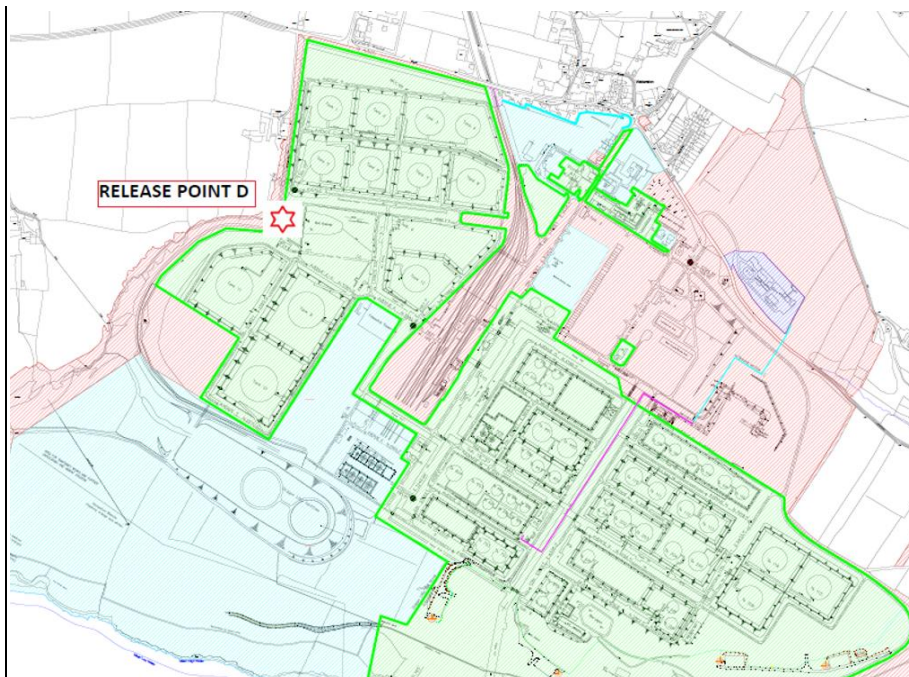


Schedule 5 - Notification	
NOTIFICATIONS OF UNAUTHORISED RELEASES in accordance with condition 4.3	
Authorisation Reference EPR/BK1341IN	
Operator Valero Pembrokeshire Oil Terminal Limited	Reference Number 01/23
PART B Additional information on the matters for notification under Part A	
Name of the prescribed substance or other substance which might cause harm	ZINC
Time, date and location of the release	3 January to 21 February 2023 (49 days)
Location	Release Point D (West Catch Basin), Lat 51°42'36.37"N Long 4°59'53.65"W, National Grid Reference: SM 9296 0552.
Reference or description of the location of the event. Description of where any release into the environment took place	Run-off from the western part of VPOT Terminal drains to the West Catch Basin where oil separators remove minor contamination before water is discharged to the Milford Haven via the West stream. On 14 Dec 2022 and 16 Feb 2023, VPOT carried out drainage works in the concrete channel immediately before Release Point D . This work was carried out to improve the Site's capability to deal with storm rain events and to improve MCERTs flow measurement. The works involved excavation of silt from areas edged green and yellow in the images below. All other operational activities at VPOT were normal. VPOT's investigation has concluded the most likely source of high Zinc concentrarions in West Catch Basin effluent, was the un-intentional mobilisation of legacy Zinc deposits within the drainage channel during dredging. The channel has not been dredged for 25+ years and further dredging is unlikely to be repeated. The legacy sludge has probably accumulated since hisorical refining operations at the site dating back to the late 1960s. Crude oils, particularly those with high Total Acid Number, commonly contain high concentrations of Zinc and the West Tank Farm tanks stored crude oil during refining operations. All the silt, approximately 5 tonnes, has been removed from the channel. West Reservoir - Release Point D Removal of silt from French Drains (yellow) – 16 Feb 2023 Removal of silt from drainage channel (green) – 14 Dec 2022 



Substances(s) potentially released

The permit limit (40ug/l) was exceeded in 8 'grab' samples taken between 3 January and 21 February 2023, concentration ranging from 45 to 133 ug/l.

	Zinc ug/l
06 December 2022	<4
13 December 2022	5
20 December 2022	<4
27 December 2022	<4
03 January 2023	117
10 January 2023	133
17 January 2023	92
24 January 2023	74
31 January 2023	122
07 February 2023	45
14 February 2023	68
21 February 2023	55
28 February 2023	21
07 March 2023	<4
14 March 2023	<4
21 March 2023	7
28 March 2023	<4
min	<4
max	133

The flow weighted Zinc concentration for the period 3 Jan to 21 Feb 2023 was 102 ug/l.

Zinc concentration was within permit limit on 28 Feb and continued to decline and remain below detection limit throughout March (<4 ug/l).

VPOT calculate the total mass of Zinc released between 3 Jan to 21 Feb 2023 as 8.2 kg Zn. This can be compared to the total annual release of Zinc, 1.16 and 3.6 kg for 2022 and 2021 respectively.

All other substances were within permit limits during this time.

Measured value and uncertainty

Test Method AES 1048.

Environmental medium into which the release took place

West Stream and into former RNAD reservoirs at Newton Noyes which discharge into the Milford Haven Waterway at approximate Lat 51°42'17.93"N Long 5° 0'53.42"W.

Measures taken, or intended to be taken, to prevent a recurrence of the incident.

The results of the metal testing were not received back until after the discharge had taken place and that as a result Valero is in discussions with the lab to expedite reporting time.

Further dredging of the channel is unlikely to be repeated as all the sludge has been removed.

Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.

There is no intention to re-dredge this area but if VPOT did so then suitable control measures would be implemented to prevent a reoccurrence of the incident.

The dates of any unauthorised emissions from the facility in the preceding 24 months

2018: 22-07-18 (pH), 08-11-08 (flow)
2019: 22-10-19 (flow)
2022: 18-07-22 (flow), 08-09-22 (flow), 05-10-22 (oil)

Name

Position

HES Supervisor