the offices and delivered to the recycling center

Provide measures or incentives for the reuse of certain materials, such as double-sided printing when ever possible.

Encourage product and equipment supplies to reduce their use of packing materials.

Present on the use of recyclable items versus not recycling and the amount of space taken up by the material.

In the MOA's have the respective offices identify three goals for the next two years for reducing the amount of waste in the workplace.

Advantages - The development of these in-house waste reduction programs is a great model for community residents and at the same time, teach individuals the rewards of undertaking the waste diversion efforts. The in-house diversion efforts will give all office staff involved the experience in solving problems on a small scale, which will be helpful in solving out future diversion issues.

Disadvantages - Lack of employee participation will derail the overall effort and impact the outcome and positive benefit. The pick up schedule must stay consistent or lack of effort will occur. There is often an expectation that recovery efforts will generate significant revenues to be used for project, often this is not the case.

IV. Promotion and Education

The (Tribal Environmental Office) will work to develop a community education packet. This packet can serve as a template for other issues such as underground storage tanks, emergency response and/or hazardous waste. There is a need for ongoing communication with Tribal members on what is being done to manage their waste and on how they can participate to make the system function most efficiently. This need is strongest when major changes are being undertaken in how waste is collected, diverted, or financed. The primary messages to be communicated are: 1) why change is being made and 2) how individual households can participate. All Tribal departments involved with solid waste management need continuing opportunities to hear from the community on what has worked well and/or where problems are being experienced.

Advantages - With clear communication, there will be greater understanding of and support for changes and new opportunities, even if there are added costs or complaints on some issues. By listening to concerns on all aspects of waste management, managers will be able to improve the overall effort. Promotion and education are vital important in gaining participation in waste diversion efforts and activities.

Disadvantages - Education and promotion require time and money. After residents know of changes to come, they may oppose and complain about the intended efforts. However, if they learn after the fact, they may complain they were not told in advance.

VI. Funding

Although the departmental grants may address and cover some of the issues, additional funding will be needed for both capital costs and on-going operation costs. Now all involved with waste management on tribal trust land should meet to strengthen and further outline where the program should work. What areas to focus on to cut overall cost for management. A blend of funding will be needed to maintain the best balance for program funding. The following are a list of funding sources that may be available to assist in the various aspects of tribal waste management.

A. Sources

-Interagency Tribal Open Dump Cleanup Project

Contributing Agencies:

- Environmental Protection Agency
- Bureau of Indian Affairs
- Indian Health Service
- Rural Utilities Service
- Department of Housing and Urban Development
- Department of Defense

-US Environmental Protection Agency

- General Assistance Program
- Environmental Justice Grants

-Bureau of Indian Affairs

- Cooperative Agreements

-Indian Health Service

- Cooperative Agreements

-Administration for Native Americans (ANA)

- Social and Economic Development Strategies
- Coordinated Discretionary Funds (CDF)
- Small Business Initiative Program

-Department of Housing and Urban Development

- Community Development Block Grant (CDBG)
- Indian Housing Program Funds
- Comprehensive Improvement Assistance Plan

-Department of Agriculture

- Environmental Quality Improvement Program (EQIP)

-Private Sector

- Privatized Services
- Joint Venture