

OPERATIONS PLAN

Solid Waste Management Program

City of Bethel

Municipal Landfill

January 2019



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Bethel Landfill Operation Plan

1.0 Introduction

The Bethel Landfill Operations Plan has been prepared to provide guidance for the operational requirements, personnel responsibilities and contingency actions necessary to ensure the landfill operations are conducted in compliance with the Alaska Department of Environmental Conservation's Solid Waste Permit No. SW2A002-17.

The Plan is intended to be a flexible, dynamic document. Operational components may be added, modified or changed in response to regulatory changes or operational constraints.

1.1 Location

The landfill is located just north of the community of Bethel, Alaska as. It is at the end of Ridgecrest Avenue. To be more precise it is at Latitude 60 48' 36" North and Longitude 161 45' 55" West next to the primary sewage lagoon.

1.2 History

The Bethel Landfill has been in operation for approximately 35 years. In 1992, a berm was constructed around the exterior of the landfill and shortly thereafter, the landfill was permitted by ADEC.

1.3 Facility Description

The landfill area is approximately 17 acres and is owned and operated by the City of Bethel. The site includes the operations office, 3 20' shipping containers for storage and seven distinct areas for the deposit of various waste items. These areas are;

1. Refrigerator and freezer storage so that the Freon can be removed before crushing them.
2. Metal area
3. Brush Pile, used for a brush fence to catch windblown bags.
4. Municipal waste working face.
5. C and D waste.
6. Tires.
7. Vehicles.

The entrance to the landfill has a locking chain link fence that is closed during times that the landfill is not open for business. Immediately before the landfill office there are three signs alerting the public to our hours of operation which is from 8:00 am to 6:00 pm Monday – Saturday. The second sign gives contact numbers and two warnings, one, alerts the public that possible blowing loads needed to be covered and two, it is a violation to dump anything outside the gate. The third sign lists the items that the landfill will not accept.

There are containment fences on the front side of the landfill or on the west side facing Bethel proper.

2.0 Waste Management Process

The majority of waste generated by the community is collected by garbage trucks, operated by City personnel. Dumpsters are located throughout the community on a regular schedule. In addition, city residents, businesses

and contractors can also bring waste products to the landfill on a daily basis, during regular working hours.

2.1 Recycling

The City of Bethel recycling program has been shut down due to the high cost of operating a facility, personnel costs and shipping items out of Bethel on the barge.

2.2 Salvaging

Salvaging at the landfill has been an ongoing issue which has gone back and forth over the years as to if people could or could not salvage. It has changed because of different operators of different administrative people with different thoughts on the issue. At present, in 2019 we allow salvaging only on Saturdays, which usually consists of lumber, appliance parts, auto parts and wood for firewood.

There are rules that people must follow in order to salvage. These are that salvaging cannot interfere with daily landfill operations. In other words, if we are operating equipment any salvaging must cease until the operator is done doing what he needs to do. We do not allow children to be out of their vehicles. The landfill is not a playground, since everything out here can and has the potential to hurt kids. This is a safety issue. If people don't follow these simple rules, they are asked to leave the landfill.

3.0 Waste Screening

The Bethel Landfill waste screening procedure complies with the waste screening guidance provided in 40 CFR Part 258.2. In addition, the landfill attendant is trained to recognize and determine the specific

category of each component of the waste stream. If at any time during the waste screening process the attendant cannot determine the waste category or if the load contains items that the landfill does not take, these items are sent back with the person bringing them, with an explanation of why we cannot take them. At this point the operator will explain how to get rid of used oil for an example.

Our goal at the landfill is to avoid the disposal of any unauthorized waste by monitoring the gate and identifying any possible hazardous wastes that could be potentially entering our landfill.

Every month, one load is screened in detail and recorded on a waste screening log which is kept in the Manager's Office. The rest of the time the load is just looked over to determine where the customer needs to drop the load, since there are different areas of the landfill for different items, such as tires, wood and metal. A typical load will have various items that need to be separated into their own areas.

3.1 Restricted Item's

Acids	Radioactive Waste	Sewage
Corrosives	Glycol	Gas
Polluted Soils	Hazardous Waste	Diesel
Solvents	Toxic Waste	Used Oil
Oily Waste	Batteries	Paint
Explosives	Untreated Medical Waste	Any Unknowns
Asbestos	Chemical Wastes	Flammables
PCB-Containing Materials		

3.2 Corrective Action Plan

Even though all incoming loads are screened when they come in, there is still the possibility of potentially hazardous waste entering the landfill and becoming an instant problem. (This can be a problem when items are coming in dump trucks, where it is hard to see all of the load.)

Should a problem come to light the landfill attendant will follow the prescribed procedure to deal with the problem. These procedures are as follows.

Identifying a problem material

Utilize personal protective equipment to insure a safe operation

Segregate and isolate the waste

Notify and documentation of the waste and

Store it away from other debris until it can be removed.

If the person or company that brought the materials can be identified, the attendant will notify that company to deal with their own problem. If there is a problem in this area, EPA or DEC or whoever deals with that particular item will be notified.

4.0 Placement of Solid Waste

When a load arrives at the landfill, the attendant will inspect the load for unacceptable items and to direct the driver as to where they are to go. Many times the loads are mixed loads, therefore they need to be directed to various destinations.

Upon arriving at the prescribed destination, they will be unloaded immediately. The attendant will insure that the load is pushed back and or situated properly. Before the end of the day the household dumpster

trash will be pushed into a pile and compacted and then covered with six inches of soil. The C & D will be pushed, compacted and covered every six months or as needed with six inches of soil. After either cell is completed it will be covered with at least twelve inches of soil.

Unstable slopes are avoided in the landfill by not making the cells too deep. Our landfill is a series of overlapping cells covered and buried one on top of another on top of another. The landfill is a growing living hill that is overlapping on itself. Most landfills have a specific location with a hole dug and filled then covered. Our lifts are less than 3 feet compacted on top of the ground and covered and then the cell is moved over next to the last one and continued. Over the last couple of years and the next couple of years we are working at the back of the landfill, making a cell then moving over overlapping the last cell and starting a new cell. Basically, we go back and forth like a type writer going to one side of the paper back to the starting point.

4.1 Daily Cover Plan

Our cover material for the landfill comes from the sand pit near the Bethel Airport which is roughly five miles away. Once the material is trucked to the landfill it is stored in piles just adjacent the working face so that it can be easily utilized on a daily basis.

5.0 Equipment

The landfill equipment consists of a skid steer, 953 track waste handler, a D-3 dozer, a 950 loader, a side dump trailer with tractor and an 816 compactor. The attendant is responsible for greasing and the general care and up keep of the equipment. A walk around inspection is required of the equipment daily before beginning operations each day. When a

mechanical problem arises the attendant is required to bring it to the attention of the mechanic's by filling out a work order form.

5.1 Personal

At least one individual is SWANA Certified in landfill management. A copy of job descriptions will be included in the Landfill form's section.

Here is a list of duties the attendant is required to do on a daily basis:

Maintain fence and gate to control public access.

Maintain on-site roads to insure easy user access.

Keep working face as small as possible.

Make sure only acceptable waste is received.

Keep working face compacted.

Work safely and effectively.

Wear reflective vest at all times.

Push, compact and cover dumpster trash daily.

Fill out daily log book.

Fuel equipment used.

Lock landfill gate and office before going home.

Fill out all required operating paperwork as needed.

6.0 Nuisance Control

Nuisances associated with landfill operations can affect the attendant, customers, the general public and the environment. These are litter, animals, dust, odor, noise and snow.

6.1 Litter

It is the attendant's responsibility to keep the access road and area around the office free of litter by collecting it and bagging then returning it to the workface where it can be compacted and covered.

6.2 Animals and Disease Vectors

The presents of dogs, cats, foxes, ravens and seagulls is an ongoing problem. The problem with dogs and cats can be solved by trapping them and turning them over to animal control. Foxes are here but to a limited state, because they are heavily trapped in the winter. The birds are a whole different problem because they are protected critters by the state so one can't shoot them or get rid of them any other way. In the summer they are both here and in the winter it is both ravens and eagles. The only real solution to these kinds of problems is to keep the household trash covered with daily cover material.

When the animal control department brings up dead animals, the attendant needs to bury them immediately in order to ward off any disease's and to keep other critters from being attracted.

6.3 Dust

Dust can be extreme in the summer months. However, the way this can be controlled is by using the cities road watering truck both morning and afternoon. The tanker truck will only apply water to the access roads and will not put any on the working face.

6.4 Odor

Odor nuisance results from decomposing waste that has not been adequately covered. This can be eliminated by following the waste handling plan outlined in this operation plan to eliminate this situation.

6.5 Noise

Follow the strict operational hours that the landfill is open will eliminate any excess noise to the public. However, the landfill is far enough away from the town that unless one is in the landfill the noise is not a problem.

6.6 Snow

It is the responsibility of the attendant to remove snow from access roads. The snow will either be removed from the landfill or put in such a place where it cannot drain when melted out of the landfill or near the working face.

7.0 Monitoring

City personnel trained in instrument use, notification procedures and documentation requirements will conduct all monitoring activities. In order to monitor compliance with the solid waste permit, a complete set of monitoring records will be maintained in the operation record. These are readily available in the landfill manager's office.

7.1 Visual Monitoring Requirements

Visual monitoring of the landfill will be conducted on a monthly basis to access signs of damage from settlement, ponding, leakage, erosion, leachate seeps, animal attraction and compliance with the permit conditions.

The results of each monitoring event will be recorded on a visual monitoring log. These completed logs will be retained in the landfill operating record, in the manager's office for review during ADEC inspections.

7.2 Surface Water Monitoring

For several years in the past the landfill department has monitored four surface water sites sampling them in both the fall and spring. We ran into a problem because sometimes these sites had little or no water. It was determined that DEC that it was not necessary to continue monitoring surface water.

7.3 Landfill Gas Monitoring

Quarterly monitoring for methane gas will be conducted at various locations in and around the landfill, these locations are shown on the gas monitoring form.

Should methane readings exceed 25% of the lower explosive limit (LEL) for methane inside the structures or at ambient air sampling locations, immediately take all necessary steps to reduce or dissipate the concentrations of methane to ensure public health, safety and welfare.

ADEC must be notified immediately after any exceedance. Gas monitoring results will be recorded on a gas monitoring log form. Completed results will be submitted to ADEC within 60 days after

collection. Results will also be maintained in the landfill office operating record for review by ADEC staff during facility inspections. Gas monitoring equipment will be calibrated prior to each monitoring event according to the manufacturer's specifications. Successful calibration procedures will be recorded on the Gas Monitoring Log Form.

8.0 Landfill Policies

We do not take any waste materials from villages.

We do not take any waste materials from contractors outside of the Bethel area. However, we reserve the right to do so in special circumstances.

Shooting is strictly prohibited in the landfill. The only exception to this policy is when a police officer needs to put down an animal.

No burning of any kind is permitted in the landfill, by order of the Fire Chief.

All prohibited items will be turned away for the consumer to deal with.

9.0 Corrective Action Plan

If any wastes are identified that cannot be disposed on site, they will be safely stored until they can be removed to an approved facility. Any repairs to the facility or structures will be repaired immediately. Improperly disposed of trash, will be relocated to an appropriate disposal area. Windblown trash will be picked up and placed back at the working face.

When and if any issues are identified that involve a permit violation, the City Manager will be notified immediately. The operator will then record the information on the violation and schedule corrective action clean-up work to rectify the situation. ADEC will be notified within 30 days of any permit violations.

10.0 Landfill Forms of Operation

All copies of currently used operational forms are to be filled out in a timely fashion and made available to ADEC staff upon request. On the following pages are shown. All forms are kept in the landfill manager's office desk.

Sample Visual Monitoring Form

Name & Title of Person Doing Inspection	Date:
Evaluate & Circle Each Item - A (for Acceptable), or U (for Unacceptable), and/or N (for Notes that you can provide)	
1. Waste Cell: Active disposal area is contained, waste is buried or covered when needed. No signs of water ponding, leachate seeps or odors.	Evaluation: A U N
2. Burning Waste: No open fires near working face of landfill. Burn area is operational, maintained, and no accumulation of waste nearby.	Evaluation: A U N
3. Cover Material: Adequate soil cover has been placed over the waste area, no waste visible, and no signs of erosion or ponding.	Evaluation: A U N
4. Access & Control: Road to the site is maintained and access is controlled by fences/gates. Signs are posted and easily readable to direct public to the active dumping area and inform of prohibited wastes.	Evaluation: A U N
5. Litter: Controlled by fencing around the site. No litter along fence or outside of landfill boundary. Litter is regularly collected.	Evaluation: A U N
6. Stormwater Control: Adequate ditches to prevent run-on and erosion. Ponding areas are graded or filled when needed. No standing water in active disposal cell. Snow not stockpiled over waste.	Evaluation: A U N
7. Animal/Nuisance Control: No visible signs of animal presence or problems. No odors or flies.	Evaluation: A U N
8. Hazardous Waste: No hazardous waste materials seen in the garbage or active disposal area. Storage containers for Hazardous Waste are maintained and not overflowing.	Evaluation: A U N
9. Closed Cells: Former waste disposal areas are backfilled and good soil cover is maintained. No signs of cover settlement, leakage, or erosion.	Evaluation: A U N
10. Salvage Area: Area is maintained and organized. No waste or garbage in the area. Old salvage material routinely landfilled or properly disposed.	Evaluation: A U N
Notes:	

RANDOM WASTE SCREENING LOG
Bethel Landfill

Name and Title of Person Doing Inspection:			Date:		
Name of Hauler:			Name of Establishment and Business Generating Waste:		
Type of Waste In Load (Check all that apply)					
Paper	Cardboard	Clean Wood	Animal Waste	Aerosol Cans	Food Waste
Plastic	Oily Waste	Ash	Metals	Oil Filters	Solvents
Insulation	Paint	Oil	Toxic Waste	Asbestos	Antifreeze
Batteries Lead Acid Ni-Cad Alkaline Other	Dirt-Soil Over Burden Clean Contaminated	Containers w/ Liquids (List type of liquids)	Petroleum Products (List types)	Medical Waste Untreated Treated Unknown	Hazardous Waste (List types)
Other (Describe)					

Were prohibited or hazardous waste identified in the load?
 Yes No

What was done with the load?
 Everything was buried.
 Load rejected and sent back to generator/.
 Prohibited and hazardous wastes were removed and rest of load buried.
 Other (explain).

Was the generator notified that prohibited items were discovered in their waste?
 Yes No NA

Figure 7-3
GAS MONITORING FORM
 Bethel Landfill

Name and Title of Person Doing Inspection:		Date:	
Weather Conditions:		Instrument Model and Serial Number: Calibration:	
Location	Time	*Instrument Reading (% LEL)	Comments
Electrical Boxes			
Crawl space and beneath floor at Attendant's Building and other structures			
Inside Connex Trailers			
Entrance Gate			
Inside Perimeter of Berm			
Other Locations (specify) <i>Attendant Building</i>			

Notes:

***IMPORTANT: If methane gas readings exceed 25% LEL, immediately take all necessary steps to reduce or dissipate the concentrations of methane.**



CITY OF BETHEL

Position Description

Job Title	Landfill Technician	Department	Public Works
Reports To	Landfill Manager	Pay Grade	Range 4
FLSA Classification	Non-Exempt	Effective Date	January 31, 2017

Position Summary: Monitors the disposal of waste material at the landfill, maintains community collection sites, and supports community-based recycling and waste-reduction/clean-up efforts.

Reasonable Accommodations: To perform this job successfully, an individual must be able to perform each essential duty and meet physical demands satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Essential Functions:

- Monitors traffic at the landfill gates and directs traffic within the landfill property;
- Separates hazardous material and processes in accordance with HAZMAT, OSHA, or other applicable requirements;
- Identifies appropriate charges for landfill customers; accepts and processes payments in accordance with established procedures;
- Operates heavy equipment and dump truck as needed to maintain the landfill property in accordance with applicable regulations and requirements;
- Performs general upkeep and maintenance of the landfill, its surrounding areas, and community collection sites (to include dumpster locations);
- Completes activity logs as required;
- Removes snow, debris, or other impediments to ensure public access to and emergency egress from landfill property and buildings;
- Performs work and maintains work area in compliance with safety requirements;
- Follows all City and Department policies and operating procedures and applicable federal and state laws.

Other responsibilities:

- Operates garbage truck as needed to ensure scheduled waste collection is completed;
- Delivers and collects mail and other items between City facilities as necessary;
- Participates in required training.

Knowledge, Skills, and Abilities:

Basic knowledge of solid waste operations;
Working knowledge of applicable occupational hazards and necessary precautions;
Working knowledge of periodic service requirements/preventive maintenance for equipment;
Demonstrated ability to drive a dump truck and operate heavy equipment and garbage truck;
Demonstrated ability to establish and maintain effective working relationships with supervisor/co-workers and the public;
Ability to comprehend and carry out verbal and written directions promptly and effectively;
Ability to communicate clearly and concisely, orally and in writing.

Experience and/or Education:

- High School Diploma, GED, or six months related experience or training;
- 40 hours HAZMAT training preferred.

Certificates, Licenses, Registrations:

- Valid Alaska Commercial Driver's License.

Physical Demands:

To perform this job successfully, an individual must be able to perform each essential duty and meet physical demands satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee must be able to continuously move about inside, on and under equipment, and outdoors on surfaces of varying height and materials; frequently remain seated for long periods of time; occasionally travel between work locations and operate machinery; frequently required to lift and move items weighing up to 100 pounds.

Work Environment:

Work is performed in a variety of settings with frequent interruptions. Employee will frequently be exposed to moving mechanicals parts, exposed places, varying weather conditions to include extreme cold and wind; interior conditions with high temperatures and little to no ventilation, fumes and/or airborne particles.

The above position description is intended to outline primary duties, qualifications, and job scope; an employee's duties are not limited to the work identified in this description.

Job Description Acknowledgement

I have reviewed this job description and I understand all my job duties and responsibilities. I am able to perform the essential functions as outlined. I understand that my job may change on a temporary or regular basis according to the needs of my location or department without it being specifically included in the job description. If I have any questions about job duties not specified on this description that I am asked to perform, I should discuss them with my immediate supervisor, Department Head, or the Human Resources manager.

I further understand that future performance evaluations are based on my ability to perform the duties and responsibilities outlined in this job description to the satisfaction of my immediate supervisor.

I have discussed any questions I may have had about this job description prior to signing this acknowledgement.

Employee's Signature

Date

Employee's Name (please print)



CITY OF BETHEL

Position Description

Job Title	Landfill Manager	Department	Public Works
Reports To	Public Works Director	Pay Grade	Range 6
FLSA Classification	Non-exempt	Effective Date	January 25, 2017

Position Summary: Supervises and coordinates the collection and disposal of waste material to include general landfill operations, HAZMAT processing, commercial, residential, and community dumpsters, clean up and recycling programs, and shipment of waste materials. This is a "hands-on" supervisory position, and the Manager is expected to perform tasks assigned to the Solid Waste division alongside assigned staff.

Essential Functions and Responsibilities:

- Directs disposal of waste material at the landfill to include public access and maintenance activities;
- Maintains landfill in accordance with the Landfill Permit Operations plan; performs all duties required to ensure compliance with the plan to include monitoring, reporting, and operational requirements;
- Identifies and processes HAZMAT waste in accordance with federal, state and local laws;
- Ensures efficient placement of community dumpsters and directs the scheduled collection of disposed items; ensures cleanliness of the area around each dumpster location;
- Responds to reports of inappropriately or illegally disposed waste and directs clean-up/waste removal;
- Identifies appropriate charges for landfill customers; accept and process payments from landfill customers in accordance with established procedures;
- Performs general upkeep and maintenance of the landfill, its surrounding areas, and community collection sites (to include dumpster locations);
- Monitors and reports landfill violations to Department Head in writing as directed;
- Separates, handles, and packages specialized waste as required to meet HAZMAT, OSHA, or other applicable requirements;
- Implements corrective actions as necessary in response to complaints, formal citations, and third-party audits of landfill or related operations;
- Purchases tools, parts, equipment and supplies in accordance with Department procedures; tracks and maintains inventory of same;
- Interprets City policies to workers and enforces safety regulations;
- Develops and implements plans and projects to reduce the accumulation of waste and waste materials in the community to include seasonal clean-up initiatives, abandoned vehicle disposals, etc;
- Manages division's purchases; electronically reconciles and submits monthly statements in accordance with established procedures;
- Prepares records and reports on solid waste activities to include quantities of waste processed, operational revenue/receipts, regulatory-based compliance actions, and other data as assigned;
- Directs all solid waste activities and maintains work areas in compliance with OSHA safety standards, Alaska Department of Environmental Conservation requirements, public health insect and rodent control regulations, and other regulatory requirements;
- Follows and enforces all City and Department policies and operating procedures and applicable federal and state laws.

Other Responsibilities:

- Supervises, trains and evaluates subordinate workers;
- Assists other departments by providing and coordinating staff support as needed;
- Operates garbage truck as needed to ensure scheduled waste collection is completed;
- Operates heavy equipment/dump truck as needed to maintain the landfill property in accordance with applicable regulations;
- Participates in required training and maintains professional certifications.

Knowledge, Skills, and Abilities:

- Working knowledge of solid waste operations, recycling, and environmental protections and impacts;

- Working knowledge of applicable occupational hazards and precaution standards;
- Demonstrable skills driving a dump truck and operating heavy equipment;
- Demonstrable skills performing minor repairs and service on equipment;
- Ability to interpret, work from, and explain safety and landfill management plans;
- Ability to understand and follow oral and written instructions;
- Ability to write simple correspondence using accurate grammar and spelling;
- Ability to clearly present information verbally in one-on-one and small group settings;
- Ability to establish and maintain effective working relationships with co-workers and the general public;

Experience and/or Education:

- High School Diploma, GED, or equivalent;
- Three years' experience in the operation of heavy equipment;
- 40 hours HAZMAT training.

Certificates, Licenses, Registrations:

- Valid Alaska Commercial Driver's License;
- SWANA Landfill Manager.

Physical Demands:

To perform this job successfully, an individual must be able to perform each essential duty and meet physical demands satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee must be able to continuously move about inside, on and under equipment, and outdoors on surfaces of varying height and materials; frequently remain seated for long periods of time; occasionally travel between work locations and operate machinery; frequently required to lift and move items weighing up to 100 pounds.

Work Environment:

Work is performed in a variety of settings with frequent interruptions. Employee will frequently be exposed to moving mechanicals parts, exposed places, varying weather conditions to include extreme cold and wind; interior conditions with high temperatures and little to no ventilation, fumes and/or airborne particles.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar or related to the position.

Job Description Acknowledgement

I have reviewed this job description and I understand all my job duties and responsibilities. I am able to perform the essential functions as outlined. I understand that my job may change on a temporary or regular basis according to the needs of my location or department without it being specifically included in the job description. If I have any questions about job duties not specified on this description that I am asked to perform, I should discuss them with my immediate supervisor, Department Head, or the Human Resources manager.

I further understand that future performance evaluations are based on my ability to perform the duties and responsibilities outlined in this job description to the satisfaction of my immediate supervisor.

I have discussed any questions I may have had about this job description prior to signing this acknowledgement.

Employee's Signature

Date

Employee's Name (please print)