

B2 OPERATING HOURS PERSONNEL AND EQUIPMENT

B2.1 Operating Hours

The SLF will not have regular operating hours and will remain closed until the CBS receives a request for its use by a resident of the CBS or a local contractor. When requests are made for its use, anticipated operating hours for SLF will be 9:00 a.m. until 3:00 p.m. Monday through Saturday.

B2.2 Operations Personnel

B2.2.1 Public Works Director

The Public Works Director has overall responsibility for all, administrative, and fiscal activities related to SLF. Specific activities for which the Public Works Director is responsible include personnel administration, work authorization, and financial management.

B2.2.2 Public Works Superintendent

Operations and activities at the SLF are performed under the direction of the Public Works Superintendent. The Public Works Superintendent's responsibility is to ensure that operations at the site are performed in accordance with the procedures outlined in this Plan of Operation, permits, regulations, and CBS policies and procedures.

The Public Works Director has overall responsibility for all operational, administrative, and safety programs conducted at the site. The Public Works Superintendent is responsible for functioning as the primary source of information regarding the overall operations of the facility and is directly in charge of all personnel and equipment involved in site operations. Responsibilities also include ensuring proper operational practices are being maintained, and that the site is operating in conformance with rules, regulations and permits.

B2.2.3 Environmental Superintendent

The Environmental Superintendent is responsible for monitoring the facility's compliance with applicable environmental requirements, and is responsible for performing a variety of technical and general duties. Duties include performing routine environmental monitoring activities,

including preparation of calculations, data management, and analysis of data based upon environmental monitoring plans.

B2.2.4 Equipment Operators

Equipment Operators (including the Public Works Superintendent) are responsible for the safe and efficient operation of heavy or specialized equipment used to operate the landfill. Principal duties performed by the equipment operators consist of the following:

- Waste screening and random load inspections
- Directing the unloading of waste at designated locations
- Operating equipment that spreads and compacts refuse at the active working face
- Placing and covering biosolids
- Placing cover soil over waste
- Keeping the unloading area clear and available for use

Equipment Operators perform under the direct supervision of the Public Works Superintendent.

B2.3 Personnel Training

Operating personnel will be trained by the Public Works Superintendent to recognize regulated dangerous waste and polychlorinated biphenyl (PCB) wastes. Annual internal training will also be conducted that will include an overview of the types of waste that can and cannot be accepted at the landfill.

The training will include recognition of typical indicators of regulated or dangerous wastes such as:

- Hazardous placards or markings
- Liquids
- Powders or dust
- Sludge
- Bright or unusual colors
- Drums or commercial size containers
- Chemical odors

PCBs are sometimes found in certain commercial and industrial sources. Personnel will be trained to look for the items.

B2.4 Landfill Operating Equipment

Landfill operating equipment will be provided by the CBS Public Works Department on an as needed basis. The types of equipment available for landfill operations include the following:

- Track-mounted dozers
- Rubber-tired loaders
- Excavators
- Water trucks
- Tub mill grinder

B3 ACCESS RESTRICTIONS

B3.1 Control of Public Access and Access Safety

Access to the SLF for disposal of inert waste and biosolids will be done initially by appointment. Users will be required to call the Public Works Superintendent 24 hours in advance of disposal. Users will be asked to estimate the volume of inert waste or biosolids they will be delivering and the amount of time that they will need to deliver and dispose of the waste. A time for disposal activities will then be established and equipment operators scheduled to receive, inspect, place and, if necessary, cover the waste.

B3.2 Site Signage

Signs posted at the entrance will guide facility users to the active disposal areas. Signs at the entrance will also indicate the types of waste accepted at the landfill and the types that are not accepted at the landfill. Contact names for personnel responsible for operating the landfill and emergency phone numbers will also be posted at the site entrance. Other signs will be posted defining access routes to the active disposal areas, speed limits and other site safety standards.

B3.3 Controlling Unauthorized Access and Traffic

Unauthorized access is restricted by a combination of an existing gate and naturally steep terrain. Signs labeled "No Trespassing" will be posted along the site perimeter at approximate 250- to 300-foot intervals.

Controlled access to the landfill is through a single entrance gate off of Harbor Mountain Bypass Road. This entrance gate will be kept locked at all times except those times when disposal activities are taking place.

Entrance to the landfill disposal areas may also include routes through the active quarries located adjacent to the SLF, but will be subject to approval of the quarry operators.

B3.4 Salvaging

Salvaging of waste for the purpose of recycling materials will be considered by the Public Works Director and Public Works Superintendent on a case-by-case basis. If salvaging is permitted it will be done at the SLF during a time when no other disposal operations are taking place, and

will be done in the presence of landfill operations personnel. A sort and salvage operation concept has been supported by the Solid Waste Implementation Team and may be implemented and administered by CBS at the facility.

B3.5 Preventing Illegal Dumping

Illegal dumping will be prevented by controlling access to the landfill. During disposal activities site operators will inspect loads of waste brought to the landfill. If restricted wastes are found they will be re-loaded and removed from the site. Additional information regarding waste restrictions is provided in Section B4.

B4 WASTE ACCEPTANCE AND RESTRICTIONS

B4.1 Quantity and Source of Waste Accepted

There are no restrictions on the quantity of inert waste or biosolids that can be disposed at SLF. However, based on historical records, annual volumes are not expected to exceed 5,000 cubic yards of inert waste, and 1,500 cubic yards of biosolids.

The maximum volume of MSW that can be accepted at SLF in any one year is 1,825 tons, which is equal to an average daily volume of 5 tons. Based on an average of 20 tons per day produced in Sitka, disposal of MSW could take place for approximately 90 days in any one year.

The source of all waste disposed at SLF is restricted to waste generated in the City and Borough of Sitka. No waste will be accepted from generators outside of the City and Borough of Sitka.

B4.2 Waste Restrictions

SLF cannot accept the following:

- Regulated dangerous or hazardous waste, as defined by the United States Environmental Protection Agency (USEPA) and the ADEC, generated by industrial or commercial sources.
- Liquid wastes.
- Radiation contaminated wastes.
- Asbestos or medical waste which is not properly containerized.

The USEPA defines hazardous waste in 40 CFR 261.2. These definitions include PCB wastes. PCBs can be found in the following commercial and industrial sources:

- Mineral oil and dielectric fluids from capacitors or transformers.
- Contaminated soil, dredged material, sewage sludge, rags, and other debris from a release of PCBs.
- Transformers and other electrical equipment containing dielectric fluids.

- Hydraulic machines.

PCBs can also be found in consumer wastes such as fluorescent ballasts, small capacitors, and electrical appliances. However, these wastes are not regulated as part of the Toxic Substances Control Act, so their disposal is not regulated. However, for the purpose of the SLF, these wastes will be diverted to the transfer station for disposal.

Sewage sludge (biosolids) can be accepted at SRL. Specific acceptance and disposal criteria for sewage sludge are provided in Section B6.

MSW can be accepted under conditions defined in Section B4.1 above and Section B7 of this Plan.

B4.2.1 Waste Oil

Waste oil will not be accepted at the SLF. A waste oil acceptance location is established at the Sawmill Cove Industrial Park (SCIP) Recycling Facility. Users of the SLF that bring waste oil for disposal at SLF will be stopped and directed to the SCIP Recycling Facility.

B4.2.2 Hazardous Waste

Hazardous waste will not be accepted at the landfill. Site operators will be trained to recognize and handle hazardous waste if it is brought to the SLF.

B4.2.3 Polluted Soil

Non-hazardous polluted soil will be accepted at SLF under the following conditions

- Approval by ADEC.
- Analytical work performed on the soil source that documents it is not hazardous and meets the criteria for acceptance at a Class III landfill.

The CBS may also use the SLF to stockpile and treat hydrocarbon contaminated soil to reduce their contaminant levels. Storage and treatment will begin only after notification and approval of the ADEC.

B4.3 Liquids Restrictions

For purposes of this section, "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846. Liquid waste will not be placed in SLF.

C2 SITE DESCRIPTION AND SITE ANALYSIS

C2.1 Site Location and Description

The SLF will be located in the in the CBS in southeast Alaska, which is approximately 90 miles southwest of the city of Juneau. Sitka is located in Alaska's Alexander Archipelago on Baranof Island in a region called Southeast Alaska on the Inside Passage waterway.

C2.1.1 Property Legal Description

A parcel of land located in the CBS, Alaska, lying within Lot 1, U.S. Survey 3670, the plat of which is on file in the Bureau of Land Management offices in Anchorage, Alaska, and also within Alaska State Land Survey No. 94-113, filed in the District Recorder's Office, Sitka Recording District, State of Alaska, as Plat Number 96-20, said parcel being more particularly described as follows:

Commencing at a point marked by a rebar and plastic survey cap which lies N62°00'W 40.00 feet from a point reportedly on the U.S. Survey 3670 boundary at a bearing of N28°00'E and distance of 865.47 feet from Corner 3, U.S. Survey 3670; thence S28°00'W 301.86 feet to a point on the proposed Granite Creek Landfill and Phase I Inert Waste Disposal Area boundary, said point being the true point of beginning of this description (Note: this course and all following courses utilize as a Basis of Bearings a line from the above noted rebar and plastic survey cap to an aluminum capped monument set by G. Crane at a distance of 190.13 feet and at a reported bearing of N28°00'E); thence continuing along the proposed landfill boundary and Phase I Inert Waste Disposal Area boundary N65°36'23"E 189.26 feet to a point marked by a rebar and aluminum survey cap; thence continuing N65°36'23"E 433.45 feet to a corner common to the proposed Phase I Inert Waste Disposal Area and the Active Quarry area; thence continuing along the proposed landfill and Active Quarry boundary N58°10'E 698.00 feet; thence N47°16'06"W 274.56 feet; thence S67°49'W 160.00 feet; thence S87°43'W 420.00 feet; thence N62°00'W 145.00 feet; thence S71°24'20"W 27.31 feet to the common corner between the proposed Active Quarry area and Phase I Inert Waste Disposal Area; thence continuing along the proposed landfill boundary and Phase I Inert Waste Disposal Area boundary S71°24'20"W 279.38 feet; thence S27°52'52"W 106.01 feet to a point marked by a rebar and aluminum cap; thence S27°52'52"W 422.59 feet to a point marked by a rebar and aluminum cap; thence S20°50'E 15.56 feet to the common corner between the Phase I Inert Waste Disposal Area and the proposed Biosolids Disposal Area; thence continuing along the proposed landfill boundary and Biosolids Disposal Area boundary S71°43'50"W 307.19 feet; thence S28°00'W 553.87 feet; thence S62°00'E 173.08 feet; thence N 83°13'29"E 191.05 feet; thence N28°00'E 339.05 feet; thence N69°10'E 169.34

feet to point marked by a rebar and aluminum cap at the common corner between the proposed Biosolids Disposal Area and the Phase I Inert Waste Disposal areas; thence N69°10'E 172.79 feet, more or less, to the true point of beginning, containing 897,129 square feet (20.595 acres), more or less.

C2.2 Population Served By Landfill

The population of the CBS is approximately 8,900, according to the 2005 Community Profile for Sitka (Sitka Economic Development Association, 2005).

C2.3 Site Classification

The site will be classified as a Class III MSW landfill (MSWLF) in accordance with the requirements of 18 AAC 60.300.(c) because it is considered to be small, rural, and remote and will accept less than 5 tons of MSW per day (on an annual average), and because it is not connected by road to a Class I landfill, which is a large landfill facility that accepts more than 20 tons of waste daily and must meet special requirements for liners, leachate collection, methane gas monitoring, and water quality sampling. To qualify as a Class III landfill, a community that is connected to a road system that is maintained year-round must be located more than 50 miles from a Class I landfill (18 AAC 60.300(c)(3)).

C2.4 Site Analysis

C2.4.1 Climatic Conditions

Sitka, Alaska is located in southeastern Alaska and is considered to be located in the maritime climatic zone. This area experiences a mean annual temperature range from the low 40s (Fahrenheit) to mid 60s with an average rainfall of over 86 inches and snowfall of over 39 inches annually with moderate humidity levels.

C2.4.2 Surface Water Conditions

The site is located just south of the Granite Creek, which runs parallel to the length of the proposed facility. Upslope run-on/runoff controls will be improved and added to minimize the volume of stormwater reaching the proposed waste disposal area. This run-on/runoff will be directed into the Granite Creek.

C2.4.3 Geologic and Hydrogeologic Conditions

C2.4.3.1 Regional Geology

The geology of Sitka and the surrounding area has been adapted from work by David A. Brew (1995). Sitka and the surrounding area lie in a northwest trending belt of rocks that belong to the

Chugach Terrane. The Chugach Terrane is one of 5 terranes in southeast Alaska that contain apparently distinct geologic records and one of the 10 tectonic assemblages that make up southeast Alaska. Chugach Terrane is divided into the Sitka Graywacke and the Kelp Bay Group. The Kelp Bay Group is subdivided into an amphibolite derived from the Kelp Bay Group and a *mélange* facies. Many of the terranes and rock types in the region around Sitka are separated by faults. These groups are described below:

- **Sitka Graywacke.** The Sitka Graywacke is a strongly deformed but coherent assemblage of flyshoidal greywacke, argillite and slate of late Cretaceous age. A small mass of diorite of possible Jurassic age occurs approximately 1½ miles east of Sitka within the Sitka Graywacke. Approximately 2 miles northeast of Sitka, the Sitka Graywacke lies in fault contact with the *mélange* facies of the Kelp Bay Group.
- **Mélange facies.** The *mélange* facies is a deformed and disrupted assemblage (*mélange*) composed of blocks of basic volcanic rocks, radiolarian chert, ultramafic rocks, limestone, and plutonic rocks in a matrix of cherty tuffaceous argillite. Along this contact and within the *mélange* facies are masses of amphibolite up to one-mile long.
- **Amphibolite.** Amphibolites are medium- to coarse-grained metamorphic rocks composed chiefly of hornblende and plagioclase, with schistosity derived from parallel arrangement of the hornblende prisms. Amphibolites are products of regional medium- to high grade metamorphism. Greenschist- to amphibolite-facies regional metamorphism overprints local remnants of blueschist-facies metamorphism in the Chugach Terrane. The amphibolites generally occur as isolated masses throughout the *mélange* facies.

C2.4.3.2 Site Geology

The rocks that underlie Sitka belong to the Sitka Graywacke. Descriptions of the site geology are based on rock samples, photographs, and information gathered from a quarry located between Granite Creek (to the north) and Harbor Mountain Road (to the south) by an EMCON environmental scientist during a site visit in April 2005. The predominant rock type in the quarry is quartz or feldspathic greywacke, which has been weakly metamorphosed. The greywacke is dark greenish gray, locally very dark gray to black, and most of the grains are equigranular and less than 1/16-inch in diameter. Approximately one-third of the grains are black, one-third are white, and one-third of the rock is a fine-grained, greenish-gray matrix formed from recrystallization of mineral grains. Hand specimens contain numerous small planar white quartz veins up to ¼-inch thick. The rock is hard and weakly weathered with iron oxide staining on the fracture faces. Based on photographs of the quarry faces, the rock appears to be slightly to intensely fractured.

Supporting documentation regarding site geology is provided in Attachment 2.

configuration of MSW is based on accepting the maximum volume of MSW allowed in one year (1,825 tons).

Drawing C-7 shows trenches that will be developed in the biosolids disposal area during the first five years of biosolids disposal.

The waste configuration grades for inert waste and MSW disposal will have slopes no steeper than 3H:1V and no flatter than five percent. The waste configuration grades for the biosolids area will be as shown on Drawing C-5.

C3.5 Facility Design

C3.5.1 Site Visibility

The site is not visible from the City of Sitka or any known residence near the site along Halibut Point Road. The site is only visible from its entrance road (Harbor Mountain Road, from Granite Creek Road at a point where Granite Creek road enters the quarry operation and is marginally visible from a local driving range.

C3.5.2 Estimated Volume and Source of Each Waste Type Accepted

There are no restrictions on the quantity of inert waste or biosolids that can be disposed of at the SLF. However, no more than 2,500 gallons of biosolids can be placed in any one trench in a given day.

The volume of inert waste disposal at SLF is expected to be approximately 5,000 cubic yards per year.

The CBS expect to co-dispose of an average of 15 cubic yards (approximately 3,035 gallons) of biosolids two days per week at the SLF. This daily volume exceeds 18 AAC 60.395 requirements that state that "*The owner or operator of a Class III MSWLF may dispose of up to 2,500 gallons of septage per day in trenches at the landfill*". The CBS interpret this regulation to mean an average daily volume. Since the CBS will only dispose biosolids at SLF two days per week, their average daily volume assuming disposal can take place 365 days per year is approximately 867 gallons per day, which is well below the 2,500 gallon maximum.

An area of the landfill has been designated for disposal of MSW such that in any one year CBS can dispose of 1,825 tons of MSW. This area is provided primarily for events when off-island disposal is interrupted.

The source of all waste disposed of at SLF is restricted to waste generated in the CBS. The facility will not be accepting waste from generators outside the CBS.