



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Environmental
Conservation

DIVISION OF WATER
Compliance Program

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<http://dec.alaska.gov/water/Compliance/index.htm>

October 14, 2014

Certified Mail 7014 1200 0000 7457 5944

Samantha Stoughtenger
City and Borough of Juneau
Juneau Douglas Wastewater Treatment Plant
2009 Radcliffe Road
Juneau, AK 99801

SUBJECT: National Pollutant Discharge Elimination System (NPDES) Facility Inspection Report.
Permit Number AK-002321-3 for the City and Borough of Juneau, Juneau Douglas Wastewater
Treatment Plant.

Dear Ms. Stoughtenger:

On September 15, 2014 The Alaska Department of Environmental Conservation (ADEC) inspectors
Shilo Williams, Willow Weimer, and Jeff Hoagland conducted an inspection of your facility.

The Juneau Douglas Wastewater Treatment Plant has been found ***In-Compliance*** with all terms and
conditions that were evaluated for this inspection under NPDES AK-002321-3.

The Department would like to extend its gratitude for making a representative of your facility
available during the inspection and thank you for your cooperation and your assistance in protecting
public health and the environment. If you have any questions, please don't hesitate to contact me at
907-465-5308 or by E-mail at shilo.williams@alaska.gov.

Sincerely,

A handwritten signature in cursive script that reads "Shilo Williams".

Shilo Williams
Environmental Program Specialist IV

Enclosure: APDES Inspection Report

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APDES INSPECTION REPORT

Alaska Department of Environmental Conservation
Division of Water
410 Willoughby Dr. Ste. 303 – Juneau, AK 99801

Section 1: General Data

Permit Number	Announced / Unannounced	Facility Type	Receiving Waters	Weather	Inspection Date
AK0023213	Announced	Domestic	Gastineau Channel	Clear	09/15/2014

Section 2: Facility Data

Name of Facility: Juneau-Douglas Wastewater Treatment Plant	Entry Time: 1230	Permit Effective: December 27, 2001
	Exit Time: 1430	Permit Expiration: Admin. Extended
Physical Address: 1540 Thane Road Juneau, AK 99801	Mailing Address: 2009 Radcliffe Road Juneau, AK 99801	
On-Site Representative: Name: Jim Westcott Address: 1540 Thane Road, Juneau, AK 99801 Phone: (907) 586-0801	Responsible Party: Name: Samantha Stoughtenger Address: 2009 Radcliffe Road, Juneau, AK 99801 Phone: (907) 586-0393 Email: samantha_stoughtenger@ci.juneau.ak.us	
Additional Inspection Participants: Don Dodson-CH2MHill Willow Weimer-ADEC Jeff Hoagland-ADEC	Other:	

Section 3: Findings

Background

The Juneau Douglas Wastewater Treatment plant is a publically owned domestic wastewater treatment facility that discharges to Gastineau Channel. The facility is operated by the City and Borough of Juneau (CBJ).

Regulatory Status/Compliance History

The Juneau Douglas Wastewater Treatment Plant is authorized to discharge under the USEPA National Pollutant Discharge Elimination System (NPDES). The permit expired on December 26, 2006, however it has been administratively extended. An Alaska Pollutant Discharge Elimination System (APDES) permit is in pending status for this facility. The Alaska Department of Environmental Conservation (ADEC) conducted inspections at this facility in 2010, 2011, and 2012. Numerous violations were documented during those inspections. Based on the 2014 inspection, it appears that CBJ personnel have made great strides at coming into compliance.

Field Inspection

Upon arrival at the Juneau-Douglas Wastewater Treatment Plant, introductions were exchanged and inspector credentials (Weimer) were presented.

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The following information was provided verbally by onsite representatives:

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- There have been no recent sanitary sewer overflows, spills, or bypasses.
- The incoming wastewater quality is visibly different when cruise ships are in port. It appears dark in color and contains an abundance of floating material.
- Compliance samples (with the exception of pH and DO) are put on ice and taken to Admiralty Environmental.
- Admiralty Environmental has been analyzing the compliance samples since 2013.
- pH and DO are analyzed onsite with an Orion A326 handheld meter.
- The grit from the headworks is brought to the city dump.
- The two aeration basins have a capacity of 790,000 gallons and contain two surface aerators in each basin.
- There are two 65 foot diameter secondary clarifiers.
- The return pump VFD was recently reprogrammed.
- The effluent is disinfected via UV light prior to discharge.
- The UV bulbs (2) are cleaned once per week on a rotating basis.
- The facility utilizes composite samplers for their influent and effluent compliance samples.
- A Milltronics flow meter is used to measure the effluent flow.
- An instrument tech performs the required calibrations. The calibration records are stored at the Mendenhall Wastewater Treatment Plant.
- The filter belt press is operated three times per week during peak season and two times per week during the off season.
- The dewatered solids are barged down south.
- The incinerator has not been in use for a number of years.
- There are currently three combined sewer overflows (CSOs). There have been no recent issues or releases with the CSOs.
- Hydrofloc 1686 (polymer) is added to aid in flocculation.
- The wastewater treatment plant is staffed four days per week. Spot checks occur the other three days.
- The food to mass ratio is calculated four days per week.
- Deionized water is purchased and stored in the lab.
- CH2MHill has been hired as a consultant to address operational parameters.
- Plans are in place to replace the catwalks over the aeration basins.
- An RFP is in the works for upgrades to the SCADA system.
- A Cummins Onan Gen Set can power the critical components in the event of a power outage.

The following observations were made by ADEC inspectors:

- A sign was posted at the entrance to the wastewater treatment plant.
- An outfall sign was posted on the shoreline.
- ADEC inspectors could not enter the aeration basin building due to the deteriorating condition of the catwalks.
- The pH and DO calibration logs were incomplete for the period of January 2014-April 2014. A post-inspection letter received by ADEC on September 22, 2014 states that a new format for recording calibration data was implemented sometime after August 20, 2014.
- DMR discrepancies were found for the months of May and June 2014. Amended DMRs were received by ADEC on September 22, 2014.
- The belt press room was clean and in excellent condition.

Sampling

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Sampling did not occur as part of the inspection.

Records Review

The following records were reviewed and are considered complete:

- Signed QAPP (reviewed in ADEC office prior to site inspection);
- O&M Plan (reviewed in ADEC office prior to site inspection);
- Analytical results and chain of custodies;
- Three years of DMRs;
- NPDES permit;
- BMP Plan and,
- CSO Long Term Control Plan (reviewed in ADEC office prior to site inspection).

The following records were reviewed and are considered incomplete:

- Calibration records- Missing entries from January 2014-April 2014

The following records were not available during the inspection:

- NA

Section 4: Compliance

Violations

- NA

Areas of Concern

- According to previous ADEC inspections, the catwalks over the aeration basins have been unstable and deteriorating for a number of years making it unsafe for the operators to enter the building and perform operations and maintenance. ADEC acknowledges that plans have been made to replace these catwalks, however at the time of the inspection, the dates the replacement is to occur were unknown.

Section 5: Appendixes

1. Photo Addendum

Signature

Name – Shilo Williams
 Division of Water – Compliance Program
 Phone: (907)465-5308
 E-mail: shilo.williams@alaska.gov

Name- Willow Weimer
 Division of Water – Compliance Program
 Phone (907) 269-6096
 E-mail: willow.weimer@alaska.gov

X Shilo Williams
 Date: 10-14-14

X Willow Weimer
 Date: 10-14-14

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Photo Addendum

Photo 01



Grit Bin

Photo 02



Orion pH and DO Meter

Photo 03



Composite Sampler

Photo 04



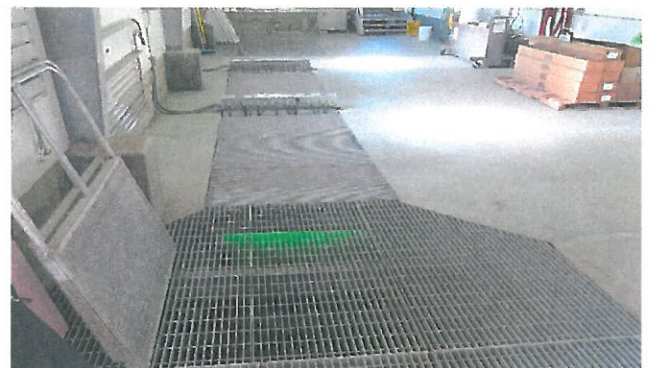
Aeration Basin

Photo 05



Digester

Photo 06



UV Disinfection

Photo Addendum

Photo 07



Milltronics Flow Meter

Photo 08



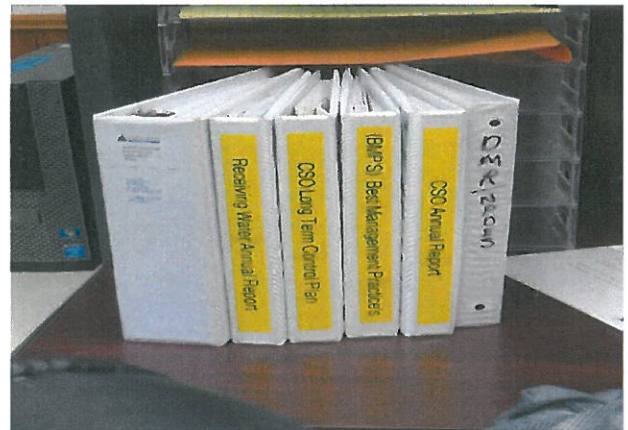
Clarifier

Photo 09



Belt Filter Press

Photo 10



Document Binders

Photo 11



Outfall Signage

Photo 12



Entrance Signage

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