ENVIRONMENTAL ALERT ALERT NUMBER: 002/2023 **ISSUE DATE: 19/05/2023 INCIDENT / ALERT DETAILS:** A review of data submitted to OPRED suggests there may be an over report of the mass of oil discharged to sea during non-compliant periods. **INITIAL/ALERT FINDINGS:** Exceedance of permitted monthly average oil in produced water concentration. Where the monthly average oil in produced water concentration exceeds the permit limit, typically 30 mg/l, only the oil discharged to sea in excess of 30 mg/l (or other limit as appropriate) needs to be reported, not the total oil discharged to sea for that month. For example, 1000 m3 of produced water is discharged to sea for a month at an average concentration of 50 mg/l. Mass of oil required to be reported to OPRED via OPPC non-compliance, noting 1000 m3 equals 1000000 L, is; $(50 \text{ mg/l} - 30 \text{ mg/l}) \times 1000000 \text{ L} = 20000000 \text{ mg} = 20 \text{ kg} = 0.02 \text{ tonnes}.$ In this example the data entered into the non-compliance is;

Offshore Petroleum Regulator for Environment & Decommissioning

| Does this notification relate either wholly or partially to discharge limits in Table 1? | | | |
|---|--|--|--|
| Yes | | | |
| The sum of all the discharged oil quantities will be calculated and provided on the summary based on the information provided here. | | | |
| What oil discharge limits in Table 1 does the breach relate to? | | | |
| Monthly average concentration | | | |
| What is the monthly average concentration? | | | |
| 50 mg/l | | | |
| What is the discharged volume for month? | | | |
| 1000 m3 | | | |
| Without in the pline berne die il group the feature at the 2 | | | |
| What is the discharged oil quantity for month? | | | |
| | | | |
| Exceedance of other permit limits. | | | |
| This approach should also be taken when reporting the following breaches; | | | |
| | | | |
| Maximum load (t/12 hr) | | | |
| Average concentration for the period of operation (mg/l) | | | |
| | | | |
| For example, in the situation there is a permitted maximum load of 1 tonne oil discharge | | | |
| to sea in a 12 hour period, where10000 m3 of water was discharged in that 12 hour period | | | |
| at a concentration of 125 mg/l, this equates to an oil discharge of; | | | |
| | | | |
| 125 mg/l x 10000000 L = 1.25 x 10 ⁹ mg = 1250 kg = 1.25 tonnes | | | |



Only the excess oil discharged over the permitted discharge is required to be reported in the non-compliance i.e. 1.25 - 1 = 0.25 tonnes.

| ✓ | Maximum load | | |
|-----------------------|--------------------------------------|--------|--|
| | What is the average concentration? | | |
| | 125 | mg/l | |
| | What is the discharge volume? | | |
| | 10000 | m3 | |
| | What is the discharged oil quantity? | | |
| | 0.25 | tonnes | |

Exceedance of maximum concentration of oil in produced water concentration.

Where the maximum concentration of oil in produced water is exceeded, typically 100 mg/l, permit holders should continue to report the concentration > 100 mg/l along with the volume of water discharged for the period where > 100mg/l oil in produced water is discharged to sea.

The total quantity of oil discharged (within permit limits and any non-compliant quantity) is still to be reported via OPPC EEMS returns as normal.

Future actions

IRS will be updated, by a combination of onscreen guidance and/or automated calculations to ensure that only the non-compliant portion of the discharge is calculated/reported. Moreover the IRS guidance will be updated.

Further Information



Any queries relating to this alert should be addressed to: BST@beis.gov.uk