



District of Port Hardy



Airport Wastewater Operations Report Annual Report 2018

Operational Certificate Number ME-105299

PLANT SUMMARY

The Airport Wastewater Treatment Plant (AWWTP), built in 1975, is located adjacent to the Transport Canada Airport facility and operates under permit ME-105299. Its effluent is discharged into the Queen Charlotte Strait. There are three lift stations located in the AWWTP collection system; Fort Rupert School, Fort Rupert Village and Peel Street.

PLANT AND OPERATOR CLASSIFICATION

The Tsulquate Wastewater Treatment plant is a Class III. Operators have met the level of certification of the plants.

Operator	Title	Certification
Joe Jewell	Utilities Supervisor	WT IV, WWT II, WD III, WWC I
Justin Reusch	Chief Operator	WT III, WD II, WWT II
Roland LeFort	Operator	WWT III, WTI II
Cory Henschke	Operator	WWT I, WD II
Robert Cousins	Operator	WWT I, WT I

OPERATIONS SUMMARY AND HIGHLIGHTS

- The Airport wastewater plant continued to produce effluent within the parameters of the permit
- The annual average flow was 552 m³/day with a maximum flow of 960 m³ recorded in January during a storm event
- The headworks screening unit has been problematic requiring a complete teardown and repair due to rocks entering the sanitary system. The screen has been functioning well in the last part of the year
- The air header was repaired in many spots this year
- A new emergency generator transfer switch has been installed as part of the 2018 capital project program. The commissioning is now complete
- Receiving waters monitoring and an dive of the outfall pipe were conducted in August as per our the requirements of the Operating Certificate. The receiving waters testing results were found to be within expected parameters
- An LC50 test was also performed in August on the effluent with a 100% survival rate
- The dive found that there was a small leak in the outfall pipe. The District was not made aware of the issue for 10 weeks after the fact. The issue was reported through the Non-Compliance e-mail address to the Ministry of Environment and repairs are being scheduled for 2019

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LAB DATA

District of Port Hardy Airport Wastewater Plant Compliance Testing														
105299 - 2018 AnnRpt WQ DATA														
Month	Flow (m ³)		pH 6.0 - 9.0		Total Suspended Solids (TSS) mg/L <= 45 mg/L		Carbonaceous Biochemical Oxygen Demand (CBOD ₅) mg/L <= 45 mg/L		Fecal Coliforms CFU/100 mL		Enterococcus CFU/100 mL		Total Ammonia mg/L	
	Average	Maximum 1254 m ³ /day	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate
January	744	960	6.6	6.6	29	20	12.0	5.0					3.80	3.80
February	722	848	6.6	6.7	18	17	9.0	5.0	21000	26000	11000	10000		
March	726	911	6.8	6.6	30	18	9.0	4.3						
April	612	772	7.1	7.1	17	21	<5	6	12000	8900	2300	2900	0.07	0.12
May	552	655	6.7	6.7	15	12	<6	<6						
June	544	688	6.8	6.7	26	20	6	14	45000	27000	1800	2900		
July	395	568	7.4	7.4	7	7	<5	<5						
August	373	432	6.8	6.7	14	14	<5	<5	20000	16000	1200	1100	<0.0005	<0.0005
September	439	578	7.2	7.2	16	15	3.8	3.4						
October	515	799	6.9	7.0	28	28	7.8	6.5	4400	3100	280	220		
November	612	926	6.7	6.7	15	20	7	6					<0.005	<0.005
December	650	890	7.3	7.0	30	29	6	6	3800	4700	1100	1200		