

**FORM WATER ANNUAL: Emissions to controlled water (W1) - Annual samples.**

Permit Number :           EPR/YP3930EX  
 Operator :                Valero Energy Ltd  
 Installation Location :    Pembroke Refinery, Pembroke, SA71 5SJ  
 Reporting Period :        Annual 2022

Parameters: Hydrocarbon Oil Index, Total Nitrogen, COD, Suspended Solids, Phenol Index, Nickel, Vanadium, Lead, Total Mercury, Benzene, BTEX, Total Cadmium

| Release Point         | W1 discharge to Milford Haven Waterway |  |
|-----------------------|--|--|
| Parameter             | ELV (mg/l)                             | Annual average of daily samples (mg/l) |
| Hydrocarbon Oil Index | 2.5                                    | 0.8                                    |
| Total Nitrogen [as N] | 25                                     | 7                                      |
| COD                   | 125                                    | 56                                     |
| Suspended Solids      | 25                                     | 17                                     |

| Release Point | W1 discharge to Milford Haven Waterway |  |
|---------------|--|--|
| Parameter     | ELV (mg/l)                             | Annual average of monthly samples (mg/l) |
| Phenol Index* | -                                      | 0.1                                      |

| Release Point                                 | W1 discharge to Milford Haven Waterway |  |
|---|--|--|
| Parameter                                     | ELV (µg/l)                             | Annual average of quarterly samples (µg/l) |
| Nickel  | 85                                     | 9  |
| Lead  | 30                                     | 2  |
| Mercury (Total Hg)                            | 1                                      | 0.2  |
| Cadmium (Total Cd)                            | 8                                      | 0.5  |
| Benzene                                       | 50                                     | <1   |
| Vanadium                                      | -                                      | 0.5  |
| Benzene, Toluene, Ethylbenzene, Xylene (BTEX) | -                                      | <5   |

Signed :                    SLGregory  
 Name :                     Sabrina Gregory  
 On behalf of the Operator Valero Energy Ltd  
 Date :                      09/01/2023

