



# Report in accordance with requirements in Directive 2011/71/EU regarding creosote

January 2019

**Norwegian Environment Agency**

Telephone: +47 73 58 05 00 | Fax: +47 73 58 05 01

E-mail: [post@miljodir.no](mailto:post@miljodir.no)

Web: [www.environmentagency.no](http://www.environmentagency.no)

Postal address: PO Box 5672 Torgarden, N-7485 Trondheim

Visiting address Oslo: Grensesvingen 7, 0661 Oslo

Visiting address Trondheim: Brattørkaia 15, 7010 Trondheim

# Content

1 Background .....	3
2 Authorised products and uses .....	3
2.1 Applications for creosote products in Norway .....	3
2.2 Authorised products and uses .....	5
2.3 Conclusions concerning alternatives .....	5
3 Alternatives promoted.....	7

# 1 Background

Pursuant to Directive 2011/71/EU<sup>1</sup>, the active substance creosote was included in Annex I to Directive 98/8/EC (BPD) on 1 May 2013. Biocidal products containing creosote may only be authorised for uses where the authorising Member State concludes that no appropriate alternatives are available. The conclusion shall be based on an analysis regarding the technical and economic feasibility of substitution, which the Member State shall request from the applicant, as well as on any other information available to the Member State.

According to a specific provision in directive 2011/71/EU Member States authorising biocidal products containing creosote in their territory shall submit a report to the Commission no later than 31 July 2016 justifying their conclusion that there are no appropriate alternatives and indicating how the development of alternatives is promoted.

In Directive 2011/71/EU it is also stated that, to increase transparency, it is appropriate to require Member States to include in the report their information on how the development of alternatives is promoted in accordance with Article 6(2) of Regulation (EC) No 850/2004, either directly or by reference to a published action plan.

This report aims to summarise some of the conclusions drawn when creosote containing biocidal products were authorised in Norway. The report is largely based on the creosote report from the Swedish Competent Authority (CA) and in part on the report from the UK CA.

## 2 Authorised products and uses

### 2.1 Applications for creosote products in Norway

The Norwegian Environment Agency received applications for product authorisation and establishment of a frame formulation under Directive 98/8/EC. In 2013 the Directive (98/8/EC) was replaced by the Regulation (EU) No 528/2012 (BPR). The applications were then transformed to applications for authorisation of biocidal product families.

The active substance creosote meets the criterion according to Regulation (EC) No 1272/2008 for classification as carcinogen in category 1B and fulfils therefore the exclusion criterion in Article 5.1(a) of the Biocidal Regulation. Creosote fulfils also the criterion in Article 5.1(e) by containing constituents that have been considered as persistent, bioaccumulative and toxic in accordance with the criteria set out in Annex XIII to Regulation (EC) 1907/2006. According to the transitional

measures (Article 91 in BPR), the biocidal products shall therefore be authorised in accordance with Article 19 in BPR.

The Norwegian Environment Agency considers that creosote satisfies the conditions given in Article 5.2(c), i.e. not approving the active substance would have a disproportionate negative impact on society when compared with the risk to human health, animal health or the environment arising from the use of the substance. Creosote therefore fulfils the criterion given in Article 10.1(a) in BPR. Consequently, creosote shall be regarded as a candidate for substitution and the Norwegian Environment Agency performed a comparative assessment in accordance with Article 23 in the same regulation as part of the assessment of the applications for authorisation for the creosote containing products.

Furthermore, in case the biocidal products contain active substances covered by the exclusion criteria in Article 5.1, the competent authorities shall, according to point 10 in Annex VI, also evaluate whether the conditions of Article 5.2 can be satisfied in their territory.

The comparative assessment shows that there are currently not sufficient alternatives for the uses authorised by the Norwegian Environment Agency in Norway. The outcome of the Stakeholder consultation regarding possible alternatives to creosote, launched by the European Commission in 2008, has also been taken into consideration.

The Norwegian Environment Agency draws the conclusion that not authorising products containing creosote for certain uses would have a disproportionate impact on Norwegian society when compared to the risk to human health, animal health or the environment arising from use of the substance. Therefore, the Norwegian Environment Agency considers that the Article 5.2 (c) is fulfilled for the authorised products.

The Norwegian Environment Agency also concluded that the conditions laid down in Article 19.1(b) were not fully met. However, according to Article 19.5 a biocidal product may be authorised when the conditions laid down in paragraph 1(b)(iii) and (iv) are not fully met where not authorising the biocidal product would result in disproportionate negative impacts for society when compared to the risks to human health, animal health or the environment arising from the use of the biocidal product under the conditions laid down in the authorisation.

The Norwegian Environment Agency considers that the relevant biocidal products families may be authorised in Norway with the support of Article 19.5 for the uses, with associated conditions, that are specified in the Norwegian decision.

Other uses, such as creosote products for treatment of wood to be used in fencing (agricultural, equestrian, industrial and highway), cladding for houses and timber foundation blocks were not authorised, as the Norwegian Environment Agency concluded that there are alternative methods available for these uses in Norway.

## 2.2 Authorised products and uses

The Norwegian Environment Agency has authorised two biocidal product families under the Biocidal Products Regulation (EU) No 528/2012 (BPR) including a total of five biocidal products with creosote as the active substance in product-type 8 (wood preservatives).

Applicant:	KOPPERS International BV
Family name:	Creosote BPF Koppers
Asset Number in R4BP:	NO-0010585-0000
Family Members:	WEI B WEI C
Applicant:	RÜTGERS Basic Aromatics GmbH
Family name:	Creosote EN-13991 BPF
Asset Number in R4BP:	NO-0010512-0000
Family Members:	Creosote EN-13991 Grade B Creosote EN-13991 Grade C Creosote EN-13991 Grade C GX-plus

The two biocidal product families were authorised for preventive treatment of wood to be used as:

- Railway sleepers
- Poles for transmission of electricity and telecommunication
- Marine applications
- Bridge structures

## 2.3 Conclusions concerning alternatives

The Norwegian Environment Agency has conducted a comparative assessment in accordance with Article 23 of the Biocidal Products Regulation. The comparative assessment was done in a tiered approach in accordance with the guidance document “Note for Guidance - Comparative assessment of biocidal products” (CA-March14-Doc.5.4) which was available at the time this assessment was started.

For all the authorised uses below, the result from the screening phase showed that there were so far no suitable wood preservatives in Norway which have been authorised under BPR or BPD. A

comparison according to Tier I-B was not possible since there were no products containing creosote that had been authorised under BPR or BPD.

### 2.3.1 Railway sleepers

The Norwegian Environment Agency has received information about several non-chemical alternative materials that are used for railway sleepers. However, these railway sleepers have, according to end users, not been sufficiently tested in Norway yet. Creosote treated wooden sleepers are used to maintain the existing wooden lines by single replacement of damaged creosote wooden sleepers. There are, according to end users, no available alternative wooden sleepers which meet their requirements now. It should be noted that a railway line represents a safety-critical field where confidence in performance and long service life of sleepers is important.

### 2.3.2 Poles for transmission of electricity and telecommunication

There are several alternative materials used for poles, but according to end users, alternative poles which may have the potential to substitute creosote treated wooden poles are not economically reasonable or are not yet sufficiently tested in Norway. Poles used for electric power transmission and telecommunication represent a safety-critical use where confidence in performance and long service life is important. Furthermore, the submitted life cycle analyses do not give a coherent picture of which of the alternative material or creosote treated wood has the least negative impact on the studied environmental and health factors.

### 2.3.3 Marine applications

Norway's long coast and the dependency of the sea for transport, fishing, living and recreation necessitate the construction of infrastructure in or close to the sea. Creosote treated wood has traditionally been used as construction material in harbours for jetty piles, house piles, bridges, etc where permanent or intermittent contact with salt water will occur. The use of creosote treated material and especially poles in marine areas as construction material in piers and jetties is today limited and alternatives are mainly used for larger commercial construction. However, according to information from enterprises involved there are still cases where creosote treated poles and material are considered preferable to have a cost-effective construction that would last for the expected lifetime. There is less need for heavy machines and other working tools to join and adjust wooden material compared to parts in steel or concrete. Such use is today very limited due to REACH restrictions and is not expected to pose unacceptable risk to humans or the environment.

### 2.3.4 Bridge structures

Wooden bridge structures are used, but to a limited extent in Norway. The expected lifespan of these bridges are about 100 years. Alternative wood preservatives have been tested, and there is ongoing research to find alternatives, but for now, they can only guarantee a lifespan of 30-50 years. The costs by building creosote treated road bridges are comparable to steel and concrete bridges, and they have about the same expected lifespan.

The "bridge over pond" scenarios in the risk assessment seem overly conservative for Norwegian conditions. They are based on a pond of stagnant water, whilst most bridges in Norway are built over flowing water or over roads. When using creosote treated materials for bridge construction, local conditions are considered to avoid unacceptable environmental exposure. A risk assessment should be performed for each bridge project based on local conditions. If needed, an application for permit according to the national pollution act<sup>1</sup> must be submitted. A careful consideration of the possibilities for reducing the environmental exposure with creosote treated materials must be part of the process, with respect, both to planning, construction, the treatment and service life.

### 2.3.5 Conclusion

The Norwegian Environment Agency cannot exclude that a prohibition of creosote products for use for protection of railway sleepers, poles for transmission of electricity and telecommunication, marine applications and bridge structures could lead to significant economic or practical disadvantages for end users. The criteria in Article 23 are not met according to this assessment, and therefore a prohibition based on that article is not possible. The analysis shows that there are no appropriate alternatives in Norway to creosote products for these uses. These uses should therefore not be prohibited or restricted based on this comparative assessment and the specific provision for creosote.

## 3 Alternatives promoted

The Norwegian Environment Agency has only authorised uses of creosote where the conclusion was that no appropriate alternatives are yet available.

Research and development programmes are in place to identify preservatives that may be suitable as direct replacements for creosote treated wood, particularly in relation to pole treatment. Such

---

<sup>1</sup> The Norwegian Pollution Control Act - LOV-1981-03-13-6

work is ongoing amongst others at the Norwegian Institute of Wood Technology. In addition, there are several parties working with alternative materials.

The Norwegian Environment Agency accepts that whilst there may in principle be suitable and available alternatives to replace the use of creosote containing products in some specific uses, these cannot be deemed to be technically and economically feasible in general. According to industry sources, the development programmes are still in their early stages. An issue relates to safety critical uses and the need to ensure confidence in longer term protection (>30 years). Development programmes would appear to be generating promising results, but it is still too early to assess the longer-term performance of the alternatives. Nevertheless, there is evidence that users may be willing to participate in service testing of alternatives. In the interim, creosote will continue to be required. There are currently no additional activities for promoting alternatives to creosote.