**Integrated Solid Waste**

**Integrated Waste Management Plan**

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| **Instructions** |
| This is an optional template that can be used to create an IWMP. Please describe what you are currently doing in your solid waste management program or what you plan to do once your program is established. This optional template can be adapted to fit the needs of your community by adding, deleting, or editing table fields and text. |

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| Authors: |
| Date: |
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| **Section 1: Waste Management Planning/Program Development** |

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| **Five Critical Elements of an Integrated Waste Management Plan**Before drafting an IWMP, the tribe should consider a few key parameters that will provide a strong framework for its waste management program:* Description of the community service area
* Description of the tribe's waste management program structure and administration
* Description of the tribe's current and proposed waste management practices
* Description of the funding, sustainability, and the long-term goals of the tribe's waste management program
* Documentation of approval of the IWMP by the appropriate governing body
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| 1. Introduction and Description of Community
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| Provide a short summary of when the community was established and what is most important in the community history and values. Include information on population, number of households, local businesses, etc. |
| 1. Waste Assessment: How Much Waste Is Generated
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| Look at residential, commercial, and other waste producers in the community, including homes, tribal governmental buildings, schools, health facilities, etc. and whether the tribe will need to manage waste from the cleanup of illegal dumpsites. Determine waste collection needs and the correct size of equipment and facilities by conducting a waste assessment. |
| 1. Current or Proposed Waste Management Program and Practices
 |
| Describe how your program is organized and who does what activities. List each position and a description of duties. Positions may include the Tribal Council, Tribal Administrator, Environmental Coordinator, Environmental Assistant, Solid Waste Technician, Bookkeeper, City Council, Landfill Operator, and SWM Committee.  |
| 1. Revenue and Costs for Current Waste Practices
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| Summarize current waste management program costs and revenues to help determine program’s direction and needs such as infrastructure and equipment. |

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| 5. Other Program Development Needs |
| List needs not related to equipment, including staff, community involvement, and organizational needs, decision making authority, MOUs, permitting or anything else that may present an obstacle. |
| 6. Waste Collection Program and User Fees |
| Review and update or develop a waste collection fee for service program and/or a landfill user fee structure. This can be done at the landfill through a variety of methods including by weight using a scale, by volume/bag, quantity/number of items or another method. Collection programs may include different rates for residences, businesses, and Elders. |
| 7. Backhaul/Recycling Inventory, Staging, Expenses, and Revenue |
| Describe your backhaul program or plans to develop one, including what is backhauled, how frequently, the end destination, and statistics on the weight/quantities of materials backhauled. Track your expenses and income for recycling/backhaul. |
| 8. Community Education and Outreach |
| Plan how to inform and involve the community through education and outreach efforts, such as community meetings, special events, school presentations/activities, newsletters, flyers, radio public service announcements, etc. Discuss solid waste disposal responsibilities for residents--in the village, at the landfill, and at subsistence camps. |
| 9. Waste Management Codes & Ordinances/Enforcement Plan |
| Write a description of the rules, codes, and ordinances that your tribe would like to adopt and how they will be enforced for tribal members. Any construction project requirements should be reflected in contracts with construction companies before projects begin.  |

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| 10. Selection of A Long-Term Primary Disposal Method |
| After you have diverted or reduced as much waste as possible, develop a plan to dispose of the rest of the waste. For most Alaska villages, the most feasible and affordable disposal option is a sustainable landfill with maximum waste reduction/reuse/recycling. Describe your current or planned primary disposal method.   |
| 11. Climate Change Planning |
| Alaska villages are significantly impacted by climate change so considering how climate change impacts may affect solid/hazardous waste management is important. Describe how climate change is affecting waste management in your community (erosion, flooding, leachate, landfill relocation, etc.) and potential adaptation measures.  |

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| **Section 2: Landfill Operations & Maintenance** |

1. **Site control**

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| Describe how are roads to and from the landfill are kept passable and safe.  |
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| Describe the signs, if any, posted at the landfill entrance and/or throughout the landfill. |
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| Describe whether and how public access to the landfill is limited to prevent unauthorized activities. |

1. **Burning**

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| Describe the type of burn unit your community has, if any. |
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| Describe how burning is managed to minimize environmental effects (waste kept dry, weather conditions, etc). |

**3. Daily Operations**

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| Note whether there is a landfill operator and/or other staff and how many hours per week they work. Also note what their job duties include and whether there is a training plan for solid waste management staff. |
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| List the equipment available for use at the landfill/recycling program and its purposes. Note additional supplies and equipment needed. |
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| Note whether there is a designated active cell/work area, its size, and the steps taken to keep it to a reasonable size.  |
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| Explain how waste volume is reduced (compaction) and how often this occurs. |
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| Indicate whether cover material is applied, type and source of material, and how often it is applied. |
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| Note the grade or slope of the landfill and how instability, erosion, or ponding is remediated if it occurs. |
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| Describe how dust, odor, noise, traffic, disease vectors, litter, and other nuisance issues are controlled. |
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| Detail the procedure for identifying and reporting damage to landfill structures and components and who is responsible for making repairs. |
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| Describe areas of the landfill that are not currently used and how they are distinguished from active areas. Note previously used areas in the landfill that have been covered. |

1. **Landfill Water Impacts**

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| Explain the processes for preventing/containing/controlling leachate seeps. |
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| Describe how the landfill is constructed and operated to prevent water from coming into contact with waste and how water is removed if flooding occurs. |
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| Describe how impacts to permafrost and wetlands are minimized (as applicable). |

**5. Special Waste Management: Please describe the procedures you use for handling and disposing of the following wastes. If you do not accept a type of waste, explain how you keep it out of the landfill**.

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| Describe your honeybucket/sewage program if applicable (septic cells, a honeybucket lagoon in or adjacent to your landfill, or inappropriate dumping of sewage or honeybuckets at the landfill): |
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| Animal Carcasses/Subsistence Waste: |
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| Household Hazardous Waste: |
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| Liquid Waste (greater than 1 gallon): |
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| Construction and Demolition Waste/Metals: |
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| Public Salvage Area: |
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| Used Oil: |

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| Vehicles (trucks, 4-wheelers, snow machines, etc.): |
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| Appliances with chlorinated fluorocarbons (CFCs—e.g. Freon®; CFCs are organic compounds similar to hydrocarbons in which the hydrogen atoms have been replaced by chlorine and fluorine). |
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| Lead-acid Batteries: |

**6. Landfill Administration**

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| Explain how the landfill is monitored (monthly visual monitoring). |
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| Note where the Landfill Operating Record is kept (e.g. copies of the permit, operations plan, inspection records). |
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| Describe your landfill site plan (if applicable). Include details: Is waste kept within 50 feet of the property boundary? How will the landfill be developed over time? How can the landfill space be used in a way that maximizes its useful life? |
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| Describe your landfill closure plan, including how much longer the site is expected to last and if there are any proposed uses for the landfill site once it is closed. |

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| **Section 3: Long-Term Goals of the Waste Management Program** |

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| Describe how a waste management business/financial plan will be developed and updated. |
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| Explain the best practices that will be developed to make the solid/hazardous waste management program sustainable.  |
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| List the tribe’s long-term solid/hazardous waste management program priorities and how these goals will be reached. |

This template was developed using excerpts from the *Integrated Solid Waste Plan Template for Alaska Native Villages Version 8.5* (Zender Environmental Health and Research Group); the Alaska Department of Environmental Conservation’s *Landfill Operations Plan,* and EPA documents.