



Biosolids Treatment Permit Application

Alaska Department of Environmental Conservation
Solid Waste Program

ADEC Office Only:

Facility Name:

Authorization #:

Instructions:

This application is for a new permit or a permit renewal for the treatment of domestic sewage solids or septage to create biosolids.

In the application, the term **“facility”** refers to all land, structures, other appurtenances, and improvements on land used for treatment and storage of septage, sewage solids, and biosolids.

Some sections may not apply to a particular treatment process; mark NA if the section does not apply. If other required information is not applicable, please explain why. Please include all the applicable data for each application section regardless if it has been previously submitted.

The application must be stamped and signed by a registered engineer to meet the requirements of 18 AAC 60.210(c).

For a new facility or significant change to an existing facility or process, prepare a draft application with a list of questions and schedule a meeting with the ADEC Solid Waste Program.

Section 1. Property Information

Facility Name:

Facility Address:

Facility City:

Facility Zip:

Legal Property Description:

Section:

Township:

Range:

Meridian:

General Property Description:

Latitude:

Longitude:

Landowner:

Contact Name:

Address:

City:

State:

Zip:

Email:

Phone:

Section 2. Contact Information**Permit Applicant** (Co. or Entity):

Contact Name:

Address:

City:

State:

Zip:

Email:

Phone:

Type of Entity:

Government

Corporation

Other:

State of Incorporation or Registration:

Alaska Business License Number:

IRS Tax ID Number:

Facility Owner (if different than applicant):

Contact Name:

Address:

City:

State:

Zip:

Email:

Phone:

Facility Operator (if different than applicant):

Contact Name:

Address:

City:

State:

Zip:

Email:

Phone:

Agent/Consultant:

Contact Name:

Address:

City:

State:

Zip:

Email:

Phone:

Section 3. Fees

A check or money order for the appropriate fees [listed in 18 AAC 60.700(a) Table E-2] must be submitted with the permit application. If not included, the application will be returned to the applicant.

- | | |
|----|---|
| 1. | Submit payment for the first year's annual fee with the initial application for a facility. No fee is required for permit renewal applications; annual fees will be billed each year. |
| 2. | You will be billed separately for time spent reviewing waiver requests. |

This application is for a:

New Permit

Permit Renewal

Section 4. Cover Letter and Certifications

Submit a cover letter with the following information and signature.

1.	A statement indicating you wish to obtain a permit to treat sewage solids or septage to produce biosolids.
2.	A brief general description of the topography, geology, climate, surface hydrology and groundwater hydrology at the facility.
3.	A brief description of the treatment method that will be applied to the sewage solids and/or septage and the specific goal of the treatment.
4.	A statement of the pathogen reduction method (40 CFR 503.32) and the vector attraction reduction method (40 CFR 503.33) that will be applied to determine that the biosolids meet the applicable requirements of the treatment goal.
5.	A statement of the expected use(s) of the biosolids.
6.	A statement that you are aware of all applicable local ordinances and zoning requirements and a list of any other necessary permits or authorizations.
7.	The applicant must sign the cover letter.
8.	The applicant must submit the following signed statement, which may be added exactly as shown in the box below to the cover letter, or the applicant may sign this sheet and submit it as an attachment to the cover letter.

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:

Title:

Signature:

Date:

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

Section 5. Waste Quantity Information [18 AAC 60.210]

1. List the sources and amounts of untreated sewage solids or septage you expect to receive at the facility each year:

<u>Quantity</u>	<u>Select Units</u>			<u>Source</u>	<u>Sewage Solids</u>	<u>Septage</u>
	Tons (T)	Cubic Yards (C)	Gallons (G)			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	T	C	G			
	Total Tons					
	Total Cubic Yds.					
	Total Gallons					

2. List the amount(s) of biosolids you expect to use, sell, or give away each year for each intended end use (some uses may require an additional permit):

<u>Quantity</u>	<u>Select Units</u>			<u>End Use</u>
	Tons (T)	Cubic Yards (C)	Gallons (G)	
	T	C	G	Fertilizer
	T	C	G	Soil Amendment
	T	C	G	Reclamation
	T	C	G	Other:
	T	C	G	Other:
	T	C	G	Other:
	Total Tons			
	Total Cubic Yds.			
	Total Gallons			

Section 6. Location Information		Please identify the PDF page that addresses each requested item	
1.	Property Ownership and Location Information [18 AAC 60.210]		PDF page
	a. Attach a copy of the deed or another legal document that identifies the landowner(s) of the treatment facility.		
	b. If the applicant is not the landowner, attach a written and notarized statement or a copy of any lease agreement signed by the landowner showing that the landowner consents to the treatment facility.		
2.	Surface Water Information [18 AAC 60.210; 18 AAC 60.225]		
	a. Distance to nearest surface water body:		feet
	b. Provide information on potential for surface water (storm water or ponds, streams, etc.) to run-on to the facility.		
	c. Provide information on the potential for septage, sewage sludge, or biosolids carried by run-off from the treatment facility to impact nearby surface waters.		
3.	Groundwater Information [18 AAC 60.210]		
	a. Attach information documenting the highest measured level of groundwater under the treatment facility.		
4.	Maps Attach maps and/or aerial photographs as needed to show the following. You may submit maps that show more than one of the required items. For example, one map can show property boundaries, wetland and surface water locations, etc. [18 AAC 60.210; 18 AAC 60.233]		
	a. Location of the treatment facility property boundaries.		
	b. Location and flow direction of surface water bodies, streams, containment, or diversion structures.		
	c. Location of public drinking water supplies within 2 miles of the treatment facility property boundaries.		
	d. Location of all residential drinking water wells within one-half mile of the treatment facility.		
	e. Location of the boundary of any wetlands within 500 feet of the property boundary.		
	f. Location of the boundary of any 100-year floodplain in the area.		
	g. Location of any documented earthquake faults or unstable areas within 200 feet of the property boundary.		

Section 7. Facility Design

A complete set of design drawings must be submitted with the following information, with drawings included for the design of the facility, as appropriate. Please ensure that the documentation represents the entire facility.

1.	Facility map(s) which show site conditions, including: [18 AAC 60.210; 18 AAC 60.220; 18 AAC 60.225]	PDF page
	a. All previous, existing and planned treatment areas. The drawings should demonstrate all processing of septage, sewage solids, and biosolids will occur at least 50 feet from the property boundary.	
	b. Fences, gates, berms and other access control devices.	
	c. Access roads to and within the facility.	
	d. Storage and treatment areas for sewage solids, septage, and/or biosolids.	
	e. Storage area(s) for equipment.	
	f. All roads, ditches, berms, etc. associated with the facility.	
2.	Plan view drawings with contour lines <u>and</u> cross section drawings that show: [18 AAC 60.210]	
	a. Treatment and storage facilities.	
	b. All roads, ditches, trenches and berms associated with the facility.	
	c. Any planned liquid or leachate collection piping system, including manholes, sumps, and pump stations.	
	d. Any planned gas venting or gas collection piping system.	
3.	Construction detail drawings <u>and</u> cross sections that show: [18 AAC 60.210; 18 AAC 60.225]	
	a. Any processing areas (e.g. drying beds, digesters, compost piles, lagoons, etc.) used in the treatment of septage or sewage solids.	
	b. Any storage areas for biosolids or untreated sewage solids and septage.	
	c. Any odor control devices.	
	d. Any liner construction details, including liner anchors, liner penetrations, etc.	
	e. Storm water drainage structures, culverts and other surface water control devices.	
4.	Design calculations, data and documentation must include the following with supporting calculations. [18 AAC 60.210; 18 AAC 60.227]	
	a. Printouts of inputs, assumptions and outputs from any computer model used to support the facility design.	
	b. An estimate (including calculations) of the maximum inventory of sewage solids, septage, and biosolids that may be stored onsite at the facility at any given time.	
	c. If located in an unstable area, information and calculations for engineering measures to ensure the integrity of the structural components will be protected.	
	d. A Quality Assurance Plan for any liner installation.	

Section 8. Operations Plan

The operations plan must be a separate document that provides sufficient detail and information that the operator(s) could use it to perform all necessary tasks for day-to-day operation of the facility.

The operations plan is a flexible document that should be reviewed annually and updated as necessary. The following table represents the minimum requirements which must be included. Additional information should be added, as needed, to ensure the facility operates in compliance with the State Solid Waste Regulations. A copy of the operations plan must be kept at the operating facility.

Please include a reference page and/or section of the operations plan where each item is addressed.

1.	Access control [18 AAC 60.010; 18 AAC 60.210; 18 AAC 60.220]	<u>PDF page</u>
	a. Access to the facility will be controlled, including gates, fences, berms or other means of preventing access; hours of operation; signage; and other control measures.	
	b. Access and onsite roads for treatment facility will be kept passable and safe for vehicles during operating months.	
2.	Waste acceptance and handling policy [18 AAC 60.210; 18 AAC 60.240]	
	a. Waste screening procedures to ensure that only domestic septage or sewage solids are accepted at the facility.	
	b. Any signage placed at the facility entrance.	
3.	Sewage Solids/Septage Processing Plan – Include step-by-step details of the sewage solids or septage processing and handling from delivery of the sewage solids or septage to distribution of the final biosolids product. [18 AAC 60.010; 18 AAC 60.210; 18 AAC 60.500-510]	
	a. Describe how product arrives and is handled for offloading.	
	b. Describe how product is handled (e.g. moved, spread, stored etc.) prior to beginning treatment.	
	c. Include the regulatory text for the Pathogen Reduction Method used to ensure the biosolids have met the requirements. • 40 CFR 503.32(a) Alternative 1-6 for Class A Biosolids • 40 CFR 503.32(b) Alternative 1-3 for Class B Biosolids • Note: For Class A alternatives 5 and 6 and Class B alternatives 2 and 3, include the specific treatment process. • Describe how the treatment and storage processes and testing will meet the requirements of the method. • If using more than one treatment process or Pathogen Reduction method, provide a separate section for each.	
	d. Include the regulatory text for the Vector Attraction Reduction Method used to ensure the biosolids have met the requirements. • 40 CFR 503.33(b) 1-8 for Class A Biosolids • 40 CFR 503.33(b) 1-10, 12 for Class B Biosolids • Describe how the treatment and storage processes and testing will meet the requirements of the method. • If using more than one treatment process or Vector Attraction Reduction method, provide a separate section for each.	
	e. Describe the determining factors or requirements for completion of the treatment.	
	f. Describe how and where the treated biosolids are moved after treatment.	
	g. Describe any additional treatment or curing processes (if applicable), and the determining factors or requirements for the final product	

Section 8. Operations Plan (continued)

4.	Biosolids Storage [18 AAC 60.010; 18 AAC 60.210; 18 AAC 60.500-510]	PDF page
	a. Describe the methods and facilities used to store biosolids and how these maintain the pathogen and vector attraction reduction goals.	
	b. Describe how run-off or leachate from the storage area will be controlled, collected, treated and/or disposed.	
5.	Odor Control Plan [18 AAC 60.010; 18 AAC 60.210; 18 AAC 60.230]	
	a. Describe how odors will be monitored and controlled at the facility. Include drawings and specifications of any odor control devices in Section 7.	
6.	Litter, vector and nuisance control plan [18 AAC 60.010; 18 AAC 60.230; 18 AAC 60.233; AS 46.06.080]	
	a. Describe procedures to ensure wildlife and domestic animals do not endanger the public or facility staff, are not harmed by contact with the waste, and do not become a nuisance.	
	b. Explain how dust, noise, traffic, litter, disease vectors and other effects will be controlled so they do not become a nuisance or hazard outside of the facility boundary.	
7.	Surface & Storm Water Control Plan [18 AAC 60.010; 18 AAC 60.225]	
	a. Describe how run-off from the facility will be controlled and monitored to ensure that all waste remains onsite and does not pollute any surface water.	
	b. Describe how run on water from upgradient sources will be controlled to reduce production of leachate from sewage solids, septage, or biosolids during storage or treatment.	
8.	Corrective action plan – Describe the actions for: [18 AAC 60.010; 18 AAC 60.500-510; 18 AAC 60.815]	
	a. Addressing any batch that does not pass the Pathogen Reduction, Vector Attraction Reduction, or pollutant requirements.	
	b. Cleaning up any improper or unauthorized waste.	
	c. Repairing any damage to the facility or structures.	
	d. Addressing any violations of regulations or permit conditions.	
9.	Operator training [18 AAC 60.235; 18 AAC 60.500-510]	
	a. Identify any training that will be required for an operator at the facility, including on-the-job training.	
	b. Describe how that training will be documented and filed in the operating record.	
10.	Recordkeeping [18 AAC 60.235; 18 AAC 60.500-510]	
	a. Describe how each treatment batch will be identified and how records associated with each batch will be organized.	
	b. Include copies of any forms used for tracking waste batches from delivery to the treatment facility until used, sold, or given away.	
	c. Include a copy of the certification statements from 40 CFR 503.17 that will be used for each batch record.	

Section 8. Operations Plan (continued)

11.	Operating record [18 AAC 60.235]	PDF page
	a. The operating record must include all the elements listed in 18 AAC 60.235, as well as any other documentation specific to the facility and operation.	
	b. The plan must state where the operating record will be located.	
12.	Reporting [18 AAC 60.500-510]	
	a. A statement that a semi-annual report will be submitted to ADEC as required by the permit.	
	b. List any other required report submittals, including the annual EPA report if required.	

Section 9. Monitoring Plan

The monitoring plan should be a separate document and must include sufficient detail to allow a qualified person to complete all monitoring in full compliance with the applicable regulations and permit conditions. It must include the following information.

1.	Organization/Introduction	PDF page
	a. Table of contents	
	b. General discussion of the purpose and goals of monitoring the biosolids.	
	c. Name the sampler (or consulting firm) and attach or discuss appropriate qualifications.	
	d. List the laboratories that will be used and attach their certifications for performing the appropriate methods.	
2.	Pathogen Reduction Monitoring [18 AAC 60.210; 18 AAC 60.500-510]	
	a. List the regulatory text for the selected Pathogen Reduction Method. If using more than one method, address each method in a separate section.	
	b. List all tests, the applicable test method(s), and the standard(s) for comparison to meet the requirements for this method.	
	c. List the number of samples that will be taken from each batch at each monitoring event.	
	d. Provide the timing and frequency of monitoring.	
3.	Vector Attraction Reduction Monitoring [18 AAC 60.210; 18 AAC 60.500-510]	
	a. List the regulatory text for the selected Vector Attraction Reduction Method. If using more than one method, address each method in a separate section.	
	b. List all tests, the applicable test method(s), and the standard(s) for comparison to meet the requirements for this method.	
	c. List the number of samples that will be taken from each batch at each monitoring event.	
	d. Provide the timing and frequency of monitoring.	
4.	Pollutant Monitoring (PCBs & Metals) [18 AAC 60.210; 18 AAC 60.500-510]	
	a. List each of the pollutants, the applicable test method, and the standards for comparison	
	b. List the number of samples that will be taken from each batch at each monitoring event.	
	c. Provide the timing and frequency of monitoring.	

Section 9. Monitoring Plan (continued)

5.	Nutrient Monitoring {pH, total Kjeldahl nitrogen (TKN), Nitrate nitrogen (NO ₃ -N), Ammonia nitrogen (NH ₄ -N), phosphorus (P) and potassium (K)} as required to determine loading rates and Nitrogen content. [18 AAC 60.210; 18 AAC 60.500-510]	PDF page
	a. For each of the required analyses, list the test method to be used.	
	b. List the number of samples that will be taken from each batch at a monitoring event.	
	c. Provide the timing and frequency of monitoring.	
6.	Sampling – For each monitoring test above [18 AAC 60.210; 18 AAC 60.500-510]	
	a. Include a description for determining the location and collection depth of each sample.	
	b. Explain how each sample will be numbered and documented.	
	c. Detail the proper sample collection method, including proper PPE, tools, containers, decontamination procedures, field tests, field documentation, etc.	
	d. Explain how each sample will be preserved and packed for shipping.	
	e. Include a typical copy of a chain of custody form that will be filled out and submitted with each container.	
7.	Quality Control [18 AAC 60.210; 18 AAC 60.500-510]	
	a. Provide a list of quality control samples or blanks for each sampling event	
	b. Provide a list of laboratory quality control samples.	
	c. Include a discussion of how samples outside the control parameters will be addressed.	
8.	Data Analysis [18 AAC 60.210; 18 AAC 60.500-510]	
	a. Provide a table of each tested analyte and the comparison standard.	
	b. Explain how results will be evaluated against the standard.	
	c. Discuss how samples that fail criteria will be addressed.	
9.	Visual Monitoring [18 AAC 60.210; 18 AAC 60.800(a)]	
	a. Provide a description of the procedures for visual monitoring of the facility, including each location that will be inspected.	
	b. Include a specific visual monitoring form or checklist that will be used. It must include, at a minimum, the following: • Details for assessing the condition of the off loading facilities ▪ Spills or sewage sludge outside the facility ▪ Evidence of unacceptable waste disposal • Details for assessing the condition of the treatment facility ▪ Waste properly contained ▪ Issues that could impact treatment process • Details for assessing the condition of storage areas ▪ Waste properly contained ▪ Evidence of run-on or run-off impacts • General facility conditions ▪ Access control ▪ Litter	

Section 9. Monitoring Plan (continued)

	c. A designated day for performing visual monitoring (<i>e.g. first day of the month, or other particular date, last Tuesday of the month, etc.</i>).	
8.	Reporting [18 AAC 60.210; 18 AAC 60.500-510]	
	a. Provide an example of the information that will be provided the customer using the biosolids.	
	b. Monitoring records for the applicable reporting period should be included with the semi-annual reports submitted to ADEC.	

Section 10. Closure Plan and Cost Estimate

It is understood that the closure plan submitted with the permit application will be conceptual and may change throughout the active life of the facility. The closure plan **must include** the following information.

1.	Description of the closure process [18 AAC 60.210]	<u>PDF page</u>
	a. A description and timeline for the closure and removal of all remaining waste or product, storage and treatment structures, and decontamination of any remaining structures.	
	b. A site plan drawing showing the area once the facilities have been removed	
	c. Any expected future use of the site	
2.	Financial information [18 AAC 60.210; 18 AAC 60.265]	
	a. The total present-day equivalent cost estimate for an independent contractor (do not assume onsite use of any material or machinery) to close and remove the facility, including removal and disposal of all infrastructure, treatment and disposal or distribution of the maximum inventory of waste that may be onsite, and decontamination of any remaining structures.	
	b. Demonstration of the mechanism of financial responsibility to cover the cost of closing and removing the facility and disposal or distribution of the remaining waste. Proof of financial responsibility may be demonstrated by self-insurance, insurance, or other guarantee approved by ADEC.	

Additional information

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

Recommended EPA Biosolids Reference Links

40 CFR 503	A Plain English Guide to the EPA Part 503 Biosolids Rule
www.epa.gov/biosolids	FAQs on Sewage Sludge/Biosolids Annual Reporting
Control of Pathogens and Vector Attraction in Sewage Sludge	
Process Design Manual Land Application of Sewage Sludge and Domestic Septage	
A Guide for Land Appliers on the Requirements of the Federal Standards for the Use or Disposal of Sewage Sludge, 40 CFR Part 503	
Preparing Sewage Sludge for Land Application or Surface Disposal	