

**FORM WATER 1a: Emissions to controlled water - Daily samples.**

Permit Number :           EPR/YP3930EX  
 Operator :                Valero Energy Ltd  
 Installation Location :    Pembroke Refinery, Pembroke, SA71 5SJ  
 Reporting Period :        Q4 2021

Parameters: pH, Oil, Ammonia, Phenols, COD

Release Point	W1 discharge to Milford Haven Waterway			
Parameter	Daily ELV (mg/l)	3-month average of daily samples (mg/l)	Maximum daily result (mg/l)	Minimum daily result (mg/l)
pH	6 - 9	8	8	7
Oil	17	1	3	
Ammoniacal Nitrogen	20	2	2	
COD	270	55	115	
Phenols	3	0.4	0.7	

Parameters: Temperature

Release Point	W1 discharge from effluent treatment plant		
Parameter	Daily average ELV (°C)	3-month average of daily samples (°C)	Maximum hourly average (°C)
Temperature	35	16	23

Parameters: Flow

Release Point	W1 discharge from effluent treatment plant			
Parameter	Weekly average of daily flows ELV (m <sup>3</sup> )	3-month average of daily samples (m <sup>3</sup> )	Maximum daily flow (m <sup>3</sup> )	Maximum weekly average flow (m <sup>3</sup> )
Flow	25,000	12,020	23,873	15,781
Flow from Tank(s)*	-	3,264	4,760	-

\* For period(s) of discharge only

Signed :                    *RDLivock*  
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 Name :                     Richard Livock  
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 On behalf of the Operator Valero Energy Ltd  
 Date :                     12/01/2022  
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