

INSPECTION REPORT

Inspection Entry Date/Time	06/04/2024 09:00 AM (AKT)	Announced: Yes	
Inspection Exit Date/Time	06/04/2024 02:15 PM (AKT)	Access: Granted	
Weather	50°F, Drizzly		
Media	Water		
Statutes/Programs	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection		
Permittee Name	Full Cycle - Power Systems and Supplies of Alaska		
Facility Name	Ward Cove Industrial and Maritime Center		
Facility Address	7037 N Tongass Hwy		
City, State, Zip Code	Ketchikan, Alaska 99901		
Borough	Ketchikan Gateway		
Facility GPS Coordinates	55.408382, -131.726632		
Mailing Address	P.O. Box 772		
City, State, Zip Code	Ward Cove, Alaska 99928		
FRS ID	110003045259		
Permit Number	AK0053384		
SIC	4952 (Sewerage Systems)		
Regulatory Representatives Participating in Inspection:			
Title	Name	Organization	
Inspector	Katrina Chambon	EPA Region 10	
Lead Inspector:			
Raymond Andrews	EPA Region 10	andrews.raymond@epa.gov	(206) 553-4252
Supervisor Review:			
Peter Contreras	EPA REGION 10	contreras.peter@epa.gov	(206) 553-6708

SECTION I – Opening Conference

I arrived at the Ward Cove Industrial and Maritime Center (the “Site” or “Facility”), located at 7037 N Tongass Hwy, Ketchikan, at 09:00 AM (AKT) on 06/04/2024 for an announced inspection. I was accompanied by Katrina Chambon, an Inspector in Training, who was there to assist with the inspection and observe inspection procedures. I presented my credentials to Stephen Bradford and informed him I was there to determine compliance with the Clean Water Act (CWA), and the facility’s National Pollutant Discharge Elimination System (NPDES) permit, permit # AK0053384. This report is based on information supplied by facility representatives, direct observations made by me, and records and reports maintained by the facility. In addition, information gathered prior to, or after, the Inspection from a review of EPA, State, and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA REGION 10	Raymond Andrews	Lead Inspector	Yes	Yes
EPA REGION 10	Katrina Chambon	Inspector	Yes	Yes
Ward Cove Group	Stephen Bradford	Executive Vice President	Yes	No
Full Cycle LLC	Paul Manabat	Operations Administrator	Yes	No
Full Cycle LLC	Greg Black	Operations Manager	Yes	No

Facility Information

Responsible official	Stephen Bradford, stephen@wcgak.com
Design Capacity & Average Daily Flow	The facility has a design flow capacity of 0.025 million gallons per day (mgd), i.e., 25,000 gallons per day, and an average daily flow of 0.005mgd, i.e. 5,000 gallons per day.
Hours of operation?	The facility operates Monday through Friday from 8am until 5pm. The facility employs a full-time operator with a part time operator available as needed. The facility has an on-call person for weekends, holidays, and evenings.
Describe the flow path.	Influent enters a 15,000-gallon receiving tank. From the receiving tank, the wastewater goes through a filter auger to remove large solids and then continues to the aerated 100,000-gallon vault. From the vault, the influent goes through a belt filter press. From the belt press, solids go into a container for pick-up and disposal by a 3 rd party. The liquids go into a 12,000 holding tank from the holding tank, the wastewater is pumped to the treatment plant where it goes through secondary aeration and chlorine disinfection. After chlorine disinfection, the waste stream mixes with lake water and is then discharged into Ward Cove. There is no dechlorination prior to discharge.
Number of Outfalls?	The facility has a single submerged outfall, which discharges into Ward Cove. The outfall was last inspected in 2019 during an EPA requested survey required prior to the building of a new dock.
Type of primary flow meter.	The facility uses an ultrasonic flow meter.
What failure alarm does the plant have?	The facility does not have a failure alarm.

Does the facility have back-up power?	The facility has a back-up generator in case of power failure. The generator automatically activates during a failure and powers the entire treatment plant.
How do you manage your biosolids?	Sludge is collected and sent through a filter press for dewatering. After dewatering, the sludge is collected by a third party and hauled away.
Has the facility had any bypasses, overflows, or hydraulic overloads in the last year?	The facility has not had any bypasses, overflows, or hydraulic overloads in the last year.
Does the facility have overflow/emergency storage capacity?	The facility does not have emergency storage capacity.
Industrial Users	The facility does not have any industrial users but receives septage from residential citizens that are not covered by a municipal wastewater treatment facility. The septage volume is approximately 150,000 gallons a month and has no observable impact on facility operations.
Are there any plans for renovation?	The facility is in the planning stages of adding additional flow capacity.
Is any portion of the plant non-operational?	The entire facility is operational.
Do you use in-house or contract out for laboratory analyses?	The facility's in house lab analyzes all pollutant parameters except for copper and ammonia. Copper and ammonia samples are sent to a contract lab for analysis. The contract lab is: Fremont Analytical 3600 Freemont Avenue North Seattle, Washington 98103 (206) 352-3790

SECTION II – Observations

On the site tour, I did not make any observations that would constitute an area of concern.

SECTION III – Records Review

Records may not be in sequential order.

Record: Other - Operations and Maintenance (O&M) Plan		AOC: Yes
Ref #: RA1-RR-004	Reviewed By: Raymond Andrews	Reviewed Date: 06/04/2024
At the time of inspection, Katrina Chambon reviewed the facility's Operations & Maintenance (O&M) plan. She found, - the O&M plan had the manuals for the various machinery that compose the treatment system, but did not contain specific SOPs for staff to explain operational procedures, - there was no documentation showing the O&M plan is being updated annually, - the O&M Plan did not contain best management practices (BMPs).		
Record: Laboratory Analysis Reports		AOC: No
Ref #: RA1-RR-003	Reviewed By: Raymond Andrews	Reviewed Date: 06/04/2024
At the time of inspection, I reviewed lab reports and chain of custody documents from Jan 2023 through May 2024. The documents appeared to be complete and accurate. I did not note any areas of concern.		

Record: Other - Integrated Compliance Information System (ICIS) Database		AOC: Yes
Ref #: RA1-RR-002	Reviewed By: Raymond Andrews	Reviewed Date: 06/04/2024
Prior to the inspection, I ran a deficiency report from EPA's ICIS data based for the period from June 2019 through May 2024. I found the facility exceeded its effluent parameters 641 times over 26 months during the period reviewed. A list of those exceedances is in a table in Appendix 2.		
Record: Other - Quality Assurance (QA) Plan		AOC: Yes
Ref #: RA1-RR-001	Reviewed By: Raymond Andrews	Reviewed Date: 06/04/2024
At the time of the inspection, I reviewed the facility QA Plan. The QA Plan map did not include the sampling point. The QA plan did not include the qualifications and training of personnel, sample shipping requirements and laboratory data delivery requirements.		
SECTION IV – Sampling Activity		
No sampling was conducted.		
SECTION V – Areas of Concern		
Areas of Concern may not be in sequential order.		
The presentation of Areas of Concern does not constitute a formal compliance determination or violation.		
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan	
Permit Requirement		
Part 2.1.5.2 of the permit states that "At a minimum, a QAPP must include...maps indicating the location of all permit required sampling points..."		
AOC:		
The QA Plan map did not include the sampling point.		
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan	
Permit Requirement		
Part 2.1.5.3 of the permit states, " At a minimum, a QAPP must include...qualification and training of personnel..."		
AOC:		
The QA plan did not include the qualifications and training of personnel.		
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan	
Permit Requirement		
Part 2.1.5.1 of the permit states, "At a minimum, a QAPP must include...sample shipping methods, and laboratory data delivery requirements..."		
AOC:		
The QA plan did not include sample shipping requirements and laboratory data delivery requirements.		
AOC Reference #: RA1-RR-002	Records Review: Other - Integrated Compliance Information System (ICIS) Database	
Permit Requirement		
Part 1.2.1 of the permit states, in part, "The permittee must comply with effluent limitations in the table(s) at all times unless otherwise indicated, regardless of monitoring frequency or reporting required by other provisions of this permit."		
AOC:		
The facility exceeded its effluent parameters 641 times over 26 months.		

AOC Reference #: RA1-RR-004	Records Review: Other - Operations and Maintenance (O&M) Plan
Part 2.2.3 of the permit states, "The O&M Plan must be reviewed annually. Documentation of annual plan review by the permittee shall be retained onsite and made available to DEC upon request."	
AOC: There was no documentation showing the O&M plan was being reviewed annually.	
AOC Reference #: RA1-RR-004	Records Review: Other - Operations and Maintenance (O&M) Plan
Permit Requirement Part 2.2.4 of the permit states, "The permittee shall ensure that the O&M Plan includes appropriate best management practices (BMPs). BMPs include measures that prevent or minimize the generation and potential for the release of pollutants to Ward Cove."	
AOC: The O&M Plan did not contain best management practices (BMPs).	

SECTION VI – Closing Conference

I held a closing conference with facility personnel at 02:15 PM (AKT) on 06/04/2024 for the inspection. During the closing conference, I discussed observations and Areas of Concern I identified during the inspection. Observations and Areas of Concern have not yet been evaluated for a formal compliance determination.

SECTION VII – List of Appendices

1. Photo Log
2. Effluent Exceedances Table

APPENDIX 1: Photo Log

All photos were taken by Lead EPA Inspector, Ray Andrews, during the inspection.

Photos were not manipulated beyond minor cropping for sizing and labels or callouts to draw attention to the subject of the photo.

All photos taken during the inspection are included in the Photo Log; however, only photos that support an Observation or Area of Concern are included in the inspection report.

- P1010955 – Sampling Point
- P1010956 – Blowers (Aerators)
- P1010957 – 15,000 gallon Receiving Tank
- P1010958 – Shoreside Discharge Notification Sign, photo 1
- P1010599 – Shoreside Discharge Notification Sign, photo 2
- P1010960 – General Area of Outfall

APPENDIX 2: Effluent Exceedances Table

Month	Parameter	DMR Value	Permit Limit	Unit	% Exceedance	Limit Type	# Violations
June 2019	TRC	.24	.21	lb/d	14	Daily Mx	1
June 2019	TRC	1.16	1	mg/L	16	Daily Mx	1
June 2019	pH	6.31	6.5	SU	3	Inst Min	1
July 2019	TRC	.1	2	mg/L	95	Minimum	31
July 2019	pH	5.7	6	SU	5	Inst Min	1
August 2019	TSS	7.3	6.3	lb/d	16	Mo Avg	31
August 2019	TSS	35	30	mg/L	17	Mo Avg	31
September 2019	Coliform, fecal	731	200	#/100mL	266	Mo Geomn	30
September 2019	Coliform, fecal	2800	800	#/100mL	250	Daily Mx	1
September 2019	pH	6.44	6.5	SU	1	Inst Min	1
September 2019	TRC	.08	.0075	mg/L	967	Daily Mx	1
October 2019	pH	6.4	6.5	SU	2	Inst Min	1
November 2019	Coliform, fecal	870	800	#/100mL	9	Daily Mx	1
December 2019	TSS	6.95	6.3	lb/d	10	Mo Avg	31
December 2019	TSS	33	30	mg/L	10	Mo Avg	31
December 2019	pH	6.2	6.5	SU	5	Inst Min	1
January 2020	TSS	12.09	6.3	lb/d	92	Mo Avg	31
January 2020	TSS	12.09	9.4	lb/d	29	Wkly Avg	7
January 2020	TSS	58	30	mg/L	93	Mo Avg	31
January 2020	TSS	58	45	mg/L	29	Wkly Avg	7
February 2020	TSS	39	30	mg/L	30	Mo Avg	29
February 2020	Coliform, fecal	490	200	#/100mL	145	Mo Geomn	29
March 2020	TSS	11.54	6.3	lb/d	83	Mo Avg	31
March 2020	TSS	11.54	9.4	lb/d	23	Wkly Avg	7
March 2020	TSS	18.08	12.6	lb/d	43	Daily Mx	1
March 2020	TSS	55	30	mg/L	83	Mo Avg	31
March 2020	TSS	55	45	mg/L	22	Wkly Avg	7
March 2020	TSS	87	60	mg/L	45	Daily Mx	1
March 2020	Coliform, fecal	2100	800	#/100mL	163	Daily Mx	1
March 2020	TRC	.11	.0075	mg/L	1,367	Daily Mx	1
April 2020	TRC	.1	.0075	mg/L	1,233	Daily Mx	1
June 2020	Coliform, fecal	30	14	#/100mL	114	Mo Geomn	30
July 2020	Coliform, fecal	18	14	#/100mL	29	Mo Geomn	31
July 2020	Coliform, fecal	81	43	#/100mL	88	Daily Mx	1
August 2020	TRC	1.09	1	mg/L	9	Daily Mx	1
August 2020	Coliform, fecal	60	43	#/100mL	40	Daily Mx	1
October 2020	Coliform, fecal	20	14	#/100mL	43	Mo Geomn	31
November 2020	TSS	32	30	mg/L	7	Mo Avg	30
December 2020	Coliform, fecal	19400	800	#/100mL	2,325	Daily Mx	1
January 2021	Coliform, fecal	31000	800	#/100mL	3,775	Daily Mx	1
January 2021	Coliform, fecal	78	43	#/100mL	81	Daily Mx	1
March 2021	pH	9.39	8.5	SU	10	Daily Mx	1
May 2021	Coliform, fecal	8570	200	#/100mL	4,185	Mo Geomn	31
May 2021	Coliform, fecal	9410	800	#/100mL	1,076	Daily Mx	1
May 2021	Coliform, fecal	46.1	14	#/100mL	229	Mo Geomn	31
May 2021	Coliform, fecal	118.	43	#/100mL	174	Daily Mx	1
June 2021	pH	5.78	6	SU	4	Minimum	1
August 2021	Enterococci	74	35	CFU/100mL	111	Mo Geomn	31
October 2022	Coliform, fecal	896	800	#/100mL	12	Daily Mx	1
October 2022	pH	6.35	6.5	SU	2	Daily Mn	1
January 1900	Coliform, fecal	92	43	#/100mL	114	Daily Mx	1
January 2024	TRC	17.22	17	mg/L	1	Daily Mx	1
January 2024	pH	6.28	6.5	SU	3	Daily Mn	1
April 2024	pH	6.28	6.5	SU	3	Daily Mn	1