



Class III Community Landfill Permit Renewal Application

Alaska Department of Environmental Conservation
Solid Waste Program

DEC Office Only:

Facility Name: _____

Authorization #: _____

Instructions:

This application is for a **permit renewal** for a Class III community landfill. The landfill must accept less than 5 tons of municipal solid waste per day and must be at least 50 road miles from the nearest Class I Landfill.

Please call or email the ADEC Solid Waste Program Rural Solid Waste Specialist assigned to the community for assistance with completing the application. <http://dec.alaska.gov/eh/solid-waste/>

Section 1. Community Information

Community Name: **Petersburg Borough**

Population: **3436**

Current Landfill Permit #: **SW3A078-20**

Section 2. Contact Information

Permit Applicant (Co. or Entity): **Petersburg Borough**

Contact Name: **Aaron Marohl**

Address: **PO Box 329**

City: **Petersburg**

State: **AK**

Zip: **99833**

Email: **amarohl@petersburgak.gov**

Phone: **907-772-5432**

Type of Entity: ☒ Government ☐ Corporation ☐ Other:

State of Incorporation or Registration: **N/A**

Alaska Business License Number: **N/A**

IRS Tax ID Number: **N/A**

Check if any of the following entities has changed from the last permit or renewal application:

☐ Facility Owner ☐ Facility Operator ☐ Agent/Consultant ☐ Landowner

For each of the entities that has changed please update the contact information:

Co. or Entity: ☐ Owner ☐ Operator

Contact Name: ☐ Agent ☐ Landowner

Address: City: State: Zip:

Email: Phone:

Co. or Entity: ☐ Owner ☐ Operator

Contact Name: ☐ Agent ☐ Landowner

Address: City: State: Zip:

Email: Phone:

3. Environmental Information:

Has the landfill flooded in the past 5 years?

☐

Yes

☒

No

If yes, Month/Year?

Describe any other environmental conditions that have significantly changed in the community and have impacted solid waste management.

No significant changes since prior application.

4. Map:

Check if any of the information below has changed since the previous application. If any items are checked, attach a current map or aerial photograph with the all the items clearly labeled. For each item, indicate the distance from the landfill. Also provide an arrow indicating North.

☒ Check here if the map has not changed significantly since the previous application, and move to part 5.

☐ Landfill property boundaries

☐ Groundwater well(s)

☐ Community

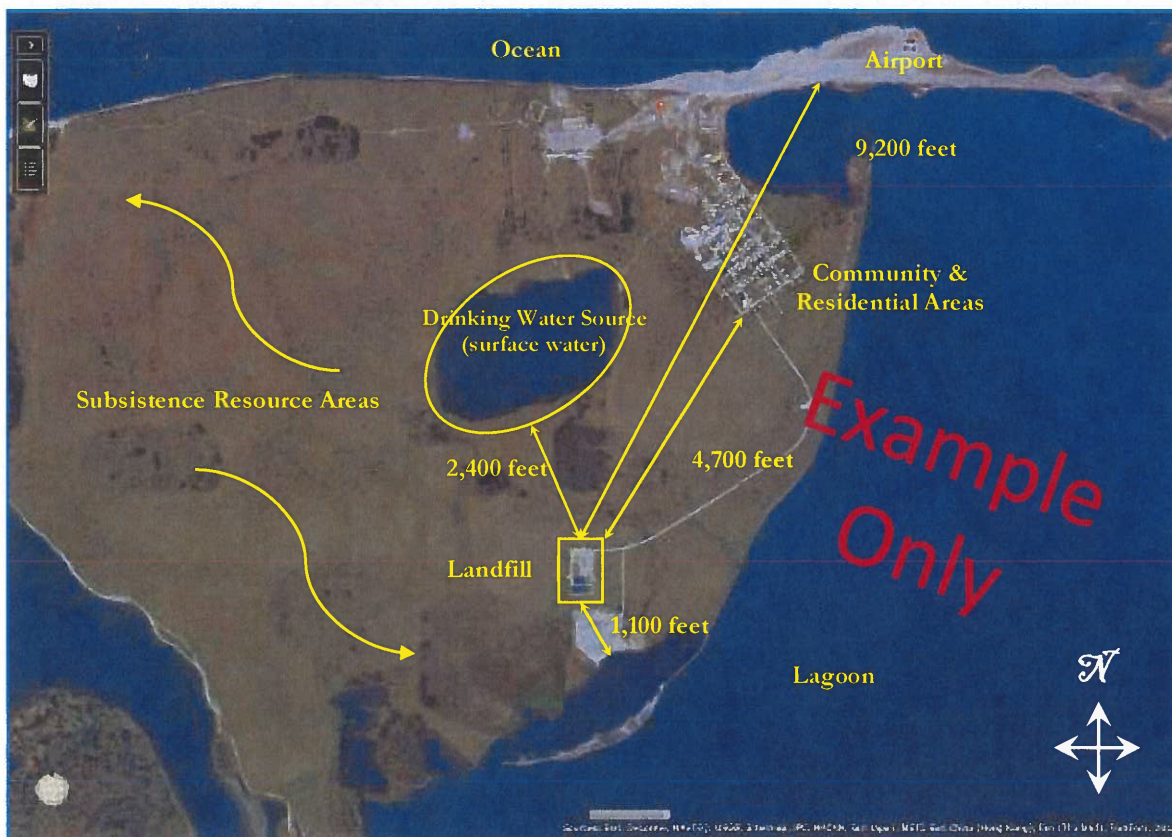
☐ Drinking water source(s)

☐ Surface water (lakes, streams, ponds, etc.)

☐ Subsistence resource areas

☐ Airport (if within 10,000 feet of the landfill)

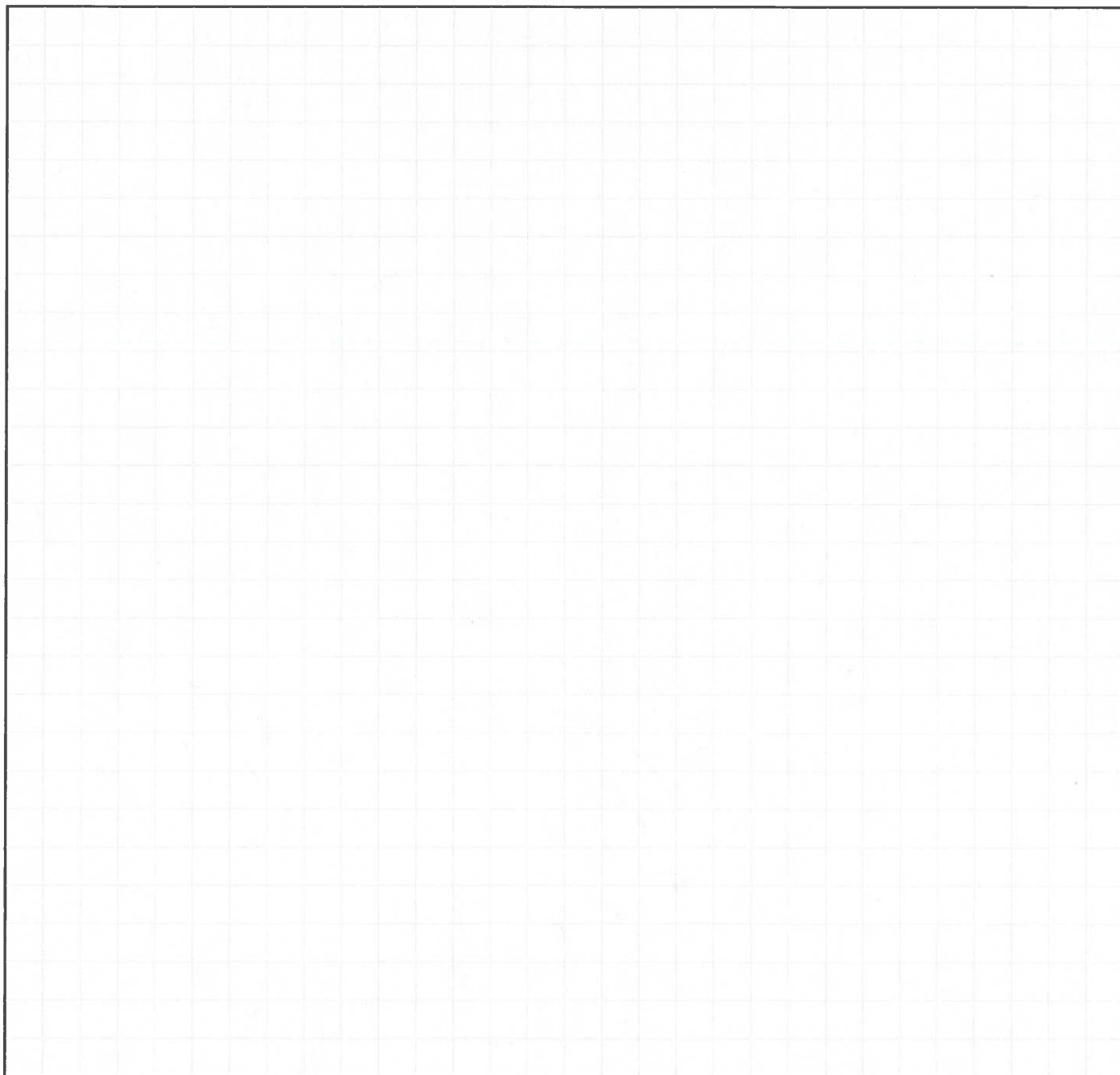
☐ Residential areas



5. Landfill Site Plan:

Update the landfill site plan on the grid below or other format. Include features from the list below as they pertain to your landfill. Check all that apply. See example on the next page.

☐ Closed disposal areas	☐ Access roads	☐ Salvage areas
☐ Open disposal areas	☐ Storage area(s)	☐ Construction and demolition debris disposal
☐ Future waste disposal areas	☐ Buildings/sheds	☐ Dead animal disposal
☐ Fences and gates	☐ Berms, ditches, and culverts	☐ Septage disposal
☐ Signs	☐ Cover material source	☐ HHW storage

A large rectangular area filled with a light gray grid, intended for drawing the landfill site plan. The grid is approximately 30 units wide by 40 units high.

6. Operations Plan:

Review, update, and submit the Landfill Operations Plan

If you don't already have an operations plan, you can use our Class III Landfill Operations Plan to easily create one. <http://dec.alaska.gov/eh/solid-waste/permitapps>

If you need help in preparing the operations plan or have questions, please call your ADEC Rural Solid Waste Specialist for assistance. <http://dec.alaska.gov/eh/solid-waste/waste-in-rural-alaska/rural-contacts>

7. Closure and Post-Closure Cost Estimate:

It is important in planning for the life of the landfill to understand the costs to close the facility.

Is the landfill closing in the next 5 years? ☐ Yes ☒ No

Have you calculated closure/post-closure costs for the landfill? ☐ Yes ☒ No

Closure Cost	Post-Closure Cost:	Total: \$ 0
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If closure/post closure cost is unknown, please complete the following section:

Check all equipment available in the community: ☒ Dump Truck ☒ Bulldozer ☒ Loader/Backhoe

Area of the landfill (in acres)? 40.00	Cost of cover soil <u>per cubic yard</u> in village (if known):
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Are you currently conducting water monitoring at the landfill? ☒ Yes ☐ No

If Yes, what is the cost per year? \$ 2,300	If cost is unknown, how many water sampling sites?
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DEC office will complete the following section with the information provided above:

Closure Cost:	Post-Closure Cost:	Total: \$ 0
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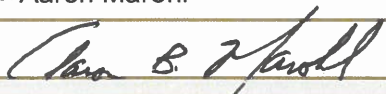
8. Signature:

I certify, under penalty of perjury, that all of the information and exhibits in this cover letter and application are true, accurate, and complete.

Printed Name: Aaron Marohl

Title: Assistant Public Works Director

Signature:



Date:

05/22/25

All applications must be signed as follows per 18 AAC 15.030:

- **Corporations:** A principal executive officer, an officer that is no lower than the level of vice president, or a duly authorized representative who is responsible for the overall management of the project or operation.
- **Municipal, state, federal, or other public entity:** A principal executive officer, ranking elected official, or duly authorized employee.
- **Partnerships:** A general partner.
- **Sole proprietorship:** The proprietor.

Additional Information – Attach any additional information necessary to accurately reflect the location, construction, and operations of the facility.

Sanitation Operations and Maintenance
Manual
Revised May 13, 2025

Petersburg Alaska
Longitude 132 91.5' and Latitude 56 79.7'

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1.0 PURPOSE OF PLAN

The purposes of this operations plan are:

- A. To ensure that the Petersburg Borough Baler Facility and Sanitation Department and Landfill are operated safely and efficiently by the adequate processing of waste for transportation and/or disposal.
- B. To operate without causing nuisances or contaminating air, surface water, or groundwater, and to ensure that the Borough Landfill is maintained and operated in an environmentally acceptable manner as a Class III municipal solid waste (MSW) disposal facility and transfer station.
- C. To ensure that all pertinent state, federal, and local regulations are met. The Borough maintains the right to be more restrictive than regulations require.

For the purposes of this document, Petersburg Borough Baler Facility and Landfill is referred to as “The Baler.”

2.0 DESCRIPTION OF OPERATIONS

The Baler Facility is open six days per week; Monday-Friday from 12:00 p.m. to 3:00 p.m. and Sunday 9:00 a.m. to 3:00 p.m. It is closed on holidays observed by Petersburg Borough. This facility serves the entire Petersburg Borough.

The existing landfill boundaries comprise an area of approximately 40 acres and is approximately 2500 feet East of the intersection of Haugen Drive and Sandy Beach Road, NE ¼ of the SE ¼ of Section 35, Township 58 South, Range 79 East, Copper River Meridian.

A scale facility is located at the entrance of the facility. There is one 70-foot Unitec scale linked to a scale program by RC Technologies to record weights, material types, and billing information. Waste is weighed. Scale Operators screen waste and question customers as to whether they have any recyclable, unacceptable, or “special” materials (see Section 8 for “special” materials). If unacceptable waste is found, then the waste is refused (see waste acceptance policy in Sections 6 through 11, below) and the generator is given information on more acceptable alternatives of disposal. For waste that can be accepted, traffic is directed to the appropriate disposal area where customers tip their waste.

Separate disposal or storage areas exist within the landfill for the following:

- A. Scrap metal. Scrap metal is staged until a recycler, typically Channel Construction, Sanitation Operations and Maintenance

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schedules the barging and removal for recycling.

- B. Construction and demolition (C/D) waste. Given the limited volumes handled at the facility, more than 30 years of capacity is estimated to be available.
- C. Scrap Wood. The department has a standing burn permit through the Petersburg Volunteer Fire Department. Scrap wood is burned on Tuesday and the ash and nails are cleaned up on Wednesday prior to customer traffic arriving.
- D. Refrigerators/Freezers. Refrigerators and freezers are staged in a designated area. The freon is removed by a contractor and the units are then baled and shipped with MSW.
- E. Compostable wood and yard waste products.
- F. Scrap aluminum storage (recyclable).
- G. Creosote. Creosote will eventually be added to the C/D cell.
- H. Windows/Glass. Glass is crushed and added as fill/cover material. Window frames can be burned/baled/recycled as appropriate.

3.0 DESCRIPTION OF SOLID WASTE AND RECYCLING HANDLING FACILITY

An eleven thousand three hundred seventy (11,370) square-foot building on site houses a Harris Badger Baler, serial number 8964, for the compacting of MSW which is then transshipped to the Roosevelt Landfill in Washington. The MSW is dumped inside the building, where it is inspected during processing. An additional two thousand seventy (2,070) square feet of the building are designated for administrative purposes.

A horizontal, two-ram, high-density solid waste baler with a nominal capacity of 25 tons per hour of general MSW is provided. The baler is capable of either manual or fully automatic operation and is fed by a Recycling Equipment Manufacturing, Inc. Oscar Conveyor installed on the tipping floor. Controls for the conveyor are integrated with those of the baler. The materials are conveyed to the bale chamber, where they are compacted, and once bale density is achieved, the bale is ejected and tied with an Accent 470 wire tie. The bales are then transferred to a 40-foot waste container supplied by Republic Services. When the container is full, it is transported by Alaska Marine Lines, a subcontractor for Republic Services, to the Port of Seattle. From there the containers are rail-shipped to Roosevelt, Washington, for disposal at a regional disposal facility.

Included at the facility is a containment area specifically designed for temporary storage of

used oil. The facility also has designated areas for household recyclables, used automotive batteries, and household hazardous waste.

The landfill fence is 50 feet away from all property boundaries in the landfill. All waste is contained within the fence and therefore all required setback distances are met at the site.

The Petersburg Borough has officially closed the portion of the landfill that was operated as a Class II landfill. An updated Final Closure Plan reflecting closure requirements of the Class II landfill is on file at the baler facility and with ADEC.

4.0 FACILITY GOALS AND OBJECTIVES

The basic goals and objectives for the facility include but are not limited to:

- A. Ensuring that all operations on site are performed safely and in an environmentally sound manner.
- B. Weighing and recording of all solid waste brought to the Baler Facility.
- C. Ensuring that no hazardous or unacceptable wastes are deposited in the landfill or transported with solid waste, and that all hazardous wastes found are removed from the waste and handled appropriately.
- D. Ensuring that customers are directed to the appropriate disposal area.
- E. Ensuring that a maximum percentage of all waste is recycled.
- F. Accepting and appropriately handling special wastes such as, but not limited to, animal carcasses, ash, treated medical waste, and other materials that might require special handling with prior notice and approval. Ensuring that special waste such as sewage screenings is deposited in locations specifically designated and approved by the Borough and the Alaska Department of Environmental Conservation (ADEC).
- G. Ensuring that used oil, batteries, and hazardous and household hazardous wastes are handled in an acceptable manner, making use of the facilities provided for this purpose.
- H. Baling solid waste and loading bales into containers for shipment.
- I. Ensuring that C/D debris and other inert wastes are properly disposed of in an area designated and approved by the Borough and ADEC.
- J. Ensuring that the yard waste operations are conducted in accordance with state and federal standards.

- K. Maintaining access roads in conjunction with the Public Works Street Department by cleaning, plowing, and sanding as needed. Ensuring that access roads and on-site roads are kept passable when open to the public.
- L. Ensuring that the site is maintained and in neat order. Ensuring that litter is picked up and does not cause a nuisance. Ensuring that wastewater and stormwater generated at the facility are managed appropriately.
- M. Operating the site to prevent access by animals and disease vectors.
- N. Operating the site to prevent nuisances related to odor and noise. Developing the site to ensure that it is not visually unattractive to the public.
- O. Properly operating and maintaining all equipment furnished by the Borough.
- P. Taking all reasonable precautions to protect facilities and equipment from damage due to operations, normal wear and tear, weather, careless handling, neglect, etc.
- Q. Conducting operations in a manner that compliments the Borough's Safety Plan to minimize chances of injury to Operators and the public.

5.0 OPERATIONAL REQUIREMENTS

Standard operating procedures and facility systems are described below.

A. Handling bales inside the facility

- 1) An open floor is provided along the north side of the baler building for a lift truck to carry the bales to the loading dock. Loading shall be the Operator's responsibility. The bales must be carefully weighed and then placed in the container and packed to ensure that the required weight for the container is achieved.
- 2) The tipping floor will be swept clean and rinsed at the end of each operating day. Litter shall be collected on an as-needed basis.

B. Random Load Checks

- 1) Wastes will be screened on the tipping floor prior to baling or disposal in the landfill. Prohibited items will be pulled from the waste stream and handled/stored in an appropriate manner.

- 2) The Baler Attendant does not conduct random load checks. Instead, the nature of refuse baling lends itself to inspection of loads of waste as they are placed on the tipping floor.

C. Hazardous Waste Exclusion Program

- 1) The Borough has set up a hazardous waste exclusion program intended to divert hazardous waste from the waste stream. The Baler Attendant directs the hazardous waste exclusion program so that customers can deliver their wastes to the appropriate area. Areas within the Baler Facility allow the Attendant to:
 - a. Direct batteries to a special storage area for recycling.
 - b. Separate and collect used oil, paints, mastics and adhesives, flammable liquids (A-fuels), gasoline, and antifreeze.
 - c. Separate refrigerators for CFC removal if they are not certified as empty.
 - d. Run the Smart-Ash burner.
 - e. Participate in household hazardous waste collection events.

D. Household Hazardous Waste Program

The Borough has a household hazardous waste program for the inspection and collection of household hazardous waste and for consolidation and shipping. The facility includes stations for the collection of used oil, automotive batteries, and small quantities of household hazardous wastes.

Used oil is currently accepted any time the facility is open. The oil is stored in five tanks ranging in capacity from 1,000-2,200 gallons with secondary containment walls, owned by the Petersburg Harbor Department. The Attendant will require all disposers to certify that the oil does not contain any contaminants such as solvents, gasoline, or water. The Attendant or other contract employee must visually inspect the oil. The used oil tanks must be secured at the end of each day and between disposal periods if necessary. All used oil is cleaned by heating in a cone tank, pumped through two Dieselcraft centrifuges, and is then burned at the Baler Facility by two (2) Firelake used oil furnaces. The oil is burned daily in the winter and used to heat the facility.

The used oil tanks are maintained by the Petersburg Harbor Department, which will be responsible for cleaning the exteriors of the tanks one time per year, or more frequently if needed. It is the responsibility of the Harbor Department to contact ADEC immediately if oil is spilled on the ground. The Borough is responsible for cleanup of spilled materials as directed by ADEC.

Batteries are also accepted any time the facility is open. Lead-acid batteries are collected and stored in totes. The Borough currently uses Hermosa Holdings LLC, dba NAPA, to

transport and ship the batteries to a recycling market.

Other hazardous wastes, including, but not limited to: paints, solvents, preservatives, photographic chemicals, corrosives, resins, adhesives, pesticides, herbicides, fuels, asphalt sealers, fluorescent light ballasts, and ammonia and other household cleaners, will be accepted according to the rules of the household hazardous waste regulations.

The facility has chemical storage containers for specific hazardous materials and contracts with US Ecology, dba Republic Services, to remove all hazardous waste annually. The Attendant or a contractor will be responsible for acceptance, identification, packaging, preparing all paperwork, and transporting and disposing of hazardous waste collected during year-round operations. The Baler Attendants shall also ensure that the facility is maintained regularly so that sufficient space is available for materials and to minimize health and safety hazards.

E. Recycling

The Petersburg Borough has established a long-term contract with Republic Services for disposal of solid waste and for acceptance and marketing of recyclable commodities. Petersburg started a commingled recycling program in February of 2014 to increase diversion of materials away from the Roosevelt Regional Landfill and decrease local costs of solid waste disposal. The program continues to be adjusted to achieve maximum citizen participation and diversion rates with a minimum of program expenses.

In the commingled program, the Petersburg Borough recycles cardboard, paper, aluminum, tin, and plastics. The commingled program is a curbside service that started with the use of blue bags for service delivery but then changed over to conventional cart-based service in 2015.

Within the landfill, the Borough also stores scrap metals, junk cars, scrap aluminum, copper, and brass for periodic shipments to recyclers in Seattle, Washington.

F. Open Burning

Open burning of wood waste is only to be done periodically and as needed. Only clean dimensional lumber or natural woody debris will be burned at this facility. Lumber that is treated, painted, or has glue or other residues is not to be burned. The Borough Sanitation Department has a standing burn permit through the local fire marshal scheduled on Tuesday and routine burns are conducted to keep material stockpiles small to be able to control the burn in such a way as to not be a risk to public health, become a sight nuisance or expose other areas to fire.

Any material capable of producing black smoke such as asphalt, rubber products, plastics, tires, oils, oily waste, or contaminated oil clean up materials will be removed at the scales

and placed in the appropriate place for proper disposal.

Oily rags and absorbents are disposed of by use of a “Smart Ash” incinerator. Other products that can produce black smoke are baled with other MSW. Tires are baled and stored on site or sheared into thirds and shipped to Roosevelt Landfill as MSW.

G. Salvaging

Salvaging may be permitted, at the sole discretion of the Borough, in an appropriate area of the facility (areas of unbaled metals, construction wastes, wood wastes), provided adequate safety provisions or other circumstances are in place. Landfill Management shall:

- 1) Ensure that salvaging, if allowed by the Attendant, is done in a manner that does not hinder site operations or create a health or safety hazard or nuisance.
- 2) Permit the controlled removal of material for recycling or reuse only during designated hours when the site is open and removal can be halted by Landfill Management if activities are unsafe or if Landfill Management otherwise deems it necessary. The salvagers shall be required to leave the disposal area when heavy equipment is in use and shall stay clear of dumping activities. Additionally, no open flames will be permitted during salvage operations unless specific safety provisions and permitting are in place.

H. Storage

- 1) Store all scrap metal and equipment (if accepted) at the site before shipment to recycling markets in a way that prevents leakage of pollutants, such as antifreeze, petroleum products, and battery acids, into the ground. Customers must complete a vehicle disposal affidavit certifying that equipment has been drained of all antifreeze and petroleum products before disposal at the site. Affidavit is validated by staff and kept on file at the Public Works office. CFCs shall be drained from appliances by a certified technician. All drums and barrels shall be empty.
- 2) Ensure that waste is:
 - a. Stored in a safe and sanitary way that prevents a litter violation under AS 46.06.080,
 - b. Stored in a manner that prevents the attraction or access of wildlife or disease vectors.
 - c. For municipal waste bales, stored within the baler plant, or otherwise protected from vectors and exposure to weather, prior to transshipment or placement at the landfill, and
 - d. For regulated waste, stored in such a manner as to prevent health hazards or contamination of the environment.

6.0 PUBLIC ACCESS

Public access will be strictly controlled in that the public will deliver materials only as directed. The site is controlled by gates and fencing, limiting public access to the working areas. Public access will be controlled with the following procedures:

- A. Ensure that an Attendant is on duty when the facility is open to the public.
- B. Close the landfill and baler facility entrance with barriers or a locked gate when an Attendant is not present at the facility.
- C. Ensure that the public is prohibited from access to the site, with the sole exception of solid waste management activities. Public wildlife watching is prohibited at the site.
- D. Limit access to prevent unauthorized dumping in closed sections of the facility.
- E. Ensure that access roads and on-site roads are kept passable and safe by the Attendant when open to the public.
- F. Ensure that signs are posted at appropriate areas of the landfill in order to direct the public regarding the proper disposal or management of waste. Hours of operation are posted at the access gate.
- G. Maintain a readable sign at the entrance to the landfill that includes the following information:
 - 1) Identification of the area as a permitted waste site, including the permit number.
 - 2) The name of the permittee and phone number(s) to call to report problems.
 - 3) Notification to users that domestic and commercial waste must be taken to the baler facility (if applicable) for processing prior to disposal.
 - 4) User information such as operating hours, restrictions, and any special disposal instructions; regular hours will be posted for receipt of household hazardous waste.
 - 5) Indication that some waste types, such as hazardous waste, are prohibited at the facility, and listing some of the more common prohibited wastes such as sewage, untreated medical wastes, PCBs, liquid septage, commercial fish processing waste, explosives, radioactive material, etc. This list also includes hazardous wastes as defined in 40 Code of Federal Regulations (CFR) 261, including: acids, corrosives, flammables, toxics.

- 6) Indication that vehicle waste loads must be covered or secured.

7.0 WASTES ACCEPTED

Solid waste accepted for management and disposal at the facility consists of all material that is permitted as such by ADEC, Alaska statutes, or AAC. They include the following:

- A. MSW
- B. C/D debris (that is not defined as a “special waste”)
- C. Yard waste
- D. Used tires
- E. Treated medical waste

The Petersburg Medical Center sterilizes all medical waste in their own autoclave and delivers the sterilized waste to the baler facility for disposal. All medical sharps are contained in proper sharps containers prior to sterilization and are fully contained within the packages of sterilized waste.

- F. Clean soil
- G. Household hazardous waste (e.g., paint, pesticides, cleaners from residential sources)
- H. Junk Vehicles

The Borough Landfill will accept any junked vehicle or equipment. All fluids, tires and batteries must be removed from the vehicle or equipment before going into the landfill. There is an Attendant at the scales to ensure this is properly done. The vehicles or equipment will be made available for participants in the Salvage and Recycle Program for a minimum of one week before they are crushed and then stockpiled. These vehicles will be recycled under the Borough recycling program.

- I. Recyclable materials
 - 1) Household recyclables, such as glass, aluminum, tin, cardboard
 - 2) Scrap metal, including appliances with CFCs removed
 - 3) Used automotive batteries
 - 4) White goods with CFCs removed

8.0 UNACCEPTABLE AND SPECIAL WASTES

- A. Unacceptable wastes are wastes that are not acceptable for disposal at the facility, based on restrictions in local, state, or federal regulation, permit condition, or management discretion. Such wastes include but are not limited to:
- 1) Unapproved special wastes.
 - 2) Liquid wastes (those that do not pass the paint filter test).
 - a. All containers for disposal that exceed 55 gallons in size are open and empty of fluids prior to acceptance at the facility to ensure that no liquids, especially hazardous liquids, or oils are deposited in the landfill, and
 - b. Containers holding liquid waste may not be placed in the landfill.
 - 3) Burning or hot wastes.
 - 4) Regulated hazardous wastes.
 - 5) Regulated hazardous waste, as defined by 40 CFR Part 261. Waste meeting this definition must be disposed of in accordance with 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste.
 - 6) Any persons wishing to dispose of any materials that have been in contact with any hazardous or special waste (such as barrels) must obtain prior approval from the Borough. If any item is questionable, it will be the responsibility of the Borough to authorize or deny disposal of said item.
 - 7) PCBs or other wastes regulated under the Toxic Substances Control Act.
 - 8) Untreated infectious or medical waste.
 - 9) Untreated sewage.
 - 10) Septage.
 - 11) Radioactive material.
 - 12) Explosives.

- 13) Any waste that is deemed to have a reasonable likelihood of damaging the facility or the processing equipment, or that is likely to pose a threat to health or safety or to cause the violation of any applicable law.

B. Special wastes are all wastes deemed neither acceptable nor unacceptable. Special wastes covered under this program are defined as, but not limited to, any liquid, semi-solid, or solid material, and associated containers generated as a direct result of an industrial, manufacturing or processing operation; any chemically or petroleum-contaminated soil or material; any wastewater treatment sludge or residue; any asbestos-containing material; any medical or infectious waste; incinerator ash; any agricultural by-product waste; any non-municipal waste generated by the oil and gas industry, or any waste regulated and classified by a state or other regulatory agency as “special waste” that is not otherwise found to be unacceptable as described in this plan.

- 1) C/D waste/processing waste
 - a. Sandblasting—vessel maintenance
 - b. Fishing industry
 - c. Timber industry
 - d. Military operations
 - e. Harbor dumpsters

2) Polluted Soils

The Borough Baler Facility/Landfill does not accept Polluted Soils. Should a customer have polluted soils, the Borough will assist the customer with information on disposal options.

- 3) Acceptance/rejection of this waste will be made on a case-by-case basis, based on Toxicity Characteristic Leaching Procedure and total metals analysis.
 - a. Oil filters
 - b. Antifreeze
- 4) Composted sewage sludge from the Petersburg Borough Wastewater Treatment Facility is disposed of at the Borough’s Landfill Facility as outlined in the Petersburg Wastewater Utility Biosolids Operations Plan.
- 5) Oil sorbents and polluted soil (sorbents are managed in the household hazardous waste building, and polluted soils are managed on a case-by-case basis)

- 6) Medical or infectious waste (including animal carcasses)
 - a. Ensure that pathological or infectious waste is first disinfected or sterilized, and then packaged to prevent a health hazard, or is incinerated in a pathological-waste incinerator before accepting at the landfill
 - b. Ensure that all animal carcasses are baled.
- 7) Regulated and unregulated asbestos
- 8) Household hazardous waste
- 9) White goods with CFCs
- 10) Scrap vehicles with CFCs and/or fluids

9.0 PLANS OF CONTROL

The facility is operated and monitored in compliance with the State of Alaska requirement regarding the control of impacts outside the facility boundary. That requirement says that the facility shall be operated to ensure that dust, odor, noise, traffic, and other effects from the operation of the facility do not become a nuisance or hazard to the public health, safety, or welfare.

A. Groundwater pollution

A groundwater hydrological and environmental assessment has been conducted, and ADEC has approved a waiver of groundwater monitoring. The landfill is operated in a manner to prevent unnecessary contamination of both groundwater and surface water.

B. Surface water pollution

Surface water control is addressed in the facility's monitoring plan. The Borough/Landfill uses a 3-1 slope grade, culverts, and ditches for 24 hour, 25 year storm water run-off. The surface water monitoring plan is subject to revision as needed.

- 1) The facility will be managed to prevent a water quality violation.
- 2) Drainage from the facility shall be controlled to prevent a water quality violation at or beyond the facility boundary.
- 3) The Borough will continue to monitor and document leachate seeps as well as redirect any surface drainages to lessen impacts to the landfill slopes.

The Landfill has in place a surface water monitoring program. It consists of sampling two surface water monitoring sites (SWL #6 and SWL #11). SWL #6 is above gradient of the landfill and SWL #11 is below the gradient of the landfill. These sites represent a background surface water site and a site under influence of the landfill leachate. Samples are taken in June and September of each year to provide dry and wet weather analysis. ADEC is to be notified if samples could not be taken. The sites are monitored for:

Water Quality: flow, visual observation (odor, texture, growth, etc.), pH, temperature (F), conductivity (mS/cm), color, dissolved oxygen, turbidity and hardness.

Dissolved Metals EPA Test Method

Cadmium 200.8

Chromium 200.8

Copper 200.8

Lead 200.8

Mercury 200.8

Total Recoverable Metals

Arsenic 245.1

Barium 245.1

Iron 245.1

Nickel 245.1

Selenium 245.1

Silver 245.1

Zinc 245.1

Water quality analytical testing results are sent to ADEC within 60 days of sampling. Results are evaluated by comparison to the applicable water quality standards under the most recent 18 AAC 70 and the Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances.

C. Stormwater control

Sanitation Operations and Maintenance

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- 1) Stormwater management shall be maintained as outlined in Petersburg Borough Stormwater Pollution Prevention Plan.
 - a. Construct and maintain surface water control structures at the facility. The surface water control structures shall prevent surface water run-on from flowing into previously disposed-of or stored waste and shall facilitate effective runoff of surface moisture from the site.
 - b. Ensure that drainage control structures are graded and maintained to prevent ponding and erosion and to prevent water from entering the solid waste.

D. Disease vectors

No sightings of rodents have been reported for some time, and the population appears to be in reasonable control.

- 1) The facility will be operated in order to prevent disease vectors.
- 2) The facility will develop an effective eradication program if rats or other disease vectors are encountered at the facility.

E. Wildlife access

A bale system with transshipping discourages many forms of wildlife from feeding on garbage. Bear removal has been successful. Bird numbers tend to be seasonal and have been reduced dramatically.

- 1) Prevent bear and wildlife contact with deposited waste at all areas of the landfill, including the active working face.
- 2) Manage the facility to prevent wildlife, domestic animal, and/or disease vector attraction.
- 3) Keep stray pets and domestic animals out of the waste facility.

F. Nuisances

- 1) Windblown litter is greatly reduced by the handling of MSW inside the building.
 - a. Prevent windblown and littered wastes from creating a nuisance.
 - b. Ensure that litter is kept in the designated portion of the landfill and baler facility by litter control fencing or other approved means.

- c. Ensure that litter is removed from access roadways, closed portions of the facility, inactive portions of the facility, and adjacent areas outside the landfill boundary.
 - d. Collect littered waste and return it to the active disposal cell or baler facility for baling on a regular basis, as needed.
- 2) Odor
- Substances that produce strong odors are normally associated with putrescible waste and will be handled inside the facility.
- 3) Noise
- Metal doors and building materials reduce noise from the handling of MSW and the baling operation.
- 4) Visibility
- The relatively remote site removes the working faces from direct public view. The view of the facility from residential areas is obstructed by trees and seeding that cover slope faces.
- 5) Dust
- The Petersburg Borough Public Works Department, on a routine basis, applies material for dust control.

10.0 FIRE CONTROL AND SAFETY

A. Fire protection

- 1) Hot loads will not be received at the facility.
- 2) Fire Protection System: Fire hydrants are installed on site. The area is in the borough's fire protection district. Fire extinguishers are required in all vehicles.
- 3) A fire-suppression system is installed inside the building facility and incorporates a monitoring program. Petersburg Borough Fire Department is available to assist in putting out fires.
- 4) Open burning in the landfill is only permitted on Tuesday in accordance with a standing burn permit through the local fire marshal. Burns are only permitted in the

center of the open rock pad and staff must ensure the area is clear of all unintended combustibles.

B. Safety

- 1) Current safety programs satisfy occupational safety standards.
- 2) Personnel protection equipment is available and used by all employees.
- 3) On-site communications: Radio equipment is being used at the facility. The Scale Attendant also has a base station. The frequencies are the same as the Public Works Department.

11.0 TRAINING

Site personnel involved either directly or indirectly in waste and special waste acceptance and hazardous waste exclusion shall receive training. Such training will be done at regularly scheduled sessions, such as site safety meetings, and will be documented as to content and personnel. Such training will be tailored to the site and the specific personnel present, and may cover such topics as a program overview; responsibilities of specific personnel; how to identify acceptable and unacceptable wastes; how to conduct and document visual inspections; what to do if an unacceptable waste, including hazardous waste, asbestos waste, or regulated PCB waste, is found; and any specific directives concerning individual waste streams.

A. Attendant training

Ensure that all Attendants are trained to recognize and handle spills of hazardous substances, and personal protection and safety. The training shall be ongoing, and appropriate certifications shall be kept current. All Attendants shall successfully complete a 24 hour HAZWOPER course and 8 hour annual continuing education.

Ensure that Attendants receive training on recognition and screening procedures for special wastes and unacceptable and prohibited materials, as well as materials not suitable for baling.

12.0 RECORD KEEPING

The following records must be retained and be available for ADEC review. Upon request, Landfill Management shall furnish the operating record to ADEC, or shall make it available at reasonable times for ADEC inspection.

The following records will be kept at the site and maintained by the Facility Superintendent or his/her designee:

- A. Permit application and permit.
- B. Site plans, maps, cross sections, as-built drawings, and other maps of the facility.
- C. Operational procedures.
- D. Inspection records.
- E. Training procedures and records.
- F. Notification procedures related to hazardous waste and other prohibited wastes.
- G. Safety procedures and fire protection.
- H. Volumes and tonnages of waste received. These should include the amount of waste received on the tipping floor and the amount of waste baled for disposal, recycling, household hazardous waste, and/or other types of waste disposal.
- I. Volumes and weight of waste accepted for asbestos disposal (if the Borough should decide to receive asbestos at the facility).
- J. Operation Plan.

The following records may be kept off site at the Petersburg Borough Public Works Office:

- A. Monitoring results, including monthly visual inspections, surface water monitoring, and gas monitoring results.
- B. Remediation plans.
- C. Permits for solid waste disposal.
- D. Any demonstration, certification, finding, testing, or analytical results.
- E. Cost estimates and financial assurance documentation.
- F. Register of complaints.
- G. Incident reports.
- H. Property deed information.

- I. Closure plan.

13.0 ROLLING STOCK EQUIPMENT

The Petersburg Borough has a number of pieces of equipment permanently assigned to the landfill operations. The Borough also has a budget for equipment rental if needed. Other Borough departments' equipment is available for use when needed. Some of the important pieces of equipment and their uses are as follows:

- A. IT14G Cat Wheeled Loader

This is used inside the facility for pushing the MSW or recyclable materials onto the baler conveyor. The loader has a forklift attachment and can be used for moving appropriate materials. The loader also has a 14' snowplow attachment for snow control. As needed, the loader can be used elsewhere outside the facility.

- B. 240 Cat Excavator

The excavator is used for spreading, grading, and compacting inert materials. The advantages of using an excavator for inert materials are numerous: one can sort, crush, save, or single out items after they have been dumped. The excavator also loads cover materials and builds retaining walls.

- C. Heil Semi-automated Garbage Truck

This is used for residential and commercial garbage pickup five days per week.

- D. Heil Semi-automated Garbage Truck

This is used for residential and commercial co-mingled recycling pickup five days per week.

- E. Heil Rear-Load Garbage Truck.

This is used as a back-up garbage truck, for picking up recycled glass, and for cruise ship garbage.

- F. Swaploader Multi-use Truck

This is used for 13 yard dumpster delivery and pickup. This vehicle is shared with Petersburg Borough's Water and Wastewater departments.

- G. Toyota Forklift

This machine is used for loading baled garbage and recycling commodities as well as all other aspects of the facility's operations and maintenance.

H. 2019 GMC Sierra 1500 4x4

This vehicle is used for administration purposes.

14.0 SOLID WASTE CONTINGENCY PLAN

The solid waste baler facility will be utilized as a solid waste contingency to store baled solid waste in case of an emergency. Potential emergencies might include barge delays, missed sailings, lack of shipping containers, equipment failure or SW contract negotiations. In the event of a long-term shipping delay, portions of the landfill can be utilized for storage of baled waste but this is meant to be a temporary solution and all baled waste will be recovered from this area and shipped per usual after the emergency situation is resolved. ADEC Solid Waste Program is to be notified prior to placing baled solid waste into the landfill contingency area.

In the event of a baler machinery failure, the Borough will transition to using open top containers for loading and shipping of loose MSW. Once the baler is repaired, baling and shipping of wastes and recycling will resume.

15.0 CORRECTIVE ACTION PLAN

Damage to the surface or slopes of the active or closed portions of the landfill will be documented and reported to the Public Works Director or his/her designee. The Director will be responsible for implementing corrective action, using the on-site heavy equipment and materials described in this Operations Plan. Corrective action is expected to include (but is not limited to) stabilization of slumping or eroded slopes, surface grading to prevent ponding of water and subsequent infiltration through the cover material, and collection and proper disposal of waste exposed because of damage to the slopes or cover material, if any.

Any improper or unauthorized waste will be addressed as described in Section 8.B. Upon being informed of any violations of regulations or permit conditions, the Public Works Director will immediately take necessary steps to return the facility to compliance with this Operations Plan and its solid waste permit.

The Operations Plan will be reviewed annually; updates will be made as necessary. Changes to operations will be documented in this Operations Plan, and affected personnel will be informed via trainings and site meetings.



City of Petersburg

P.O. Box 329

PETERSBURG, ALASKA 99833

CITY OF PETERSBURG

LANDFILL GROUND/SURFACE WATER

MONITORING PROGRAM

Submitted by:

Water & Wastewater Utilities
Laboratory

CITY OF PETERSBURG

LANDFILL GROUND/SURFACE WATER

MONITORING PROGRAM

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STATEMENT OF PURPOSE

The ground/surface water monitoring will take place at the City of Petersburg's existing landfill. The landfill has been in service for over twenty (20) years. Up until 1990, the material was burned as it was disposed of. Since the burning stopped, the landfill has grown rapidly and continues to grow.

The landfill is located on Mitkof Island, northeast of town, approximately 1/2 mile from the shore of Frederick Sound. It is situated in a muskeg area, with hardpan located 5-15 feet underneath.

The purpose of the monitoring plan is to determine if a leachate plume does in fact exist and if it does, determine the extent and composition of the plume and direction of flow.

It is also important to the City to have the monitoring program in place before the next phase of the solid waste management plan is implemented which will consist of a baling facility.

MONITORING SITES

The site is located at the existing dump which is approximately two (2) miles northeast of the center of town and 1/2 mile from the shore of Frederick Sound. Access to the site is provided via the water treatment facility road which passes directly to the south of the landfill.

A total of five (5) wells have been installed. One well is located above (up gradient) of the landfill and is used as a control well. Four wells have been installed below (down gradient) of the landfill, on a radius of approximately 150 feet from the toe of the fill, per attached sketch.

The wells are constructed of two (2) inch diameter threaded PVC which is EPA approved for this purpose. The wells have PVC screens installed and are surrounded by silica sand. They also have a protective cover with a locking cap. The wells were bored through muskeg, until ground water was reached. This occurred directly on top of the hardpan (silty-clay) at a depth of ten (10) to twelve (12) feet below the surface. At ADEC's suggestion, one of the down-gradient wells was held to a depth of five (5) feet to collect mainly surface water. These groundwater well sites are designated as WS-1 through 5.

Five (5) surface water sites have been established and are designated as SW-6 through 10. Two (2) were at the request of ADEC and three (3) additional sites have been proposed by the City and accepted by ADEC. The two (2) surface water sites requested by ADEC are situated along the stream which flows adjacent to the landfill. One sample site is directly upstream of the landfill and is approximately fifty (50) feet from the facility boundary and has the designation of SW-7. The other sample site is directly downstream of the landfill and is approximately two hundred (200) feet from the facility boundary and is designated as SW-10. The control site for surface water samples is SW-6 and is located approximately 1250 feet upstream from the facility boundary. SW-8 & SW-9 are surface water sampling sites investigating direct runoff from the landfill and are within fifty 50 feet from the toe of the slope created by the landfill.

SAMPLING PROCEDURES

Samples will be taken in the field by City personnel who are certified water/wastewater operators and are familiar with sampling and analysis procedures. Actual procedures for sampling will be in accordance with the ADEC/EQLMO Field Sampling and Laboratory Submittal Procedures Manual, dated March 1991.

The sampling procedures are as follows;

- 1.) In the afternoon before sampling, each well is completely evacuated of water.
- 2.) The next morning, samples are taken using a 1 liter Norwell, PTFE bailer.
- 3.) To eliminate cross contamination of the samples, prior to each sample being taken, the bailer is thoroughly rinsed, inside and out, with 0.1N HCl and flushed with distilled water. After each series of samples the bailer is washed with hot soapy water and rinsed and flushed before storage.
- 4.) The samples are repacked in the shipping container provided by the analysis laboratory and shipped via Federal Express back to the lab in Seattle on the same day the samples are taken.

The sample bottles for the 200.8 & 245.1 test methods are plastic, 500ml in size, with nitric acid added as a preservative at the lab. These bottles are color coded red for reference.

The bottles for the 9020 test method are glass, 500ml in size, with no preservative. These are color coded blue for reference.

SAMPLE TYPE & MONITORING PARAMETERS

Monitoring Parameters are as follows:

<u>Element</u>	<u>EPA Test Method#</u>	<u>Detection Limits (ug/l)</u>
Arsenic	200.8	1.
Barium	200.8	3.
Cadmium	200.8	0.1
Chromium	200.8	0.2
Copper	200.8	0.2
Iron	200.8	1.
Lead	200.8	0.1
Manganese	200.8	0.2
Nickel	200.8	0.5
Selenium	200.8	1.
Zinc	200.8	0.6
Silver	200.8	0.1
Mercury	245.1	0.2
Total Organic Halogen	9020	20.

Conductivity, pH, Dissolved Oxygen, Alkalinity, Salinity, and Chemical Oxygen Demand will be analyzed at the Water & Wastewater Utility laboratory by the following procedures:

Water Temperature will be taken in the field using a thermometer that has been calibrated against an NIST Traceable Instrumentation. A Certificate of Calibration is on file in the laboratory.

Conductivity will be measured using a Hach, Model 44600 Conductivity/TDS meter. Calibration is performed prior to each series of tests using Hach NaCl standard solutions.

An Orion, Model SA520 pH meter is used to measure pH. Calibration is performed prior to each series of samples using two buffers that bracket the expected range of the sample.

Dissolved Oxygen is performed using a YSI, Model 58 DO meter. The DO meter is calibrated prior to each series of samples. Calibration of the DO meter is by the Winkler Titration Method.

A Hach Alkalinity Test Kit, Model AL-DT is used to perform alkalinity measurements by titration. Results obtained are both phenolphthalein and total alkalinity (as mg/l of CaCO_3).

Salinity is measured using a Hach Salinity Test Kit, Model SA-DT, by titration of mercuric nitrate.

Chemical Oxygen Demand will be measured using a COD Reactor. This method is EPA approved as published in the Federal Register, Vol. 45, No. 78, Monday April 20, 1980, page 26811.

SAMPLING FREQUENCY

Sampling will be done on a quarterly basis. Results will be provided to ADEC on March 1, June 1, September 1 and December 1 of each year.

ANALYSIS

The method of analysis for the metals will be the Inductively Coupled Plasma Mass Spectroscopy (ICP-MS) EPA Method 200.8. The Cold Vapor Method 245.1 will be used for Mercury. The EPA Method 9020 will be used for the Total Organic Halogen (TOX).

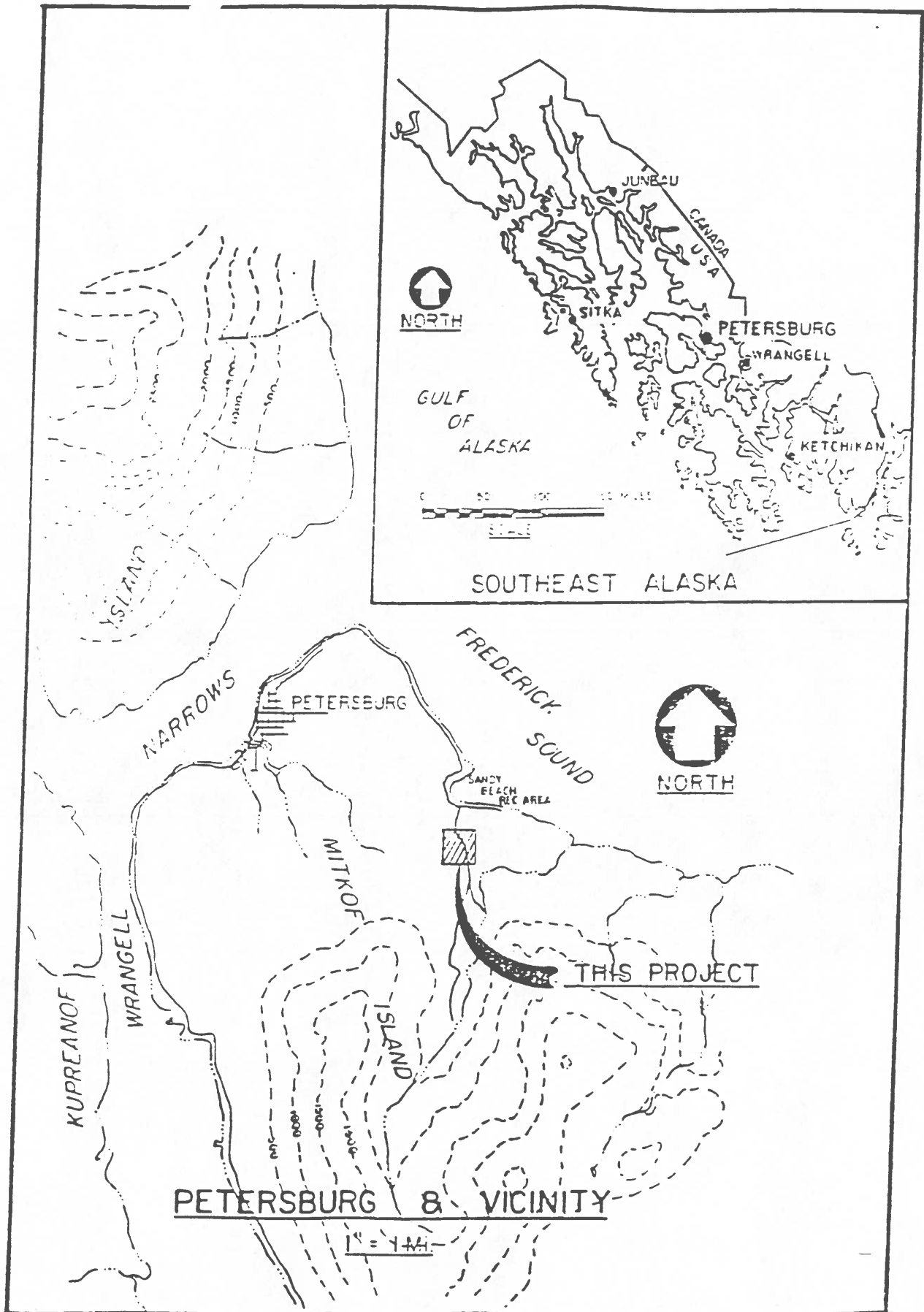
Quality Assurance

Quality Assurance procedures for sampling will be per the ADEC/EQLMO Field Sampling and Laboratory Submittal Procedures Manual, dated March 1991

Laucks Testing Laboratories has been retained by the City of Petersburg to perform analysis on the ground/surface water samples. Their QC Manual has been provided to ADEC.

DOCUMENTATION & REPORTING PROCEDURES

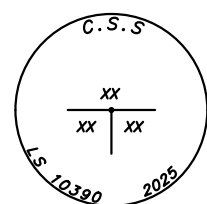
The reports will be submitted to ADEC on a quarterly basis. Copies of the Petersburg laboratory reports will be included in the Laucks Testing reports. The reports will indicate the date, site or well number, parameters, detection limits, concentrations, lab name, analysis date and signatures.



LEGEND

- C.S.S., L.S. 10390 2" ALCAP MON ON REBAR ESTABLISHED THIS SURVEY
○ 2" BRAUN ALCAP LS 5485 ON REBAR RECOVERED THIS SURVEY
● 3" TONER/NORDLING B.C.M. RECOVERED THIS SURVEY
⊕ 2.5" G.L.O. B.C.M. RECOVERED THIS SURVEY

- SUBJECT PARCEL BOUNDARY LINE
— ADJOINER SIDE BOUNDARY LINE
- - - RESERVOIR ROAD R.O.W. EASEMENT BOUNDARY (PLAT No. 97-14)
- - - RESERVOIR ROAD R.O.W. EASEMENT CENTERLINE (PLAT No. 97-14)
- - - LANDFILL/BALER FACILITY FOOTPRINT
X X X CHAINLINK FENCE



TYPICAL 2" DIAM. ALUMINUM
CAP MONUMENT SET THIS SURVEY

CERTIFICATE OF APPROVAL

I, HEREBY CERTIFY THAT THIS BOUNDARY MAP HAS BEEN
FOUND TO COMPLY WITH THE BOUNDARY SURVEY STANDARDS
OF THE PETERSBURG BOROUGH AND THAT SAID MAP HAS BEEN
APPROVED FOR FILING IN THE OFFICE OF THE DISTRICT RECORDER.

PLANNING DIRECTOR, DATE
PETERSBURG BOROUGH

GENERAL NOTES

1. THE BASIS-OF-BEARING UTILIZED TO CONDUCT THIS SURVEY IS THE BEARING OF THE LINE BETWEEN THE 3" TONER/NORDLING BRASS CAP MONUMENT MARKING CORNER #2 OF A.D.L. 20835 AND THE 2.5" G.L.O. BRASS CAP MONUMENT MARKING CORNER #1 OF A.D.L. 20835. ACCORDING TO THE LANDFILL SUBDIVISION, PLAT No. 2009-10, THE ACCEPTED BEARING IS S 00°06'00" W.
2. THE ACCURACY OF THIS SURVEY IS GREATER THAN 1:5,000.
3. ALL BEARINGS SHOWN ARE TRUE BEARINGS AND ARE ORIENTED TO THE BASIS-OF-BEARING AND DISTANCES SHOWN ARE REDUCED TO HORIZONTAL FIELD DISTANCES.
4. WHEN RECORD COURSES DIFFER FROM MEASURED COURSES, RECORD COURSES ARE SHOWN IN PARENTHESES () FOLLOWED BY THE SOURCE OF THE RECORD INFORMATION.
5. THE FOLLOWING PLATS AND RECORDS WERE USED TO EXECUTE THIS SURVEY:
(R1) LANDFILL SUBDIVISION PLAT No. 2009-10
(R2) RESERVOIR ROAD RIGHT-OF-WAY PLAT, PLAT No. 97-14
(R3) RECORD OF SURVEY OF THE N.E. 1/4 OF THE S.E. 1/4 OF SECT. 35, T58S, R79E, C.R.M. PLAT No. 93-20RS
(R4) SURVEY OF STATE LAND A.D.L. 20835, PLAT No. 68-544
(R5) AN UNRECORDED TOPOGRAPHIC SURVEY OF THE PETERSBURG LANDFILL BY RICK BRAUN LS 5485 COMPLETED IN 2008
(R6) STATE OF ALASKA PATENT No. 5483, DOC.#1981-000039-0
6. THE PURPOSE OF THIS SURVEY IS TO DOCUMENT CHANGES MADE IN THE LANDFILL AREA AND BALER FACILITY AREA SINCE THE TOPOGRAPHIC SURVEY COMPLETED BY BRAUN IN 2008. THIS RECORD OF SURVEY PLAT IS MEANT TO DOCUMENT THE BOUNDARIES OF THE PARCELS THAT CONTAIN THE LANDFILL AREA AND THE BALER FACILITY AREA.
7. R.O.W. PARCEL C IS PART OF THE RESERVOIR ROAD R.O.W. PLATTED BY RICK BRAUN, PLAT No. 97-14. THE R.O.W. IS DETAILED IN STATE OF ALASKA PATENT No. 5483, DOC.#1981-000039-0, BOOK 12, PAGE 910, PETERSBURG RECORDING DISTRICT. RESERVOIR ROAD WAS REFERED TO AS, "THE QUARRY ROAD" WITHIN THE DESCRIPTION OF THE PATENT. THIS R.O.W. IS AN EASEMENT GRANTING UNRESTRICTED PUBLIC USE AND ACCESS.

TONER/NORDLING B.C.M.
A.D.L. 20835 CORNER No. 3

A.M.H.T.L.O.
STATE OF ALASKA QUIT CLAIM DEED No. 8000016
BOOK 53, PAGE 88 - DOC.#1996-001327-0

A.M.H.T.L.O.
STATE OF ALASKA QUIT CLAIM DEED No. 8000016
BOOK 53, PAGE 88 - DOC.#1996-001327-0

G.L.O. B.C.M. 1/4 S35/S36
A.D.L. 20835 CORNER No. 1

CURVE TABLE (CALC)				CURVE TABLE (RECORD R2)			
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CURVE	RADIUS	ARC LENGTH	DELTA ANGLE
C1	500.00'	355.01'	40°40'51"	C1	500.00'	354.81'	40°39'29"
C2	500.00'	146.90'	16°50'01"	C2	500.00'	146.90'	16°50'00"
C3	200.00'	141.95'	40°39'56"	C3	200.00'	141.95'	40°40'40"
C4	1300.00'	374.06'	16°29'10"	C4	1300.00'	374.06'	16°29'11"
C5	1335.00'	384.13'	16°29'10"	C5	1335.00'	384.81'	16°30'56"
C6	235.00'	166.79'	40°39'56"	C6	235.00'	166.80'	40°40'40"
C7	465.00'	136.62'	16°50'01"	C7	465.00'	136.62'	16°50'00"
C8	465.00'	329.97'	40°39'30"	C8	465.00'	329.51'	40°38'04"
C9	535.00'	379.65'	40°39'30"	C9	535.00'	380.10'	40°39'30"
C10	535.00'	157.18'	16°50'01"	C10	535.00'	157.18'	16°50'00"
C11	165.00'	117.11'	40°39'56"	C11	165.00'	117.11'	40°40'00"
C12	1265.00'	363.32'	16°27'21"	C12	1265.00'	363.31'	16°27'19"
C13	1300.00'	102.41'	4°30'49"	C13	1300.00'	102.41'	4°30'49"
C14	1335.00'	104.50'	4°29'05"	C14	1335.00'	104.49'	4°29'04"
C15	1265.00'	100.32'	4°32'58"	C15	1265.00'	100.34'	4°32'41"

R.O.W. PARCEL C
106,878 S.F.
2.45 AC.

A.D.L. 20835
1,743,776 S.F.
40.03 AC.

N 00°06'00" E 1321.50' (N 00°06'00" E 1321.52' R1)
BASIS OF BEARING

PETERSBURG BOROUGH
STATE OF ALASKA PATENT No. 7908
BOOK 23, PAGE 405 - DOC.#1985-000345-0
A.D.L. No. 100494

OWNERSHIP SUMMARY:

A.D.L. 20835 - PETERSBURG BOROUGH (STATE OF ALASKA PATENT No. 5483)
TRACT A - PETERSBURG BOROUGH (QUIT CLAIM DEED DOC.#2009-000601-0)
TRACT B - PETERSBURG BOROUGH (QUIT CLAIM DEED DOC.#2009-000601-0)

CLIENT: PETERSBURG BOROUGH
P.O. BOX 329
PETERSBURG, AK 99833

80 0 80 160 160
SCALE IN FEET

PETERSBURG LANDFILL RECORD OF SURVEY

OF A.D.L. 20835 AND OF
TRACT A AND TRACT B OF THE LANDFILL SUBDIVISION,
PLAT No. 2009-10, WITHIN
SECT. 35, T58S, R79E, C.R.M.
PETERSBURG RECORDING DISTRICT

SURVEYOR:

CENTRAL SOUTHEAST SURVEYORS

P.O. BOX 533, PETERSBURG AK 99833
PH (907) 518-0075
EMAIL: tynocana@gmail.com

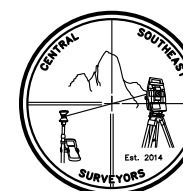
RPLS #10390

DRAWN & CHECKED BY D.C.T. SURVEY DATE INITIATED: 4/15/25 COMPLETED: 5/19/25

DATE: 5/19/25

SCALE: 1" = 80'

C.S.S. DRAWING No. PS6 LANDFILL ROS-TOPO 2025



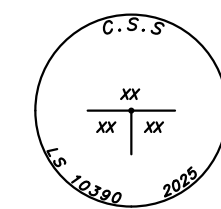
LEGEND

- C.S.S., L.S. 10390 2" ALCAP MON ON REBAR ESTABLISHED THIS SURVEY
- 2" BRAUN ALCAP LS 5485 ON REBAR RECOVERED THIS SURVEY
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- SUBJECT PARCEL BOUNDARY LINE
- - - SIDE BOUNDARY LINE
- - - RESERVOIR ROAD R.O.W. EASEMENT BOUNDARY (PLAT No. 97-14)
- - - RESERVOIR ROAD R.O.W. EASEMENT CENTERLINE (PLAT No. 97-14)

- - - REFUSE CLASSIFICATION AREA
- - - TOP SLOPE
- - - TOE SLOPE
- - - STREAM/DITCH CENTERLINE
- - - CHAINLINK FENCE
- - - OVERHEAD POWER TRANSMISSION LINE
- - - EDGE GRAVEL ROAD
- - - POWER POLE

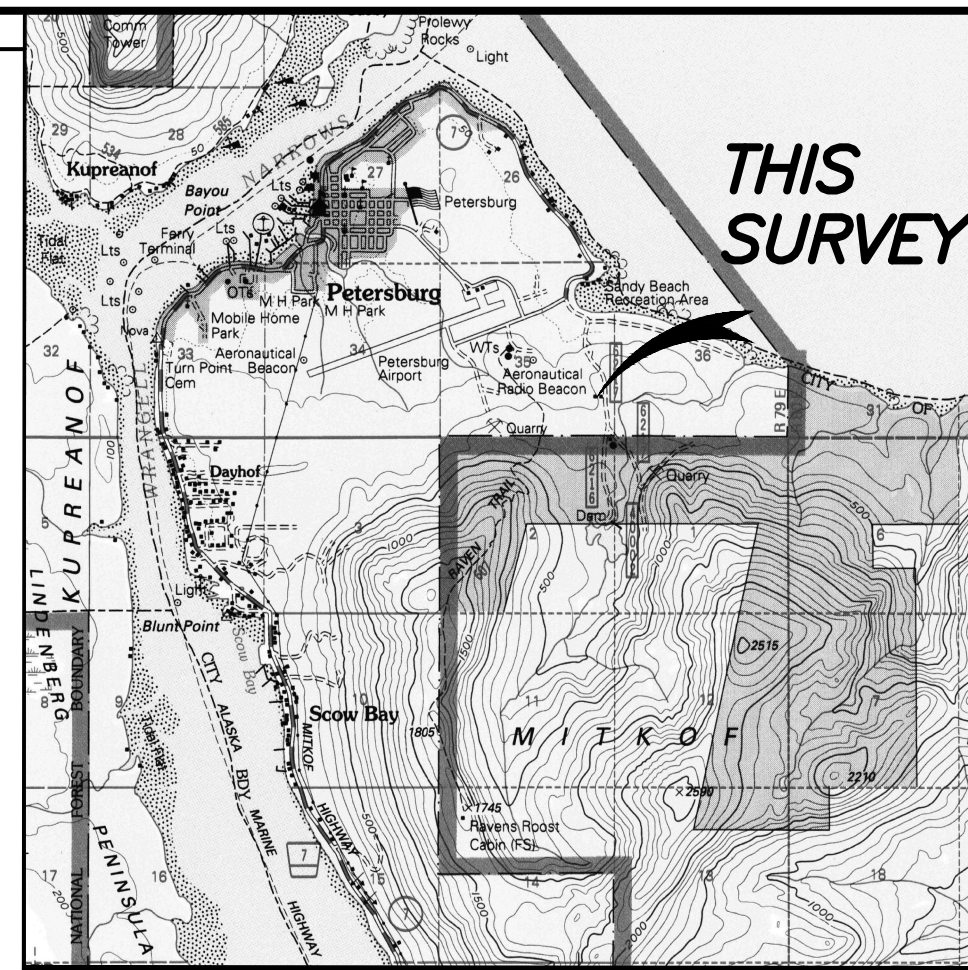
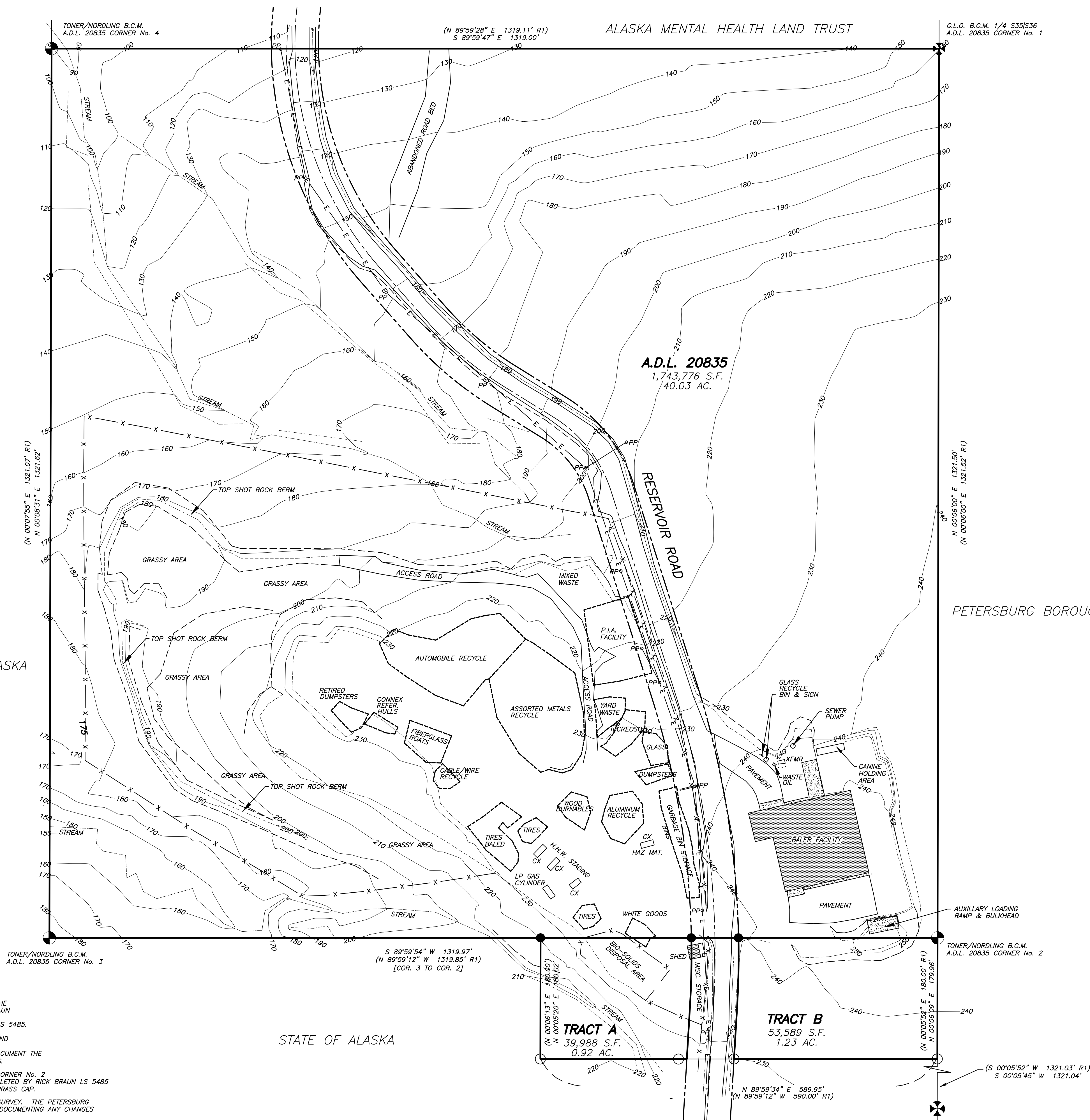
- ▨ STRUCTURE/BUILDING
- ▨ CONCRETE
- ▨ CONNEX



TYPICAL 2" DIAM. ALUMINUM
CAP MONUMENT SET THIS SURVEY

GENERAL NOTES

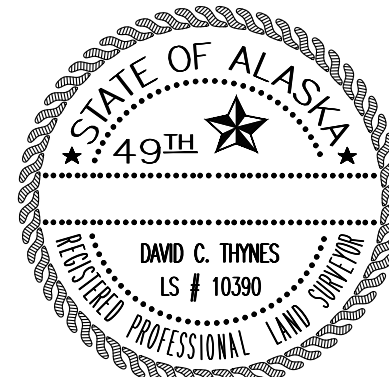
- THE BASIS-OF-BEARING UTILIZED TO CONDUCT THIS SURVEY IS THE BEARING OF THE LINE BETWEEN THE 2.5" TONER/NORDLING BRASS CAP MONUMENT MARKING CORNER #2 OF A.D.L. 20835 AND THE 2.5" TONER/NORDLING BRASS CAP MONUMENT MARKING CORNER #1 OF A.D.L. 20835 ACCORDING TO THE LANDFILL SUBDIVISION, PLAT No. 2009-10, THE ACCEPTED BEARING WHICH IS S 00°06'00" W.
- THE ACCURACY OF THIS SURVEY IS GREATER THAN 1:5,000.
- ALL BEARINGS SHOWN ARE TRUE BEARINGS AND ARE ORIENTED TO THE BASIS-OF-BEARING AND DISTANCES SHOWN ARE REDUCED TO HORIZONTAL FIELD DISTANCES.
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 - (R5) AN UNRECORDED TOPOGRAPHIC SURVEY OF THE PETERSBURG LANDFILL BY RICK BRAUN LS 5485 COMPLETED IN 2008.
- TOPOGRAPHIC INFORMATION SHOWN OUTSIDE OF THE LANDFILL FENCE LINE AND EAST OF THE RESERVOIR ROAD IN AREAS THAT HAVE NOT BEEN EXCAVATED OR FILLED IS FROM THE BRAUN TOPOGRAPHIC SURVEY NOTED IN THE LIST OF RECORD PLATS AS (R5). THE INFORMATION WAS COMBINED WITH DATA FROM THIS SURVEY WITH THE PERMISSION OF RICK G. BRAUN LS 5485.
- THE PURPOSE OF THIS SURVEY IS TO DOCUMENT CHANGES MADE IN THE LANDFILL AREA AND BALER FACILITY AREA SINCE THE TOPOGRAPHIC SURVEY COMPLETED BY BRAUN IN 2008. A SEPARATE RECORD OF SURVEY PLAT WILL ACCOMPANY THIS TOPOGRAPHIC SURVEY TO DOCUMENT THE BOUNDARIES OF THE PARCELS THAT CONTAIN THE LANDFILL AND THE BALER FACILITY AREAS.
- ELEVATIONS FOR THIS TOPOGRAPHIC SURVEY ARE BASED ON THE PROJECT ELEVATION OF CORNER No. 2 OF A.D.L. 20835 SHOWN ON A TOPOGRAPHIC SURVEY OF THE PETERSBURG LANDFILL COMPLETED BY RICK BRAUN LS 5485 DECEMBER 2008. CORNER No. 2 ELEVATION = 245.90' MEASURED TO THE TOP OF THE BRASS CAP.
- THIS SURVEY REPRESENTS LANDFILL CONDITIONS EXISTING DURING THE DURATION OF THE SURVEY. THE PETERSBURG LANDFILL IS A DYNAMIC SITE THAT CHANGES WITH USE. C.S.S. IS NOT RESPONSIBLE FOR DOCUMENTING ANY CHANGES IN THIS SITE AFTER THE DATE THIS SURVEY WAS COMPLETED, 5/20/2025.



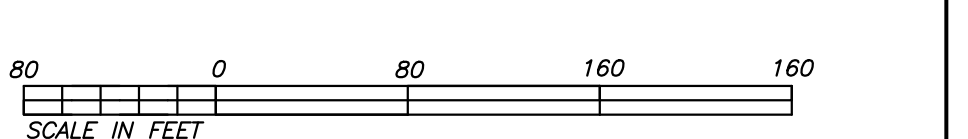
VICINITY MAP
SOURCE: USGS QUADRANGLE PETERSBURG (D-3)
DATE: 1986 SCALE: 1 INCH = 1 MILE

SURVEYOR'S CERTIFICATE
I CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE MONUMENTS SHOWN HEREON EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT.

DAVID C. THYNES AELL#10390 DATE



CLIENT: PETERSBURG BOROUGH
P.O. BOX 329
PETERSBURG, AK 99833



PETERSBURG LANDFILL TOPOGRAPHIC SURVEY

OF A.D.L. 20835 AND OF
TRACT A AND TRACT B OF THE LANDFILL SUBDIVISION,
PLAT No. 2009-10, WITHIN
SECT. 35, T88S, R79E, C.R.M.
PETERSBURG RECORDING DISTRICT

SURVEYOR:
CENTRAL SOUTHEAST SURVEYORS
P.O. BOX 533, PETERSBURG AK 99833
PH (907) 518-0075
EMAIL: tynocana@gmail.com
RPLS #10390

DRAWN & CHECKED BY D.C.T.	SURVEY DATE INITIATED: 4/15/25	COMPLETED: 5/19/25
DATE: 5/20/25		
SCALE: 1" = 80'	C.S.S. DRAWING No.	PSG LANDFILL TOPO 2025

City of Petersburg Sanitation Department
Landfill Final Closure Plan – 2015 revision
August 25, 2010 (updated 12/9/2010 & 4/22/15)

Final Closure Plan – Class III Landfill

In 2014, the Borough completed the Landfill Slope Stabilization project in which dredge spoils from the Petersburg North Harbor were hauled and placed on the western and northern outboard slopes of the landfill. The depth of spoils on the previous landfill slopes varied from 24" to over 36" to properly grade the slopes to no more than 3:1. The former scrap metals area was completely covered with spoils and will no longer be used for metal storage. A large work pad area was developed at the highest elevations of the landfill that will serve as the scrap metal storage area and junk car area. All work areas within the landfill were graded to drain surface water to the outside of the filled area.

No active MSW cells will exist when the Class III landfill is closed. Areas of the landfill to be addressed with the closure shall include: scrap metal storage area, junk car storage area, compost project area, municipal wastewater sludge pits and other recyclable commodity storage areas and structures.

Scrap Metal Storage area: The scrap metal storage area will be cleaned of all remaining scrap and debris. The cover over this area will be verified as meeting the 24" cover criteria for a Class III landfill closure and soil or rock placed to achieve the closure cover depth requirement if needed. The area will be graded to drain and protected from erosion by placement of rock or grass seeding of soils.

Junk Car Storage area: This area will be cleaned of all debris and graded with rock or soil to provide positive surface drainage to the extents of the landfill footprint, sloped 3:1 at a maximum. Grass seeding will be provided on soils to prevent erosion.

Compost Project site: This area will be cleaned of debris and all structures removed. All surfaces will be sloped at a maximum of 3:1 to allow surface drainage to natural ground. Seeding will be provided to prevent erosion.

Municipal Wastewater Sludge Pits: The existing two pits being used for disposal of municipal sludge will be closed by backfilling to grade, capping with a minimum of 18" of rock and/or soil. A minimum of 6" of organic soil shall then be placed and spread on the area and seeded with grass to prevent erosion of the slopes. Ground surfaces will be sloped (maximum of 3:1) to facilitate drainage to undisturbed areas.

Other storage areas, roads and structures: All non-permanent structures will be removed from the site, debris cleaned up and graded to prevent standing water. Seeding will occur on all slopes to prevent erosion. The original landfill shack will be maintained and used for storage of sanitation department supplies. All fences and access gates will be maintained until the site is retired by ADEC.

An annual schedule of site inspections and monitoring of landfill slopes will be provided by the Borough after the closure for a period of five (5) years. Any occurrence of erosion will be remedied upon discovery. Monitoring of drainage patterns shall also be provided with attention being given to complete elimination of standing water at the site and documentation of any leachate seeps that may occur on the surface of the landfill.

Note: The City of Petersburg previously filed a Final Closure Plan with ADEC on July 9, 1998, which was developed prior to the closure of the Class II landfill/balefill. The Class II portion of the landfill was closed in 2002 and included application and spreading of an impermeable blue clay cap on the waste disposal areas that was then covered with organic soils to the proper 3:1 slopes and seeded for erosion control. This effort was approved by ADEC Environmental Engineer Glenn Miller as an effective closure for the

landfill. This process lead the City to request and receive a solid waste permit to operate as a Class III landfill.

The City became incorporated as the Petersburg Borough in 2013. Due to the Borough's method of baling and shipping all MSW to Washington State, the landfill is correctly classified in purpose and function as a Class III landfill. The closure plan continues to be amended to reflect changes in the final plan for the Borough landfill, with regard to the 2013-2014 Landfill Slope Stabilization project, the previously closed sections of the landfill and the current classification of the landfill.

The amended Closure Plan is hereby included with the 2015 Landfill Permit Renewal Application for review and approval by ADEC.