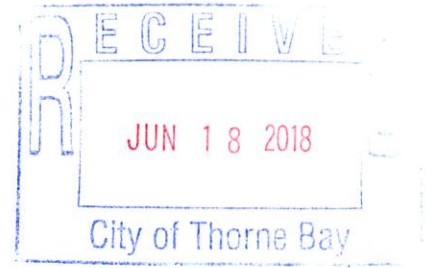


Wastewater Treatment System Classification



System Owner: Thorne Bay, City of
System: Thorne Bay Wastewater Treatment System
Classification: Class 1 Wastewater Treatment System
Report Date: 06/15/2018

Operators:

Name	Certificate Level	Expiration Date
Billy J. Phillips	Not Certified	
Samuel H. Sawyer	Not Certified	

Wastewater treatment systems are classified according to a point rating system. Point values are assigned for each component found in the treatment plant and the point total determines the classification. The classification of this system is shown below with each component highlighted.

Classification:

Total Classification Points: 29

Class 1 = 1 to 30 classification points

Size (Peak day design capacity, gallons per day)

less than 10,000	1
10,000 - 50,000	2
50,001 - 100,000	4
100,001 - 500,000	9 ←
500,001 - 1,000,000	12
1,000,001 - 5,000,000	16
5,000,001 - 10,000,000	20
10,000,001 - 50,000,000	25
greater than 50,000,000	30

Pretreatment

Influent pumping	2
Flow equalization basin	1
Manually cleaned screens	1
Mechanically cleaned screens	2 ←
Fine screens, including microscreens	3

Comminutor, barminutor, grinders	2
Grit removal	2
Primary Treatment	
Primary clarifiers	4
Primary clarifiers with chemical addition	7
Imhoff tank, or other method of combined sedimentation and digestion, other than a septic tank	3
Dissolved air flotation	16
Secondary Treatment	
Trickling filter without recirculation	5
Trickling filter with recirculation	8
Activated sludge: Oxidation ditch	8 ←
Activated sludge: Diffused or dispersed aeration	10
Activated sludge: Pure oxygen	15
Activated sludge: Sequencing batch reactor (SBR), intermittent cycle extended aeration system (ICEAS), or other batch treatment method	20
Activated sludge: Additional points if an activated sludge plant is operated in high rate mode or contact stabilization mode	2
Rotating biological contactor	10
Activated bio-filter with aeration	10
Activated bio-filter without aeration	8
Stabilization ponds without aeration	5
Aerated lagoon	8
Secondary clarifiers	4 ←
Secondary clarifiers with chemical addition	7
Advanced Waste Treatment	
Polishing pond or effluent flow equalization	2
Chemical and physical treatment without secondary treatment	20
Chemical and physical treatment following secondary treatment	15
Ion exchange	4
Granular media filtration	8
Membrane filtration	8
Membrane filtration, integrated system	12

Electrolysis, electrodialysis reversal	20
Biological or combined chemical and biological nutrient removal	12
Nitrification by extended aeration only	2
Chemical precipitation of phosphorous	3
pH adjustment	3
Activated carbon columns or beds	8
In-plant Odor Control	
Biofilter	3
Adsorption with activated carbon or equal adsorbent	3
Wet scrubber	3
Thermal deactivation with catalytic process	6
Odor-reducing sprays	2
Sludge Thickening and Dewatering	
Sludge decant tank	2
Gravity thickener basin	3
Gravity belt thickener	4
Screw press	5 ←
Centrifuge	6
Belt filter press, plate-and-frame press, or vacuum filter	8
Sludge bagger	3
Evaporative sludge drying by means of drying beds	2
Additional points if a polymer is added to sludge before the sludge is put in drying beds	3
Sludge Stabilization and Conditioning	
Unheated anaerobic digestion	8
Heated anaerobic digestion	10
Aerobic digestion	5
Wet oxidation	10
Chemical stabilization with lime	3
In-vessel composting, if controlled and operated by the operator as part of routine system operations	10
Static pile composting, if controlled and operated by the operator as part of routine system operations	5

Solids Disposal

Incineration, if controlled and operated by the operator as part of routine system operations	12
Land application, if controlled and operated by the operator as part of routine system operations	5
Sludge lagoon	3
Off-site disposal	1 ←

Disinfection

Liquid and powdered hypochlorites	3
Additional points if hypochlorites are generated on-site	2
Gas chlorine	12
Chlor-Alkali on-site generation	12
Chlorination using tablets	1
Ultraviolet light	3
Ozonation without pure oxygen	3
Ozonation with pure liquefied oxygen	4
Ozonation with on-site generation of pure oxygen	5
Dechlorination with gas	10
Dechlorination with dechlorination agents other than gas	3
Dechlorination using tablets	1

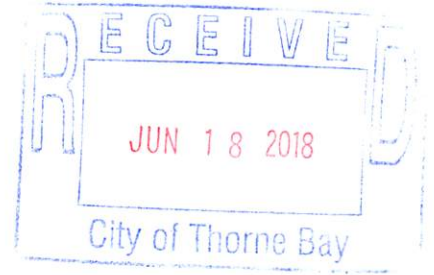
Effluent Discharge

Plant pumping of effluent	2
Effluent aeration	2

Other Treatment

Other wastewater treatment	0
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Wastewater Collection System Classification



System Owner: Thorne Bay, City of
System: Thorne Bay Wastewater Collection System
Classification: Class 1 Wastewater Collection System
Report Date: 06/15/2018

Operators:

Name	Certificate Level	Expiration Date
Billy J. Phillips	WWC 2	12/31/2018
Samuel H. Sawyer	Not Certified	

Wastewater collection systems are classified according to the number of service connections and the number of main line lift stations. Initially, the classification is determined based on the number of service connections. The classification is then elevated one class if the system has 15 or more main line lift stations. A system where gravity is the only means of wastewater flow is classified as class 1 regardless of the number of service connections.

Classification:

This system is classified as follows:

Number of Service Connections in this System	Classification
203	Class 1 = 15 to 500
	Class 2 = 501 to 5,000
	Class 3 = 5,001 to 15,000
	Class 4 = more than 15,000

Number of Main Line Lift Stations: 4 - Does not affect the classification.

Gravity is the only means of wastewater flow: No - Does not affect the classification.