

PROJECT NAME:

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Design criteria for:
☐	☐	Estimated daily flow to system and basis used for estimation.
☐	☐	All sources of wastewater are shown on the plan.
☐	☐	Waste loads and waste strength, and the basis used for estimating loads.
		18 AAC. 72.220, 18 AAC 72.260(a)(2)(A)
		<u>Explanation if not included:</u>
☐	☐	2. A site plan that shows the design, location and configuration of the wastewater treatment and disposal systems.
☐	☐	Location for both an initial and replacement infiltrative area
☐	☐	Statement that all required vertical and horizontal separation distances have been met.
		18 AAC 72.260 (a)(2)(B)and (a)(4)
		<u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	3. Describe the siting of the infiltrative area with respect to: Potential for health hazards (such as slopes, cut banks, et cetera). Nuisances, such as odor. Groundwater and potential impacts. 18 AAC 72.260 (a)(2)(C) <u>Explanation if not included:</u>
☐	☐	4. Information and/or calculations regarding the septic tank size and tank design, including access openings and security. 18 AAC 72.035(a)(4)(D) (NOTE: The design and construction of the septic tank must comply with Appendix K of 1997 Uniform Plumbing code.) Information on how septic tank will be pumped, particularly if at a remote site. <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	7. A copy of the engineered soils report identifies: ☐ Soil types encountered, and thickness of layers. ☐ Percolation rates of receiving soils.(NOTE- if percolations rate is faster than 1 minute/inch, a 2' thick sand liner is required) ☐ Depth to groundwater ☐ Depth to impermeable layer(s) ☐ Number, location and total depth of test hole(s). ☐ Presence or absence of permafrost and its potential effect on system performance ☐ Site suitability for this project. 18 AAC 72.265 (see Appendix A-Soils Analysis and Report) <u>Explanantion if not included:</u>
☐	☐	8. General topography and the separation distance to slopes greater than 25% are shown on the site plan. 8 AAC 72.260(a)(4)(C) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
[]	[]	9. Calculations show infiltrative area conforms to 18 AAC 72.260 Table C: Check the type of distribution system that applies: [] Traditional perforated pipe and drainrock [] Chamber type systems (e.g., infiltrators) must be sized based on the bottom area only. [] Gravelless pipe system, must be sized based on the area in contact with the soils (engineering computations must be included) [] Other <u>Explanation if not included:</u>
[]	[]	10. If design flow exceeds 2500 gallons per day, a nitrate calculations estimating the effect of this discharge on the ground water at a determined point such as the nearest down gradient property line, or a point not to exceed. 500 feet from the edge of the infiltrative area, whichever is least.
[]	[]	All criteria or assumptions used in nitrate analysis, such as waste strength, precipitation amount, depth of aquifer used for mixing, ground water table gradient and other assumptions. <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	11. Show that construction of soil infiltrative area will conform to the following standard construction practices: ☐ ☐ On a bed system, the manifold is level and constructed of solid pipe. ☐ ☐ On a bed system, distribution lines are level and are spaced at maximum 6 foot centers with no more than 3 feet between the outer distribution lines and the side of the infiltrative area. Distribution lines are bedded in rock to prevent crushing. ☐ ☐ For shallow trench and deep trench systems, the distribution line should be laid in the center of the trench; distribution line bedded in rock to prevent crushing. ☐ ☐ Sewer rock sized between ¾ inch and 1 ½ inches used in a bed system or shallow trench. Sewer rock sized between ¾ inch and 3 inch used in a deep trench system. ☐ ☐ Suitable filter fabric is placed above the sewer rock. ☐ ☐ For a bed system, at least two monitoring tubes are installed in opposite corners of the infiltrative area. For shallow trench and deep trench, one monitoring tube is required at the end of each trench. ☐ ☐ The maximum length of absorption system is 100 feet. ☐ ☐ When using two or more trench systems, the trenches should be separated by twice the effective depth of the deepest trench. ☐ ☐ If receiving soil percolates faster than 1 minute per inch, a 2 foot thick sand filter is required. Sand filter is noted on the design drawing. (a sand liner cannot be used with a deep trench system) 18 AAC 72.070(1) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
[]	[]	12. Cross section details that show depth of cover and insulation installed over septic tank and infiltrative area. If insulation used, identify type (Should be Dow Chemical Styrofoam HI Blue Board or equivalent) <u>Explanation if not included:</u>
[]		13. If this system serves more than 20 people or a triplex or more multifamily dwelling, complete the Class V Injection Well Inventory Form for the EPA underground Injection Control Program. Contact EPA Region 10. Website link is https://www.epa.gov/uic/underground-injection-control-region-10-ak-id-or-and-wa <u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE



revised 3-16-2006

Disposal to Land Surface

(Plan Intake Form must also be completed.)

PROJECT NAME: _____

Check each item that is included with your submittal. If an item is not included, check “not included” and provide and explanation why the item does not apply to this project or describe special circumstances why the information is not included

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Documentation that applicant owns the land treatment area, or written authorization from landowner to discharge effluent to land area. 18 AAC 72.205 (f)(1) <u>Explanation if not included:</u>
☐	☐	2. Details showing how land used for discharge and treatment area is protected from access. 18 AAC 72.205 (f)(2) <u>Explanation if not included:</u>
☐	☐	3. Topography, hydrology and geology of the discharge area in sufficient detail to show that it is adequate to protect land uses and public health outside the disposal or treatment area. 18 AAC 72.205 (f)(3) <u>Explanation if not included:</u>
☐	☐	4. Describe the method(s) of discharging the effluent to the land surface and the method(s) of preventing disease transmission. Include a description of vector control. <u>Explanation if not included:</u>

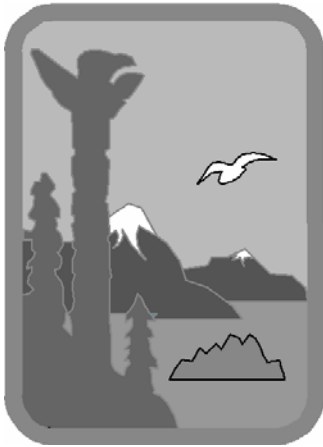
INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐ ☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐	5. If land area is part of the treatment system: Land treatment area is clearly shown on drawings. Expected influent characteristics of wastewater that will be applied to the land and the expected treatment contribution from the land. Expected point of compliance where water quality standards will be met. Assimilative capacity of soil and associated flora, and ultimate fate of the discharged water. All design and waste load assumptions. Design features protect treatment capabilities against adverse impacts from precipitation and/or freezing conditions. 18 AAC 72.275 (b)(2)(B) <u>Explanation if not included:</u>
☐ ☐ ☐	☐ ☐ ☐	6. Identify potential health hazards and nuisances by describing: Local topography; Geologic, soil characteristics and groundwater conditions; Existing uses of nearby surface water including aquaculture, food processing, food gathering, fishing, boating, swimming and recreation. 18 AAC 72.275 (b)(2)(B) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	7. Information identifying: Thermal protection methods Glaciation potential during cold weather operation Operational variables such as daily or seasonal flow variations, variation in waste strengths, et cetera. 18 AAC 72.275 (b)(2)(D)(E) <u>Explanation if not included:</u>
☐	☐	8. Specifications provided for: All piping materials Fill, backfill, and bedding Performance and tightness testing <u>Explanation if not included:</u>
☐	☐	9. Information showing evidence that wastewater will be treated to at least secondary standards unless formally waived to a lesser standard by DEC. Expected effluent concentration of BOD, TSS and pH. <i>If required treatment cannot be met, a request to reduce effluent quality, signed and sealed by an engineer must be submitted.</i> 18 AAC 72.050(d) and 18 AAC 72.060 <u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE



Revised 2/17/2006

Holding Tank Checklist

(Plan Intake Form must also be completed.)

PROJECT NAME: _____

Check each item that is included with your submittal. If an item is not included, check “not included” and provide an explanation why the item does not apply to this project or describe special circumstances why the information is not included.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Soils report identifying conditions that preclude the installation of soil absorption system such as elevated ground water table, impermeable soils, or permafrost. 18 AAC 72.025(a)(1) and 18 AAC 72.265 <u>Explanation if not included:</u>
☐	☐	2. Information verifying that the holding tank size is at least 1,000 gallons. 18 AAC 72.025 (2) <u>Explanation if not included:</u>
☐	☐	3. An audio/visual high water alarm system is required. Specific information such as a catalogue cut or manufacturer’s brochure. ☐ Levels that activate alarm shown. ☐ Type of controls shown.(float, switches, pressure) 18 AAC 72.025(a)(4) <u>Explanation if not included:</u>



Revised 2-17-2006

Package Plant(up to 1500 gpd)
(Plan Intake Form must also be completed.)

PROJECT NAME: _____

Check each item that is included with your submittal. If an item is not included, check "not included" and provide an explanation why the item does not apply to this project or describe special circumstances why the information is not included.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Design criteria and operating conditions: Expected design flow (include basis for estimate)
☐	☐	Hydraulic and organic loading for treatment system components
☐	☐	Expected % removal of TSS and BOD
☐	☐	Performance, operation and maintenance information for selected plant (from manufacturer)
☐	☐	Verification that the plant meets NSF 40 standards or can successfully treat domestic wastewater for at least one year under expected conditions.
☐	☐	Seasonal flow variations.
☐	☐	Thermal protection. <u>Explanation if not included:</u>
☐	☐	2 Expected effluent quality. <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	3. Specifications for : Fill and backfill material and placement
☐	☐	Pressure testing, completed piping, method for testing 18 AAC 72.245(E) <u>Explanation if not included:</u>
☐	☐	4. Methods of sludge removal and locations of sludge and residual disposal. Include types of residuals (septage, grit, screenings, et cetera) expected amounts – average daily and annual. If onsite disposal, provide copy of application for monofil from ADEC Solid Waste Program. If offsite disposal, provide verification that site has ADEC approval to accept residuals, include name and permit number. <u>Explanation if not included:</u>
☐	☐	5. Methods to control facility by-passes including those in the plant and in the influent flow. (By-passes of plants will be considered on a case-by-case basis. By-passes may not be approved because less than primarily treated wastewater cannot be discharged into or onto the ground or into surface waters.) 18 AAC 72.245(6) <u>Explanation if not included:</u>
☐	☐	6. Final grading plan shows that surface drainage will be directed away from treatment and /or disposal system. 18 AAC 72.245(8) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	7. Name and contact number for system maintenance provider.
☐	☐	Provisions for system maintenance for life of system. 18 AAC 72.245(9)(A)& (B) <u>Explanation if not included:</u>
☐	☐	8. If plant effluent is to be discharged into an existing disposal system: A written agreement from the owner of the receiving system accepting the flow; and
☐	☐	Calculations or other verification that the existing disposal system can accommodate the increase in flow.
☐	☐	Systems that discharge to an outfall to surface water, verification that the disposal operates under a current wastewater disposal permit.
☐	☐	A person or formal organization responsible for on-going operation and maintenance for disposal system. <u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE



Revised 2-16-2006

Stabilization Pond Checklist

(Plan Intake Form must also be completed)

PROJECT
NAME: _____

Check each item that is included with your submittal. If an item is not included, check "not included" and provide and explanation why the item does not apply to this project or describe special circumstances why the information is not included.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. A soil report containing or verifying the following: Separation distance between lowest part of a percolating pond and the seasonal high groundwater table is at least 4 feet. (include method of determining this distance)
☐	☐	Separation distance between lowest part of a percolating pond and impermeable layer is shown to be at least 6 feet. (include method of determining this distance).
☐	☐	Subsurface soil and groundwater conditions and levels including soil types, density, and depth to seeps in written form and/or shown on testhole logs.
☐	☐	In areas of permafrost, test holes at least 20 feet below surface or to the depth at which permafrost or impermeable layer is encountered.
☐	☐	In areas of permafrost, soil moisture profile analyses from a laboratory that show soils in the wastewater treatment area are suitable for a percolation pond.
☐	☐	Results/conclusions/recommendations of a geotechnical study clearly shows that the area can be used for proposed system.
☐	☐	For a non-percolating pond, effects of ground water and ground water level fluctuations on the liner/seal.
		18 AAC 72.255(5), 18 AAC 72.265(2)-(5), (10)
		<u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	2. Specifications for: Fill, backfill and berm construction material and placement. Pressure testing, method for testing completed piping. <u>Explanation if not included:</u>
☐	☐	3. For a percolating stabilization pond, the following calculations and design information. 18 AAC 72.255 (10) Site Specific hydrogeology data that predicts the expected flow path of the percolating effluent into the soils and expected impacts that the proposed system will have on adjacent properties. Existing drainage conflicts, steep slopes or river banks that may allow short circuiting into a local surface drainage. (Where it will better illustrate soil loadings, a drawing with the hydraulic grade lines showing the flow path can be included.) Human activities that may conflict with the proposed system, such as boating, shellfish harvesting, or recreation activities. Field testing results and calculations of soils to that support design hydraulic loading rates. Calculations justifying that the allowable sustained loading rate of the receiving soils is sufficient to handle the expected flows. For systems with an average daily flow over 2,500 gallons per day, nitrate calculations estimating the effect of this discharge on ground water quality at a determined point such as the nearest down gradient property line, or a point not exceeding 500 feet from the edge of the stabilization pond, whichever is least. (see 18 AAC 72.260(a)(5) for specific requirements and see 18 AAC 72.070(9), (11) and (14) for acceptable modeling methods. Hydrogeologic data assuring existing public or private drinking water sources will not be adversely impacted. 18 AAC 72.255 <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	4. For discharges to the surface of the land from a stabilization pond: A written agreement from the owner for this use or documentation that the applicant owns the land.
☐	☐	Details showing how land used for discharge and treatment area is protected from public access.
☐	☐	Topography, hydrology and geology of the discharge area in sufficient detail to evaluate whether the proposed system is adequate to protect land uses and public health outside the disposal or treatment. 18 AAC 72.275 (b)(5), (6), (7), (8) <u>Explanation if not included:</u>
☐	☐	5. For discharges to surface waters, mixing zone calculations that demonstrate compliance with permit discharge requirements. 18 AAC 72.205 (d) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	9. Detailed drawings (plan and cross section) of dike design, including construction materials, and specifications.
☐	☐	Calculations and insitu or laboratory test data that defines permeability of impoundment seal.
☐	☐	In permafrost areas, thermal protection to prevent differential settlements.
☐	☐	Dike stability and safety considerations.
		18 AAC 72.255 (a)(3)
		<u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE



Revised 6-23-2015

Surface Waters Outfall Disposal System Checklist

(Plan Intake Form must also be completed.)

PROJECT NAME: _____

Check each item that is included with your submittal. If an item is not included, check “not included” and provide an explanation conforming to standard sanitary engineering principles why the item does not apply to this project or describe special circumstances why the information is not included. Provide page numbers, page/sheet numbers where the information is located.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Specific engineering design criteria, specifications, and detailed drawings on:
☐	☐	Design flow, including daily/seasonal variations
☐	☐	Calculations verifying that the proposed system will adequately handle maximum design flows under expected tidal conditions.
☐	☐	Material specifications for piping
☐	☐	Pipe anchoring details to protect against wave or ice action, buoyancy, beach logs, et cetera.
☐	☐	Potential for pipe siltation
☐	☐	Methods of thermal protection
		<u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	2. Engineering specifications for methods to control operational variables such as:
☐	☐	Icing and ice movement
☐	☐	Seasonal flow or pollutant loading variations
☐	☐	Operator access for maintenance and sampling
☐	☐	Other conditions that would affect system operations
		<u>Explanation if not included:</u>
☐	☐	3. Specific engineering design criteria used to demonstrate that wastewater will be treated to at least secondary standards.
☐	☐	Expected effluent concentration of BOD, TSS, fecal coliform, and pH.
		<u>Explanation if not included:</u>
☐	☐	4. For gravity sewers extending into receiving waters, engineering specifications and drawings for a suitable access to allow for cleaning and sampling.
		18 AAC 72.275 (a)(7)
		<u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
[]	[]	5. If a system serves more than one building, or is set up to serve more than one property, evidence that a written and legally recorded agreement is in place among all land owners; or that an operation and maintenance entity (such as a Home Owner's Association) has been formally established and that the Association has written bylaws that have been recorded and commit landowners to operation and maintenance of their individual system and support of any jointly owned portions of the system. <u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE



Revised 2-14-2006

Treatment Plant Checklist- greater than 1, 500 gpd (Plan Intake Form must also be completed.)

PROJECT NAME: _____

Check each item that is included with your submittal. If an item is not included, check "not included" and provide an explanation why the item does not apply to this project or describe special circumstances why the information is not included.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Design criteria for: Flows, Anticipated wasteloads Treatment capacities of selected treatment system Expected % removal of BOD and TSS. <u>Explanation if not included:</u>
☐	☐	2. Arrangement and layout of unit processes and operations of treatment plant are shown on plan. Criteria for selection, sizing of units, aeration capacity, et cetera. Methods for testing constructed facilities 18 AAC 72.245(C) <u>Explanation if not included:</u>

INCL UD ED	NOT INCL UD ED	SUBMITTAL ITEM
☐	☐	3. Material specification and compaction criteria for bedding and backfill. 18 AAC 72.245(E)
☐	☐	Pressure testing method for testing completed piping.
☐	☐	Performance testing for unit processes.
		<u>Explanation if not included:</u>
☐	☐	4. Methods of sludge removal and locations of sludge and residual disposal. Include types of residuals (septage, grit, screenings, etc.) expected amounts - average daily and annual. If onsite disposal, provide copy of application for monofil from ADEC Solid Waste Program. If offsite disposal, provide verification that site has ADEC approval to accept residuals, include name and permit number. 18 AAC 72.245(G)
		<u>Explanation if not included:</u>
☐		5. All facility by-passes are controlled including those in the plant and in the influent flow. (By-passes of treatment plant will be considered on a case-by-case basis. By-passes may not be approved because less than primarily treated wastewater cannot be discharged into or onto the ground or into surface waters.) 18 AAC 72.245(6)
		<u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	6. Final grading plan shows that surface drainage will be directed away from treatment facilities. 18 AAC 72.245 (8) <u>Explanation if not included:</u>
☐ ☐	☐ ☐	7. If plant effluent is to be discharged into an existing system: A written agreement from the owner of the receiving system accepting the flow; and Calculations showing the existing system can accommodate the increase in flow. 18 AAC 72.245(9)(A)& (B) <u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE

(revised 03/06/2006)



Utilidor, Collection and Pumping Checklist

(Plan Intake Form must also be completed)

PROJECT

NAME: _____

Check each item that is included with your submittal. If an item is not included with your submittal, check "not included" and provide an explanation as to why the item does not apply to this project or describe special circumstances why the information is not included.

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	1. Calculations that verify or clearly show: Pipe size and slope are adequate to handle current and future hydraulic loads At least 2 feet per second pipe velocity will be maintained when flowing full; Receiving sewer pipe diameter is at least as large as connecting upstream sewer, unless requirement waived. If waived provide copy of waiver approval. If not waived, a request to waive requirement including supporting documentation 18 AAC 72.270 (2) <u>Explanation if not included:</u>
☐	☐	2. Calculations or graphic representation of hydraulic grade line for force mains, pressurized lines and/or vacuum sewer collection systems that show system is capable of handling design flows. 18 AAC 72.270 (2) (B), (C) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	5. If lift station incorporates any type of by-pass or overflow provisions: Justification for the by-pass. Location of by-pass discharge and ultimate receiving waters. 18 AAC 72.245 (6) <u>Explanation if not included:</u>
☐	☐	6. Name and location of treatment plant receiving discharge from collection lines has been identified. Calculations or treatment/flow data showing that the treatment system is capable of handling the proposed added flow. A letter/statement from the treatment plant owner approving the additional flow. 18 AAC 72.270 (5) <u>Explanation if not included:</u>
☐	☐	7. For pumping system: Pump performance curves. Verification that each pump station has 2 pumps is provided or shown on plan. Calculations showing pump starts per hour, system head loss, and pumping conditions (total dynamic head). Capacity of each pump in lift station is equal to design flow. A description of pump controls, and pump control and high water alarm settings. Provisions for servicing and emergency operations such as emergency power. 18 AAC 72.270 (6) <u>Explanation if not included:</u>

INCLUDED	NOT INCLUDED	SUBMITTAL ITEM
☐	☐	8. Utilidor is designed to protect public health, drinking water systems and the environment. The plan clearly shows:
☐	☐	Construction materials and dimensions, and relative location of the piping.
☐	☐	Documentation and/or calculations showing adequate protection against freezing;
☐	☐	A description of how the piping in the utilidor may be repaired, if necessary.
☐	☐	A description of how water and/or wastewater will be removed from the utilidor in the event of a line break.
☐	☐	If utilidor contains both water and sewer collection lines, the separation distance requirement is met. 18 AAC 72.020 (g) and (h)
		<u>Explanation if not included:</u>
☐	☐	9. A written statement that I have verified, to the best of my ability, there are no service connections associated with this project to any facility that discharge petroleum products, oil, industrial solvents or other substances detrimental to treatment processes or operation. 18 AAC 72.040 (b)(2)
☐	☐	A written statement that I have verified, to the best of my ability, there are no service connections associated with this project that include discharge from stormdrains, gutter runoff, other non-domestic wastewater sources such as construction dewatering, street runoff. 18 AAC 72.040 (b)(1)
		<u>Explanation if not included:</u>

I submit the above information/items concerning this project. By my signature I certify that the above information is correct.

SIGNATURE of submitter

DATE