

# STATE OF ALASKA

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**DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATER QUALITY DIVISION  
WASTEWATER DISCHARGE PROGRAM**

December 08, 2003

File: 2671.45.001

Mr. Don Turner, Turner Construction  
Tanani Bay Subdivision  
Box 85  
Haines, AK 99827

**Certified Mail #7000 1530 0001 6497 0159**  
**Return Receipt Requested**

Re: Wastewater Disposal Permit No. 2003DB0053 for The Tanani Bay Subdivision.

Dear Mr. Turner:

The Department of Environmental Conservation has completed its review of the Tanani Bay Subdivision's request for the renewal of ADEC Wastewater Disposal Permit NO. 9511DB022 and is issuing ADEC Wastewater Disposal Permit 2003DB0053.

This permit is effective December 08, 2003 and expires December 7, 2008. Please review the conditions and stipulations in this permit and ensure they are all understood.

Department of Environmental Conservation regulations provide that any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 15 days of the permit decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

A flat annual fee is required for your wastewater permit, in accordance with 18 AAC 72. A separate invoice will be mailed to your facility.

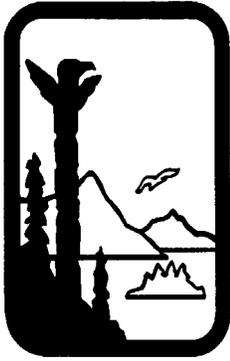
Sincerely,

**SIGNATURE ON FILE**

William D. McGee  
Technical Engineer

enc: Permit No. 2003DB0053

cc: For File 2671.45.001  
Tim Wingerter, ADEC/Fairbanks  
ADF&G/Juneau, AK 99801  
ADNR/ Juneau, AK 99801



STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DOMESTIC WASTEWATER DISPOSAL PERMIT

Permit: 2003DB0053

Effective Date: December 8, 2003  
Expiration Date: December 7, 2008

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<b>Issued to:</b>	Don Turner, Turner Construction		
<b>Facility Name:</b>	Tanani Bay Subdivision Wastewater Treatment Facilities		
<b>Location of Discharge:</b>	Section 15, Township 30S, Range 59E – North of Haines, AK		
<b>Description of Discharge Point:</b>	8 inch diameter outfall line extending 372 feet, terminating at approximately -10 feet M.L.L.W		
<b>Latitude:</b>	59.268600° N	<b>Longitude:</b>	135.441500° W
<b>Waterbody or Surface discharged to:</b>	Tanani Bay at the intersection of Lutak and Chilkoot Inlets.		
<b>Maximum Volume:</b>	15,000 gallons per day (gpd)		
<b>Type of Treatment:</b>	Secondary treatment units with Ultraviolet light (UV) and chlorine disinfection.		
<b>Type of Facility</b>	Individual lot secondary treatment with individual disinfection units		

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There are 2 different types of disinfection units, chlorination and UV used for the effluent from the individual treatment systems within the Tanani Bay Subdivision. The fecal coliform bacteria effluent limits are those required for chlorine disinfection of treated wastewater. If the treated wastewater effluent from all individual treatment systems are disinfected by UV, the permittee may request a modification of the permit for the fecal coliform bacteria effluent limits.

A subsistence collection area has been identified on the beach near the Tanani Bay Subdivision and is bisected by the outfall line from the Tanani Bay Subdivision Wastewater Treatment Facilities. To ensure compliance with the wastewater discharge limits, extra samples and specific collection dates have been established. It is required to sample and monitor as described in sections 1.1.6 and 1.1.7

The formation of an appropriate entity to properly maintain and operate all the components of the sewer system, including the individual treatment systems, in accordance with 18 AAC 72.205 is required. The permittee shall submit documentation that the requirements of 18 AAC 72.205 have been met within 6 months of permit issuance.

This permit is subject to the conditions and stipulations incorporated herein. This State of Alaska Wastewater Discharge Permit is being issued in accordance with AS 46 and 18 AAC 15. It may be terminated or modified in accordance with AS 46.03.120.

A Discharge Monitoring Report (DMR) is attached and is to be used for reporting discharge-sample analysis results. Noncompliance notification and accidental discharge/sewage spill forms are also attached. Copies should be made from the original for reporting purposes.

**SIGNATURE ON FILE**

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William D. McGee  
Technical Engineer

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## ATTACHMENT A: QUALITY ASSURANCE PROJECT PLAN

## 1. SPECIFIC PERMIT CONDITIONS

### 1.1. EFFLUENT AND MIXING ZONE LIMITATIONS

#### 1.1.1. DISCHARGE RESTRICTIONS

The discharge must be free of any additives such as antifreeze solutions, methanol, solvents, corrosion inhibitors, garbage, toxic substances, grease or oils which produce a sheen, foam (other than trace amounts), or other contaminants.

#### 1.1.2. COMPLIANCE WITH ALASKA ADMINISTRATIVE CODE

The discharge must not cause or contribute to a violation of the Alaska Water Quality Standards (18 AAC 70) or the Alaska Wastewater Disposal Regulations (18 AAC 72).

#### 1.1.3. CHANGE IN DISCHARGE

No other treated or untreated wastewater, sludge, or other materials shall be discharged to the lands or waters of the state unless otherwise approved by the department.

#### 1.1.4. MONITORING ACCORDING TO QUALITY ASSURANCE PROJECT PLAN (QAPP)

The permittee must conduct monitoring and laboratory analysis according to the attached QAPP (Attachment A) unless the permittee submits to and receives approval from ADEC to operate under an individual, facility-specific QAPP. If the permittee wants to operate under a facility-specific QAPP, they must prepare and submit their individual QAPP to ADEC within 90 days of the effective date of this permit. The permittee must comply with the QAPP and have the plan available at the facility at all times.

The approved QAPP can also be viewed at:

<http://info.dec.state.ak.us/decpermit/wq/generic%20qapp.pdf>

#### 1.1.5. REPRESENTATIVE SAMPLING

Samples and measurements taken as required must be representative of the volume and nature of the monitored discharge. Effluent samples must be collected from the effluent discharge line prior to release onto the land surface or entry into a water body. Mixing zone samples should be collected, if safely possible, from the down current leading edge of the plume, just outside of the mixing zone boundary. If flow does not extend to the edge of the mixing zone boundary during the required monitoring period, sample collection is not required and the reason for the absence of flow should be indicated on the discharge monitoring report.

1.1.6. EFFLUENT LIMITATIONS & MONITORING

1.1.6.1. The chlorine and UV disinfected, secondary treated domestic wastewater is discharged to Tanani Bay at the intersection of Lutak and Chilkoot Inlets via a 8 inch diameter outfall line extending 372 feet from shore, with a 8 inch diameter diffuser, 4 feet long with 2 ports, parallel to shore and terminates at -10 feet M.L.L.W. The permit effluent limits must be met at the end of the effluent line, prior to discharge into the receiving body. The mixing zone limitations must be met at the outer edge of the mixing zone, (mixing zone size and shape is defined in section 1.1.7.1 below).

1.1.6.2. The permittee must monitor the wastewater effluent in the following manner while the treated wastewater is being discharged.

Effluent Characteristic	Minimum Value	7 Day Average	30 Day Average	Maximum Value	Units	Frequency of Analysis	Sample Type
Total Flow	N/A	N/A	13,500	15,000	gpd	Weekly -- 52/year	measured or estimated
Fecal Coliform Bacteria (FC) <sup>1</sup>	N/A	N/A	200	800	FC per 100 ml	1 <sup>st</sup> sample in March, 2 <sup>nd</sup> sample in April, 3 <sup>rd</sup> sample in May, 4 <sup>th</sup> sample July-Sept., 5 <sup>th</sup> sample Oct.-Dec.	Grab
5-day Biochemical Oxygen Demand	N/A	N/A	30	60	mg/l	Quarterly -- 4/year	Grab or composite <sup>3</sup>
Total Suspended Solids	N/A	N/A	30	60	mg/l	Quarterly -- 4/year	Grab or composite <sup>3</sup>
Total Residual Chlorine <sup>2</sup>	N/A	N/A	.5	1.0	mg/l	Weekly -- 52/year	Grab
pH	6	N/A	N/A	9	S.U.	Upon Dept. Request	Grab
Dissolved Oxygen	2	N/A	N/A	17	mg/l	Upon Dept. Request	Grab

Footnotes

1. all effluent fecal coliform average results must be reported as the geometric mean
2. test not required if chlorine is not used as disinfectant.
3. Composite samples must consist of at least four equal volume grab samples, two of which must be taken during periods of peak flow (7-9 a.m. and 6-8 p.m.).

1.1.7. MIXING ZONE LIMITATIONS AND MONITORING

1.1.7.1. This discharge is assigned a mixing zone to meet the Alaska Water Quality Standards (18 AAC 70) for fecal coliform bacteria, pH, chlorine, and dissolved

oxygen. The mixing zone for this discharge is defined as the area of a circle with a 100 foot radius centered on the outfall at the diffuser extending from the diffuser to the surface. It shall be the responsibility of the permittee to inform this department, in writing, if water from inside of the mixing zone is used, or is intended to be used, as a water supply for aquaculture, human consumption or food processing, or if any area inside the mixing zone is used for contact water recreation or the harvesting for human consumption of raw mollusks or other raw aquatic life. These water uses are defined in the Alaska Water Quality Standards (18 AAC 70).

1.1.7.2. The permittee must monitor the receiving waterbody (mixing zone) at the minimum frequency indicated in the Table below.

1.1.7.3. Mixing zone limits for fecal coliform bacteria, dissolved oxygen, pH and chlorine must be met at the outer edge of the mixing zone. The wastewater discharged to the lands or waters of the state must not exceed the following limitations:

Mixing Zone Characteristic	Minimum Value	30 Day Average	Maximum Value	Units	Frequency of Analysis	Sample Type
Fecal Coliform Bacteria (Outside edge of MZ) <sup>1</sup>	N/A	14	43 <sup>2</sup>	FC per 100 ml	4 per year – 1 in April and May, 1 between July and December, 1 Between January and March.	Grab
Total Chlorine <sup>3</sup> (Outside edge of MZ)	N/A	N/A	0.0075	mg/l	4 per year – 1 in April and May, 1 between July and December, 1 between January and March.	Grab
pH (Outside edge of MZ) <sup>4</sup>	6.5	N/A	8.5	S.U.	Upon Dept. Request <sup>5</sup>	Grab
Dissolved Oxygen	6.0	N/A	17.0	mg/l	Upon Dept. Request <sup>5</sup>	Grab

Footnotes

1. all mixing zone fecal coliform results must be reported as the geometric mean;
2. not more than 10% of the samples taken may exceed this value;
3. the Alaska Water Quality Standards, (18 AAC 70), limit is 0.0075 mg/L for total residual chlorine, but the detection limit for monitoring purposes in this permit is 0.1 mg/L; test not required if chlorine is not used as disinfectant;
4. pH for freshwater must be within 0.5 S.U. of background, pH for marine must be within 0.2 S.U. of background
5. Reasonable potential to exceed these limits does not appear to exist and therefore monitoring will not normally be required, however the department may request the monitoring in the future by contacting the permittee.

1.1.8. ADDITIONAL MONITORING

If the permittee monitors any influent or effluent characteristic identified in this permit more frequently than required, the results of such monitoring must be reported

to the department in the monitoring report. The department will not require the reporting of results of analysis that are conducted on site for training purposes, if the department is notified in advance, in writing, of the intent of the analysis.

#### 1.1.9. REPORTING

Monitoring results obtained during the Quarterly-- 4/year reporting period must be summarized and reported to the department and postmarked no later than the 14th day of the month following the completed reporting period. Reporting must begin at the commencement of discharge. Signed copies of these, and all other reports required herein, must be submitted to the department at the following address:

Alaska State Dept. of Environmental Conservation  
Division of Water  
410 Willoughby Ave., Suite 303  
Juneau, AK 99801  
Telephone: 907-465-5366  
Fax: 907-465-5274  
Email: [wq\\_permit@dec.state.ak.us](mailto:wq_permit@dec.state.ak.us)

Knowingly making a false statement, by the permittee, the operator, or other employees, including contractors, on any such report may result in the imposition of criminal penalties as provided for under AS 46.03.790.

#### 1.2. MANAGEMENT PRACTICES

##### 1.2.1. PROPER OPERATION AND MAINTENANCE

The permittee must at all times, ensure proper operation and maintenance for all facilities and systems of treatment and control (and related appurtenances) which are installed and that discharge to the outfall line used by the permittee to achieve compliance with the conditions of this permit.

##### 1.2.2. REMOVED SUBSTANCES

Collected grit, scum, sludge, or other pollutants removed in the course of treatment or control of wastewater must be disposed of in a state approved, permitted manner.

##### 1.2.3. WARNING SIGNS

At least one sign must be posted near the discharge area, during the discharge. The sign must provide the identity and telephone numbers of the discharger; must inform the public that a mixing zone exists; the size and orientation of the mixing zone; a map/drawing showing the size of the mixing zone in relation to the shoreline; that treated, disinfected wastewater is being discharged; raw aquatic plants or animals should not be consumed from areas within the mixing zone; and that users of the area should exercise caution.

#### 1.2.4. AIR AND LAND RELEASES

The permittee must not place, deposit, or allow to be placed or deposited on the premises, any material which may produce, cause or contribute to the spread of disease, create a safety hazard or in any way endanger the health of the public.

#### 1.2.5. RECORDS RETENTION

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, and calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation must be retained in Alaska for observation by the department for five years. Upon request from the department, the permittee must submit certified copies of such records.

The permittee must post or maintain a copy of this permit available to the public at the disposal facility.

#### 1.2.6. CHANGE IN DISCHARGE

All discharges authorized herein must be consistent with the terms and conditions of this permit. The discharge of any pollutant or toxic material, (including oil, grease, or solvents), more frequently than, or at a concentration or limit not authorized, shall constitute noncompliance with the permit. Any anticipated facility expansions, flow increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new waste disposal permit application, and request a plan review at least thirty days before the implementation of such changes. Physical changes may also be subject to plan review by the department.

#### 1.2.7. TOXIC POLLUTANTS

If new or revised toxic pollutant (including oil, grease, or solvents) concentration standard is established in accordance with 18 AAC 70, for a pollutant present in this discharge, and such new standard is more stringent than the limitation in this permit, this permit is considered to be modified in accordance with the new toxic pollutant concentration standard.

#### 1.2.8. ACCIDENTAL DISCHARGES AND NONCOMPLIANCE

- 1.2.8.1. The permittee must provide protection from accidental discharges not in compliance with the provisions of this permit. Facilities to prevent such discharges must be maintained in good working condition at all times by the permittee. If an accidental discharge occurs, the permittee must report the event to the department within 24 hours, or as soon as possible, of becoming aware of such conditions. The attached accidental discharge/spill notification form shall be completed and sent to the department as a follow-up written report.

- 1.2.8.2. If, for any reason, the permittee does not comply with or will be unable to comply with any effluent limitation specified in this permit, the permittee must report the noncompliance to the department within 24 hours, or as soon as possible after becoming aware of such conditions.
- 1.2.8.3. A written follow-up report must be sent to the department within seven days of the noncompliance event. Permittees may use the attached noncompliance notification form to report noncompliance. A written report must contain, but not be limited to:
  - 1.2.8.3.1. Times and dates on which the event occurred, and if not corrected, the anticipated time the noncompliance is expected to continue.
  - 1.2.8.3.2. A detailed description of the event, including quantities and types of materials involved.
  - 1.2.8.3.3. Details of any actual or potential impact on the receiving environment or public health.
  - 1.2.8.3.4. Details of actions taken or to be taken to correct the causes of the event.
  - 1.2.8.3.5. Details of actions taken or to be taken to correct any damage resulting from the event.
- 1.2.8.4. It is recognized that influent quality changes, equipment malfunctions, or uncontrollable circumstances may sometimes result in effluent concentrations exceeding the permit limitations, despite the exercise of all possible care and maintenance measures and corrective measures by the permittee. The permittee must demonstrate to the department that such circumstances did exist where, despite all evasive measures, the effluent concentrations exceeded those set forth in this permit. The Commissioner shall consider such evidence in determining departmental actions. The department does not waive any of its legal rights during such consideration.

## 1.2.9. TRANSFER OF OWNERSHIP

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee must notify the succeeding owner or controller of the existence of this permit in writing, a copy of which must be forwarded to the Department of Environmental Conservation at the address in this permit. The original permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the department approves assignment of the permit. The department will not unreasonably withhold such approval.

## **2. GENERAL PERMIT CONDITIONS**

### **2.1. ACCESS AND INSPECTION**

The permittee must allow the Commissioner or their representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, state laws and regulations.

### **2.2. INFORMATION ACCESS**

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit must be available for public inspection at the State of Alaska Department of Environmental Conservation, Division of Air & Water Quality, 610 University Avenue Fairbanks, Alaska 99709-3643.

### **2.3. CIVIL AND CRIMINAL LIABILITY**

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including, but not limited to, accidents, equipment breakdowns, or labor disputes.

### **2.4. ADVERSE IMPACT**

The permittee must take all necessary precautions to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the non-complying activity. The permittee must cleanup and restore all areas adversely impacted by the noncompliance.

### **2.5. CULTURAL OR PALEONTOLOGICAL RESOURCES**

Should cultural or paleontological resources be discovered as a result of this activity, work, which would disturb such resources, is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907-269-8721).

### **2.6. APPLICATIONS FOR RENEWAL**

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

### **2.7. OTHER LEGAL OBLIGATIONS**

The requirements, duties, and obligations set forth in this permit are in addition to any requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any

necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit must comply with all applicable federal and state laws and regulations.

## 2.8. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options:

- Waste source reduction.
- Recycling of waste.
- Waste treatment.
- Waste disposal.

**ACRONYMS**

18 AAC 15	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 15: Administrative Procedures. Available at <a href="http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm">http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm</a>
18 AAC 70	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 70: Quality Standards. Available at <a href="http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm">http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm</a>
18 AAC 72	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 72: Wastewater Disposal. Available at <a href="http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm">http://www.state.ak.us/local/akpages/ENV.CONSERV/title18/title18.htm</a>
40 CFR	Code of Federal Regulations Title 40: Protection of Environment
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation
BOD	Biochemical Oxygen Demand
BMP	Best Management Practices
COD	Chemical Oxygen Demand
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
EPA	U.S. Environmental Protection Agency
FC	Fecal Coliform
GPD or gpd	Gallons per day
GPY or gpy	Gallons per year
HDPE	High-Density Polyethylene
mg/L or mg/l	Milligrams per liter
MGD or mgd	Million gallons per day
MLLW	Mean Lower Low Water
MZ	Mixing Zone
N/A	Not Applicable

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**ACRONYMS**

pH	A measure, in Standard Units (SU), of the hydrogen-ion concentration in a solution. On the pH scale (0 –14), a value of 7 at 25°C represents a neutral condition. Decreasing values, below 7, indicate increasing hydrogen-ion concentration (acidity); increasing values, above 7, indicate decreasing hydrogen-ion concentration (alkalinity).
POTW	Publicly Owned Treatment Works
QAPP	Quality Assurance Project Plan
SU	Standard Units
TAH	Total Aromatic Hydrocarbon
TAqH	Total Aqueous Hydrocarbon
TMDL	Total Maximum Daily Load
TRC	Total Residual chlorine
TSS	Total Suspended Solids
ug/l	Micrograms per liter
WQS	Water Quality Standards
WWTP or WWTF	Wastewater Treatment Plant (or Facility)

**DEFINITIONS**

Annual	Annual shall be once per calendar year
Aquaculture	The cultivation of aquatic plants or animals for human use or consumption
Average	An arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities
Backwash	the wash water resulting from the backwashing of a water filter
Biochemical Oxygen Demand (BOD)	A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the BOD, the greater the degree of pollution
Black Water	Water that contains animal, human, or food waste
Boundary	Line or landmark that serves to clarify, outline, or mark a limit, border, or interface
Chemical Oxygen Demand (COD)	A measure of the oxygen required to oxidize all compounds, both organic and inorganic, in water
Color	The condition that results in the visual sensations of hue and intensity as measured after turbidity is removed
Commissioner	The commissioner of the Alaska Department of Environmental Conservation, or the commissioner's designee
Composite Samples	Composite samples must consist of at least four equal volume grab samples; "24 hour composite" sample means a combination of at least 4 discrete samples of equal volume, collected at equal time intervals over a 24 hour time period at the same location. A "flow proportional composite" sample means a combination of at least 4 discrete samples collected at equal time intervals over a 24 hour time with each sample volume proportioned according to the flow volume. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of <i>Standard Methods for the Examination of Water and Wastewater</i> .
Contact Recreation	Activities in which there is direct and intimate contact with water. Contact recreation includes swimming, diving, and water skiing; contact recreation does not include wading
Criterion	A set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety; a criterion might be a narrative statement instead of a numerical concentration or limit
Department	The Alaska Department of Environmental Conservation
Dissolved Oxygen	The concentration of oxygen in water as determined either by the Winkler (iodometric) method and its modifications or by the membrane electrode method, also The oxygen dissolved in water, wastewater, usually expressed in milligrams per liter, or percent saturation
Ecosystem	System made up of a community of animals, plants, and bacteria, and the system's interrelated physical and chemical environment
Effluent	The segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment
Fecal Coliform Bacteria	Bacteria that can ferment lactose at $44.5^{\circ} + 0.2^{\circ}\text{C}$ to produce gas in a multiple tube procedure; "fecal coliform bacteria" also means all bacteria that produce blue colonies in a membrane filtration procedure within $24 \pm 2$ hours of incubation at $44.5^{\circ} + 0.2^{\circ}\text{C}$ in an M-FC broth. Also, bacteria found in the intestinal tracts of warm-blooded animals. Fecal Coliform's presence in water or sludge is an indicative measure of microbial pathogens and can serve as a warning mechanism for preventing potential human health risks.

**DEFINITIONS**

Geometric Mean	The geometric mean is the N <sup>th</sup> root of the product of N. For example $\sqrt[4]{12 \times 23 \times 34 \times 990} = 55$
Grab samples	A sample taken at a given place and time
Grey Water	Domestic wastewater composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers
Influent	Wastewater as it enters a wastewater treatment plant
Mean	The average of values obtained over a specified period.
Mean Lower Low Water	The tidal datum plane of the average of the lower of the two low waters of each day, as would be established by the National Geological Survey, at any place subject to tidal influence
Micrograms per liter	The concentration at which one millionth of a gram ( $10^{-6}$ g) is found in a volume of one liter
Milligrams per liter (mg/l)	The concentration at which one thousandth of a gram ( $10^{-3}$ g) is found in a volume of one liter; it is approximately equal to the unit "parts per million (ppm)," formerly of common use
Mixing Zone	An area in a waterbody surrounding or downstream of, a discharge where the effluent plume is diluted by the receiving water within which specified water quality criteria may be exceeded
Month	Month shall be the time period from the 1 <sup>st</sup> of a calendar month to the last day in the month
Permittee	A company, organization, association, entity or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring and reporting as required by the permit
Quality Assurance Project Plan	A system of procedures, checks, audits, and corrective actions to ensure that all research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.
Quarter	Quarter shall be the time period of three months based on the calendar year beginning with January
Receiving Body	Ocean, bay, marine area, tundra, river, stream, inlet etc. that an outfall line discharges into/onto
Report	Report result of analysis
Residual Chlorine	Chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine
Secondary Recreation	Activities in which incidental water use can occur. Secondary recreation includes boating, camping, hunting, hiking, wading, and recreational fishing. Recreational fishing, does not include fish consumption
Settleable Solids	Solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), Standard Methods for the Examination of Water and Wastewater, 18th edition (1992)
Sheen	An iridescent appearance on the water surface
Suspended Solids	Insoluble solids that either float on the surface of, or are in suspension in, water, wastewater, or other liquids. The quantity of material removed from wastewater in a laboratory test, as prescribed in "Standard Methods for the Examination of Water and Wastewater" and referred to as nonfilterable residue (See: total suspended solids).
Total Aqueous Hydrocarbons	Those collective dissolved and water-accommodated monoaromatic and polynuclear aromatic petroleum hydrocarbons that are persistent in the water column; "total aqueous hydrocarbons" does not include floating surface oil or grease
Total Aromatic Hydrocarbons	The sum of the following volatile monoaromatic hydrocarbon compounds: benzene, ethylbenzene, toluene, and the xylene isomers, commonly called BETX

**DEFINITIONS**

Total Suspended Solids	A measure of the suspended solids in wastewater, effluent, or water bodies, determined by tests for "total suspended non-filterable solids." (See: suspended solids.)
Turbidity	An expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through a water sample; turbidity in water is caused by the presence of suspended matter such as clay, silt, finely divided organic and inorganic matter, plankton, and other microscopic organisms
Twice per year	Twice per year shall consist of two time periods during the calendar year, (Oct. through April and May through Sept.)
Wastewater Treatment	Any process to which wastewater is subjected in order to remove or alter its objectionable constituents and make it suitable for subsequent use or acceptable for discharge to the environment
Water Recreation	See contact recreation or secondary recreation
Water Supply	Any of the waters of the state that are designated in 18 AAC 70 to be protected for fresh water or marine water uses; water supply includes waters used for drinking, culinary, food processing, agricultural aquacultural, seafood processing, and industrial purposes; "water supply" does not necessarily mean that water in a waterbody that is protected as a supply for the uses listed in this paragraph is safe to drink in its natural state
Week	Week shall be the time period of Sunday through Saturday

**Discharge Monitoring Report  
(DMR) – PAGE 1 of 2**

<b>Permit number:</b> 2003DB0053	Expires December 7, 2008
<b>File number:</b> 2671.45.001	

Submit this report to: Alaska Department of Environmental Conservation  
 410 Willoughby Ave., Suite 303  
 Juneau, AK 99801  
 FAX 907-465-5274 or  
 Phone 907-465-5366

<b>Applicant Name:</b> Don Turner, Turner Construction		<b>Responsible party:</b>	<b>Don Turner</b>
<b>Address:</b> Box 85, Haines, AK 99827		<b>Phone / email:</b>	<b>907-766-2687 turners@aptalaska.net</b>
<b>Facility:</b> Tanani Bay Subdivision Wastewater Treatment Facilities		<b>Onsite Contact:</b>	<b>Don Turner</b>
<b>Location:</b> North of Haines		<b>Fax:</b>	<b>907-766-3379</b>

<b>Required Reporting Frequency</b> Quarterly -- 4/year	<b>Discharge:</b> Disinfected, secondary treated domestic wastewater into Tanani Bay at Lutak and Chilkoot Inlets	<b>Sample Period:</b>	
		<b>From:</b>	
		<b>To:</b>	

<u>Parameter</u>	<u>Min. Value</u>	<u>30 day Average</u>	<u>7 day Average</u>	<u>Max. Value</u>	<u>Number of Analyses</u>	<u>Number of Violations</u>	<u>Units</u>	<u>Frequency of Analysis</u>	<u>Sample Method</u>
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**Discharge 1**

Flow Rate	Estmt'd/ Measure	-		-				gpd	Weekly – 52 year	Measured or estimated
	Permit Limits	N/A	13,500	N/A	15,000	report	Report			
Fecal Coliform Bacteria	Analytical Results	-						#/100 ml	5 per year 1 in March, April, May, July-Sept., Oct.-Dec.	Grab
	Permit Limits	N/A	200	N/A	800	report	Report			
Biochemical Oxygen Demand	Analytical Results	-						mg/l	Quarterly -- 4/year	Grab or Composite
	Permit Limits	N/A	30	N/A	60	report	Report			
Total Suspended Solids	Analytical Results	-						mg/l	Quarterly -- 4/year	Grab or Composite
	Permit Limits	N/A	30	N/A	60	report	Report			
Dissolved Oxygen	Analytical Results		-	-				mg/l	Upon Dept. Request	Grab
	Permit Limits	2	N/A	N/A	17	report	report			
pH	Analytical Results		-	-				Std. Units	Upon Dept. Request	Grab
	Permit Limits	6	N/A	N/A	9	report	report			
Total Residual Chlorine (if chlorine is used as disinfectant)	Analytical Results	-	-	-				mg/l	Weekly - 52/year	Grab
	Permit Limits	N/A	.5	N/A	1.0	report	report			

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THAT INFORMATION, I BELIEVE THAT THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION.

<b>NAME, TITLE OF PRINCIPAL EXECUTIVE OFFICER</b>	<b>SIGNATURE OF PRINCIPAL, EXECUTIVE OFFICER OR AUTHORIZED AGENT</b>
	( ) _____
	DATE TELEPHONE

**COMMENT AND EXPLANATION OF ANY VIOLATIONS (REFERENCE ALL ATTACHMENT HERE)**

\_\_\_\_\_ CHECK HERE IF THERE WAS NO DISCHARGE DURING THE ENTIRE REPORTING PERIOD





**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
 Division of Air and Water Quality, Wastewater Discharge Program  
 Phone: ANCHORAGE (907) 269-3059, Fax: (907) 269-7508; FAIRBANKS (907) 451-2130, Fax:  
 (907) 451-2187; JUNEAU (907) 465-5300, Fax: (907) 465-5274

## NONCOMPLIANCE NOTIFICATION

GENERAL INFORMATION			PERMIT #: 2003DB0053
APPLICANT/COMPANY Don Turner/ Turner Construction	FACILITY NAME Tanani Bay Subdivision Wastewater Treatment Facilities	FACILITY LOCATION Near Haines	
PERSON REPORTING	PHONE NUMBER OF PERSON REPORTING	REPORTED HOW? (e.g. by phone)	
DATE/TIME EVENT WAS NOTICED	DATE/TIME REPORTED	NAME OF DEC STAFF CONTACTED	
VERBAL NOTIFICATION MUST BE MADE TO ADEC WITHIN 24 HOURS OF DISCOVERY			
INCIDENT DETAILS (attach additional sheets, lab reports and photos as necessary)			
ESTIMATED QUANTITY INVOLVED (volume or weight)			
CAUSE OF EVENT (be specific)			
PERMIT CONDITION DEVIATION (Identify each permit condition exceeded during the event).			
Parameter (e.g. BOD, pH)	Permit Limit	Exceedance (sample result)	Sample date
CORRECTIVE ACTIONS Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of recurrence.			
ENVIRONMENTAL DAMAGE. <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN (If yes, provide details below).			
ACTUAL/POTENTIAL IMPACT ON ENVIRONMENT/PUBLIC HEALTH (describe in detail)			
ACTIONS TAKEN TO REDUCE OR ELIMINATE ACTUAL/POTENTIAL IMPACT ON ENVIRONMENT/PUBLIC HEALTH [(describe in detail) (e.g. Supplied drinking water to nearby well owners and informed well owners not to drink from wells until further notice)].			
COMMENTS			
Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.			
NAME: _____	SIGNATURE: _____	DATE: _____	
FORMS MUST BE SENT TO DEC WITHIN 7 DAYS OF THE EVENT.			



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 (907) 451-2187; JUNEAU (907) 465-5300, Fax: (907) 465-5274

## ACCIDENTAL DISCHARGE / SPILL NOTIFICATION

GENERAL INFORMATION			PERMIT #: 2003DB0053
APPLICANT/COMPANY	FACILITY NAME	FACILITY LOCATION	
PERSON REPORTING	PHONE NUMBER OF PERSON REPORTING	REPORTED HOW? (e.g. by phone)	
DATE/TIME OF SPILL	DATE/TIME REPORTED	NAME OF DEC STAFF CONTACTED	
VERBAL NOTIFICATION MUST BE MADE TO ADEC WITHIN 24 HOURS OF DISCOVERY OF SPILL.			
INCIDENT DETAILS (attach additional sheets, lab reports and photos as necessary)			
PRODUCT SPILLED (e.g. sewage, propylene glycol, etc)		SOURCE OF SPILL	
QUANTITY SPILLED (volume or weight)	QUANTITY CONTAINED	QUANTITY RECOVERED	QUANTITY DISPOSED
CAUSE OF SPILL (be specific)			
CLEANUP ACTIONS (describe in detail)			
DISPOSAL METHODS AND LOCATION (describe in detail)			
STATUS OF CLEANUP ACTIONS (If clean up has not begun, provide estimated time to begin and complete clean up and reasons for the delay)			
<b>ENVIRONMENTAL DAMAGE.</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN If yes, provide details below.	<b>SURFACE AREA AFFECTED (square feet)</b>	<b>SURFACE TYPE (e.g. tundra, land covered with snow, etc)</b>	
ACTUAL/POTENTIAL IMPACT ON ENVIRONMENT/PUBLIC HEALTH (describe in detail)			
COMMENTS			
Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.			
NAME: _____		SIGNATURE: _____	DATE: _____
FORMS MUST BE SENT TO DEC WITHIN 7 DAYS OF THE EVENT.			