

**SPECIAL CONDITIONS****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. The permittee is authorized to discharge treated **wastewater associated with a land-based RAS from Outfall #001A** to Belfast Bay. Such discharges are limited and must be monitored by the permittee as specified below:<sup>(1)</sup>

Effluent Characteristic					Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	7.7 MGD [03]	---	---	---	Continuous [99/99]	Meter [MR]
Biochemical Oxygen Demand <sup>(5)</sup> (BOD <sub>5</sub> ) [00310]	1,926 lbs./day [26]	3,211 lbs./day [26]	30 mg/L [19]	50 mg/L [19]	3/Week [03/07]	Composite <sup>(2)</sup> [24]
Total Suspended Solids(TSS) <sup>(5)</sup> [00530]	1,926 lbs./day [26]	3,211 lbs./day [26]	30 mg/L [19]	50 mg/L [19]	3/Week [03/07]	Composite <sup>(2)</sup> [24]
Total Kjeldahl Nitrogen (as N) [00625] ( <b>May – Oct</b> )	Report lbs/day[26]	Report lbs/day[26]	Report mg/L [19]	Report mg/L [19]	1/Week[01/07]	Composite <sup>(2)</sup> [24]
Nitrate + Nitrite Nitrogen (as N) [00630] ( <b>May – Oct</b> )	Report lbs/day[26]	Report lbs/day[26]	Report mg/L [19]	Report mg/L[19]	1/Week [01/07]	Composite <sup>(2)</sup> [24]
Total Nitrogen (as N) <sup>(3,5)</sup> [00600] ( <b>May – Oct</b> )	1,348 lbs/day[26]	Report lbs/day[26]	Report mg/L [19]	Report mg/L [19]	1/Week[01/07]	Composite <sup>(2)</sup> [24]
Fish on Hand [45604]	---	Report Metric Tons [41]	---	---	1/Month [01/30]	Calculated [CA]
Total Phosphorus <sup>(4)</sup> [00665] ( <b>May – Oct</b> )	Report lbs/day[26]	Report lbs/day[26]	Report mg/L [19]	Report mg/L[19]	1/Week [01/07]	Composite <sup>(2)</sup> [24]
Total Ammonia (as N) [00610] ( <b>May – Oct</b> )	Report lbs/day[26]	Report lbs/day[26]	Report mg/L [19]	Report mg/L[19]	1/Week [01/07]	Grab [GR]
Temperature [00011] ( <b>May – Oct</b> ) ( <b>Nov – April</b> )	---	---	---	64°F <sub>[15]</sub> 64°F <sub>[15]</sub>	1/Day [01/01] 1/Week [01/07]	Measure [MS] Measure [MS]
pH (Std. Units) [00400]	---	---	---	6.0-9.0 [12]	3/Week [03/07]	Grab [GR]

**SPECIAL CONDITIONS****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)****Footnotes**

1. **Sampling** – All effluent monitoring must be conducted following the last treatment unit prior to discharging to the receiving water. All monitoring must be conducted so as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. The permittee must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136 b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136 or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine’s Department of Health and Human Services for wastewater. Samples that are sent to a laboratory operated by a waste discharge facility licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (effective date April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR).
2. **Composite sample** means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24-hour period (or a lesser period as specified in Special Condition A on monitoring and reporting) and combined proportional to the flow over that same time period.
3. **Total nitrogen (as N) – Monthly** – The permittee is required to report the monthly average, and daily maximum mass and concentrations for each month (May – October) of each year by adding the total kjeldahl nitrogen values to the nitrate + nitrite nitrogen values for each sampling event. See **Attachment A** of this permit for *Protocol for Nitrogen Sample Collection and Analysis for Waste Water Effluent*.
4. **Total phosphorus** – See **Attachment B** of this permit for *Protocol for Total Phosphorus Sample Collection and Analysis for Waste Water and Receiving Water Monitoring Required by Permits*.
5. **BOD, TSS and Total nitrogen** - The monthly average and daily maximum limitations for biochemical oxygen demand, total suspended solids and total nitrogen will be subject to a statistical evaluation at the end of the term of this permit to assist the Department in establishing best practicable treatment standards for the RAS industry.