

### MMSP-Depot Industrial WWTP Effluent Discharge Standards

The proposed industrial waste water treatment plant for MMSP Project – Depot Area will cater industrial waste water from train wash plant which might contain metals, dusts, oil & grease, etc. and its final effluent discharge goes to Tullahan River which is classified as Class C Water Body per DENR-EMB.

**Figure 1. DENR-EMB Website Screenshot for Tullahan River Classification**

3	TULLAHAN-TINAJEROS	C	NCR	METRO MANILA	MALABON-NAVOTAS-TULLAHAN-TINAJEROS RIVER SYSTEM	2018-10
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Source: [http://water.emb.gov.ph/?page\\_id=809](http://water.emb.gov.ph/?page_id=809)

**Table 1. WWTP Effluent and Receiving Water Body Classification**

Effluent	Receiving body of water	Classification	Reference
Industrial waste water from train wash plant	Tullahan River	Class C	water.emb.gov.ph

### General Effluent Standard

Summarized below are the applicable significant parameters and general effluent standards for industry category “Maintenance of vehicles, their parts and component” with PSIC Code 452, 454 for Class C Water Body based on Table 7 & 9 of DENR DAO 2016-08.

**Table 2. General Effluent Standard for Class C Water Body for PSIC Code 452,454**

PSIC CODE	Parameter	Max Allowable Limit for Class C Water Body	Unit	Reference	Document
Maintenance and Repair of Vehicles, their Parts & Component 452, 454	Color	150	TCU	Table 9	DENR DAO 2016-08
	pH (Range)	6.5-9.5			
	Total Suspended Solids	100	mg/L		
	Ammonia	0.5	mg/L		
	Nitrate	14	mg/L		
	Nickel	1	mg/L		
	Cadmium	0.01	mg/L		
	Mercury	0.004	mg/L		
	Lead	0.1	mg/L		
	Oil & Grease	5	mg/L		
Benzo(a)pyrene	3	µg/L			

\*Source: General Effluent Standards (Table 9) of DENR DAO 2016-08

### Definition of Terms

1. **DENR DAO 2016-08** – Water Quality Guidelines and General Effluent Standards of 2016
2. **Water Quality Guidelines (WQG)**- refer to the level for a water constituent or numerical values of physical, chemical, biological and bacteriological or radiological parameters which are used to classify water resources and their use, which do not result in significant health risk
3. **General Effluent Standards (GES)**- any legal restriction or limitation on quantities, rates, and/or concentrations or any combination thereof, physical, chemical or biological parameters of effluent which a person or point source is allowed to discharge into a body of water or land; that is applicable to all industry categories and defined according to the classification of the receiving body of water
4. **PSIC**- Philippine Standard Industrial Classification (2009)
5. **MPN/100 mL**- Most probable number per 100 mL
6. **µg/L**-microgram per liter
7. **TCU**- True Color Unit
8. **BOD**- Biological Oxygen Demand

### References

1. *DENR DAO 2016-08 "Water Quality Guidelines and General Effluent Standards of 2016*
2. *Environment Management Bureau (EMB) website; [http://water.emb.gov.ph/?page\\_id=809](http://water.emb.gov.ph/?page_id=809)*