SKIM Supplementary HOCNF guideline for the Norwegian sector

Guideline to how to complete specific HOCNF sections for Norway – related to information not already covered in OSPAR documents, the Norwegian Activities Regulations and the Guideline to the Norwegian Activities Regulations

Version: November 2025

Disclaimer: The OSPAR guidelines and recommendations should be followed for offshore chemical notification and management. This supplementary HOCNF guideline for the Norwegian sector comes in addition.

Users are responsible for consulting the most recent versions of both the OSPAR framework and relevant Norwegian regulations, as these may be updated over time. Always refer to the original source documents to ensure compliance and accuracy.

These guidelines were collaboratively developed with input from representatives of operators affiliated with Offshore Norge (*Nettverk: Utslipp til Sjø*), as well as participants from the supplier organisation EOSCA and NEMS AS, under the guidance of the SKIM working group. They supersede the 'SKIM Supplementary Guideline for the Norwegian Sector' issued in March 2017.

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Introduction

This guideline aims to identify and explain how to execute certain Norway specific issues not already covered in the latest versions of OSPAR Guidelines for Completing the Harmonised Offshore Chemical Notification Format (HOCNF), OSPAR Recommendation 2010/03 on the Harmonised Offshore Chemical Notification Format (HOCNF) and Norway's Petroleum Activities Regulations (the Norwegian Activities Regulations) and their associated guideline notes.

Chemical Management and Regulatory Requirements in Norway
Under the Norwegian Activities Regulation, operators are required to manage offshore chemicals in accordance with Section 62 (ecotoxicological testing of chemicals and HOCNF documentation requirements) and Section 63 (categorisation and environmental assessment). These provisions mandate that operators ensure all chemicals used offshore are properly assessed for environmental impact, including biodegradability, bioaccumulation, and toxicity.

Chemicals are classified into four categories - black, red, yellow, and green - with yellow further divided into subcategories 1, 2, and 3. Operators must select chemicals that pose the lowest environmental risk and prepare substitution plans for chemicals in the black, red, and yellow subcategories 2 and 3.

Responsibility for HOCNF and Environmental Assessments
Although suppliers typically prepare and submit the Harmonised Offshore Chemical Notification Format (HOCNF), the operator is ultimately responsible for:

- Ensuring the accuracy and completeness of HOCNF documentation
- Conducting environmental evaluations and categorisation of chemicals
- Making decisions on chemical use based on environmental risk
- Maintaining compliance with regulatory requirements

This responsibility is clearly stated in Norwegian regulatory guidance, which emphasizes that the operators - not the suppliers or the authorities - are accountable for the environmental management of chemicals used offshore.

Most operators use the NEMS Chemicals database, managed by the IT company NEMS AS, as a centralized repository for HOCNF documentation, to which suppliers upload their HOCNF and operators review. The Norwegian Environment Agency (NEA) has full access to the NEMS Chemicals database. While the use of the NEMS database is not mandatory, it is the preferred solution for many operators and suppliers.

Regulatory Oversight by NEA
The NEA does not approve individual chemical HOCNF registrations. Instead, NEA regulates chemical discharge through permits issued under the Pollution Control Act. Operators must apply for these permits and demonstrate compliance through:

- Annual reporting
- Audits
- Spot checks, including reviews of data in the NEMS Chemicals database

This framework ensures that operators maintain full accountability for the environmental impact of the chemicals they use offshore.

Definitions and Abbreviations

Term	Description
Application Area	Usage area for the product as described in Offshore Norge Guideline 044. • Example: 'Production chemical'
BCF	Bioconcentration factor
Biodegradation	Expressed as the percentage of the biological oxygen demand (BOD) measured in recommended standard tests, compared to the theoretical or chemical oxygen demand (ThOD or COD). The percentages obtained are quoted as the biodegradation percentages in the HOCNF form.
Chemical Class	Refers to a group of substances with similar chemical structures or functional groups
EC50/LC50	Toxicity values from crustacean, fish, sediment reworker and algae tests. The toxicity data is typically reported as the concentrations at which x % (e.g. 50%) mortality or inhibition of a function (e.g. growth) is observed and are expressed as the lethal concentration (LCx) or the effect concentration (ECx), e.g. LC50 or EC50. L/EC50-values are usually obtained from short term tests (duration in the range of hours to ten days).
EOSCA	The European Oilfield Speciality Chemicals Association .
Function Group	Function of the product as described in Offshore Norge Guideline 044. • Example: 'Emulsion breaker'
Functional Group (chemical)	A specific group of atoms within a molecule responsible for its characteristic chemical reactions.
Havtil (Havindustritilsynet)	The Norwegian Ocean Industry Authority (Havtil) is a government supervisory and administrative agency with regulatory responsibility for safety, the working environment, emergency preparedness and security.
NEA	The Norwegian Environment Agency (Norwegian: Miljødirektoratet) is a government agency with responsibility for managing Norwegian nature and regulating polluting activity. Their primary tasks are to reduce greenhouse gas emissions, manage Norwegian nature, and prevent pollution.
OECD	Organisation for Economic Co-operation and Development.
OSPAR	Oslo-Paris Commission for the protection of the Marine Environment of the North- East Atlantic.

Operator	The Operating Oil & Gas Company
PBT	Persistence Biodegradability Toxicity
PLONOR list	OSPAR List of substances/preparations used and discharged offshore which are considered to pose little or no risk to the environment.
Pow	is equivalent to Kow and means the partition coefficient of a substance between octanol and water, measured or calculated according to the HOCNF.
Product (Trade Name)	The marketed chemical product identified by its unique trade name. It refers to the complete formulation submitted for HOCNF evaluation.
SKIM	Samarbeidsforum offshorekjemikalier, industri og myndigheter (English: "Industry and Authorities working group for offshore chemicals").
SDS	Safety Data Sheet
Substance	The chemical element and its chemical compound in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product, and any impurity deriving from the process used. Solvents which may be separated without affecting the stability of the substance or changing its composition, are excluded. Substances were previously called component.
Supplier	The supplier of the product.
Surfactant	Any substance with surface-active properties according to test method A.5 in Regulation EC 440/2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) of 30 May 2008, and which consists of one or more hydrophilic and one or more hydrophobic groups of such a nature and size that is capable of reducing the surface tension of water, and of forming spreading or adsorption monolayers at the water-air interface, and of forming emulsions and/or microemulsions and/or micelles, and of adsorption at water-solid interfaces.
Trade Name	The name under which the product is sold or registered.

References

OSPAR References:

Title	*Purpose*	*Reference*
OSPAR Recommendation 2010/03 on a Harmonised Offshore Chemical Notification Format (as amended 2023)	Establishes the regulatory requirement for using the Harmonised Offshore Chemical Notification Format (HOCNF) for offshore chemical submissions. It defines the legal and procedural framework under the OSPAR Convention.	OSPAR Recommendation 2010/03 (amended by 2014/17, 2019/03, 2021/08, and 2023/03)
Harmonised Offshore Chemical Notification Format (HOCNF)	Provides the official notification form (template) used by suppliers to submit data on offshore chemicals. It ensures consistency in how chemical properties such as toxicity, biodegradability, and bioaccumulation are reported.	OSPAR Agreement 2023-09 (updated 2025)
OSPAR Guidelines for Completing the Harmonised Offshore Chemical Notification Format (HOCNF) (OSPAR Agreement: 2012-05. Update 2025)	Offers detailed instructions for completing the HOCNF, including guidance on test methods, data quality, and how to handle complex substances such as mixtures or substances tested in solvents.	OSPAR Agreement 2012-05 (updated 2025)
OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment (PLONOR)	Identifies substances that are considered to pose little or no risk to the environment when used and discharged offshore. These substances are subject to reduced regulatory scrutiny under the OSPAR framework.	OSPAR Agreement 2013-06 (updated 2025)

Norwegian References:

- Norwegian Regulations relating to conducting petroleum activities (The Norwegian Activities Regulations). FOR-2010- 04-29-613.
    - Forskrift om utføring av aktiviteter i petroleumsvirksomheten (aktivitetsforskriften) - Norwegian official version - Lovdata
    - Aktivitetsforskriften - Norwegian version (Havtil web page)
    - The Activities Regulation - English translation (Havtil web page)
- Guidelines for the Norwegian Activities Regulations: For each Section of the Activities Regulation (available through the *Havtil* links above), there is a corresponding section guideline accessed by selecting the link at the end of the regulation text
- Offshore Norge: 044 Recommended guidelines for discharge and emission reporting
- Norwegian Environment Agency: Offshore chemicals - frequently asked questions

Part 1: General Information

1.1 Trade name
When the composition of a product changes, a new trade name must be assigned. This process allows for the reassessment of the product's environmental characteristics as required by the operator.

1.2 Supplier and background information
Mandatory

1.3 SDS
The SDS must meet the requirements in REACH article 31, annex II.

1.4 Use and discharge
It is mandatory to provide information in the two first columns - the product's area of use (Application Area A-K) and function group - ref. 044 - Offshore Norge Recommended guidelines for discharge and emission reporting.

1.5 a) General physical properties
"General physical properties" must be entered when applicable.

1.6 b) Fate
The supplier should describe the expected environmental fate of the substance or product, including any transformation during use and its likely final destination in the marine environment (e.g., sediment, water column, air, or biota), based on available data or scientific literature. If no data is available or the section is not applicable, this should be stated.

1.7 Composition
All intentionally added substances must be specified in Section 1.6 of the HOCNF. Any residual substances from the manufacturing process and impurities present in the preparation shall be detailed in the comments field of the HOCNF.

Substances listed under PLONOR or REACH Annex IV must be identified using a CAS number, EINECS number, or another relevant identifier that matches the information provided in the respective list.

In addition, all SDS hazard classified substances must include their CAS numbers in accordance with REACH Article 31, Annex II.

For all other substances than specified above, identification using CAS or EINECS numbers is preferred when available, however the substances may be described by its Chemical Class or Functional Group). These descriptions must be sufficiently detailed to allow Operators to perform an appropriate environmental assessment.

If the supplier chooses not to disclose the exact substance, this information must be documented internally and made available to the NEA upon request.

If the supplier uses a green environmental category for a REACH Annex V, subcategory 7, 8, or 9 substance, the supplier must be able to provide documentation to authorities showing compliance if requested.

Molecular weight should be specified with precision and may be reported as an interval or as greater than or less than (< / >). This requirement does not apply to PLONOR substances, REACH Annex IV and V substances, or inorganic substances.

Concentration ranges (%) may be used instead of exact values. Use one of the seven standard intervals listed below. Shorter ranges are allowed. If other ranges are used, provide a reason in the comment field under the composition table.

0 - 0,1	0,1 - 1	1 - 5	5 - 10	10 - 30	30 - 60	60 – 100

Provide discharge factors for process and well intervention chemicals. CHARM default surfactant values do not apply in the Norwegian sector. Log Pow values may be used for non-surface active substances.

Part 2: Ecotoxicological Information

Part 2
Ecotoxicological testing and documentation is required for all intentionally added substances, unless exempt from ecotoxicological testing as defined in Activities Regulation Section 62. Test report numbers, methods, and results must be recorded, along with the full address of the GLP-approved laboratory.

2.1.1 Partitioning and bioaccumulation potential ($logP_{OW}$)

Substances with a molecular weight greater than 700 are not required to undergo testing for bioaccumulation potential, as this is considered an indicator of limited potential for bioaccumulation. For substances where log Pow data is not necessary, one of the following conclusions can be included in the comments section:

- "The substance is inorganic, and bioaccumulation data is not relevant"
- "The substance has a MW > 700 as this is an indicator of limited bioaccumulation”
- "The substance already has a BCF-test, and log Pow data is not required"

If the bioaccumulation potential is known to be very high, based on chemical structure or solubility properties, a value of log Pow $\geq$ 4.5 may be stated without further documentation When using the HPLC- method (OECD 117) and the span of peaks is greater than 2 Log Pow units, an alternative method may be considered (e.g. OECD 107). When using OECD 117, all peaks with an area > 5% should be stated with the corresponding log Pow value and %-area under the peak. The log Pow for the substance is taken to be the highest log Pow peak with area > 5%. An example is given below. In this case the log Pow for the substance is 5.2.

Peak nr.	log Pow	Area
1	1.5	75.0
2	2.9	15.0
3	5.2	5.1
4	5.9	4.9

Weighted average log Pow should be calculated by adding all peaks multiplied with corresponding areas. In the example above, weighted average is: log Pow = 2.1

To perform oil/water distribution analysis using the HPLC- method (OECD 117), all peaks with an area above 5% should be stated, and with the corresponding log Pow value and %- area under the peak. The area percentage is normalized to 100 %(1). Weighted average log Pow is calculated as a weighted average of the Pow-values SUM of (Pow x areal/100)(2). log Pow is calculated as log (3). An example is given below:

Peak nr.	**Log Pow**	*Area*	%-area	**Normalised area (1)**	Pow =10logPow (2)	Average Pow(3) : (1)* (2)/100
1	**0.8**	**145000**	34.0	**35.03**	6.31	2.21
2	**1.3**	**268888**	63.1	**64.97**	19.95	12.96
3	**3.2**	**12450**	2.9		N/A	
Sum		**426338**	100.0	100.00		15.17

Note: If applicable, the values typed in **bold** must be entered into the log Pow table in the HOCNF.

Weighted average **log Pow = log 15.17 = 1.2**

All components present in products with relevant applications (products for which amounts of discharges depend on the partitioning between oil and water phase) should be issued with discharge factors. The discharge factor is a number between 0-100% giving the partition following the water phase and by so describe the solubility route for the component if blended into a 50:50 oil:water environment. The CHARM default values are example only and should not be used unless these can be documented as valid for the specific substance. Offshore products are a wide group of chemicals and there is no single method to measure oil/water partition.

The discharge factor can be given in the comment field in section 1.6a) or in section 1.6b).

Bioconcentration factor (BCF)

When a BCF test has been used, the report should conclude whether the substance has a potential for bioaccumulation or not.

2.2 Biodegradability

Biodegradation data is not required for substances in one or more of the following categories:

- "The substance is inorganic and biodegradation data is not relevant".
- If the substance is known to be non-biodegradable, a value of 0% may be stated as the biodegradation at day 28, without further documentation.

A note should be made in the comments section of 2.2.1 indicating which phrase applies.

2.3 Aquatic toxicity

The Norwegian Environment Agency can approve other relevant toxicity tests if they are performed according to standardized methods.

If a substance is diluted in water, aquatic toxicity tests must be conducted on the concentrated form. If testing is done on the diluted version, the results must be recalculated to reflect the toxicity of the concentrated substance. Corrected EC/LC50 values must be entered into the HOCNF (and NEMS), ensuring they accurately represent the toxicity of the active substance

Part 3: Confirmation statement

The supplier must sign the last page of the HOCNF to confirm the data.

In Norway, an electronic signature in NEMS Chemicals is considered valid. The confirmation must be renewed every third year.