



# COMPARATIVE ASSESSMENT REPORT:

# CREOSOTE

*Evaluating Competent Authority:*  
**Belgium**



# COMPARATIVE ASSESSMENT REPORT: CREOSOTE

March 2019

<b>Version</b>	<b>Changes</b>	<b>Date</b>
Version 1.0	First Version coincide with issuing of product authorisations	February 2018
Version 1.1	Addition of information on research activities in Belgium	March 2019



## Table of contents

1. BACKGROUND.....	4
2. LEGISLATION AND GUIDANCE .....	6
2.1. Comparative assessment in accordance with Art. 23 of the BPR.....	6
2.2. Specific provision according to the Commission Directive 2011/71/EUs .....	6
3. ADMINISTRATIVE INFORMATION ON THE PRODUCTS FALLING WITHIN THE SCOPE OF THE COMPARATIVE ASSESSMENT .....	7
4. USES INTENDED IN BELGIUM FOR THE BIOCIDAL PRODUCTS .....	8
5. SCREENING PHASE OF THE COMPARATIVE ASSESSMENT.....	9
6. TIER I. COMPARISON TO OTHER AUTHORISED BIOCIDAL PRODUCTS .....	11
7. TIER II. COMPARISON TO NON-CHEMICAL ALTERNATIVES .....	11
7.1. Possible alternative materials to be used for railway sleepers .....	12
7.2. Possible alternative materials to be used for poles for overhead electricity and telecommunication.....	13
7.3. Possible alternative materials to be used for agricultural fencing & posts/stakes for agricultural fencing	13
7.4. Possible alternative materials to be used for tree support posts.....	14
7.5. Possible alternative materials to be used for equestrian fencing & posts/stakes for agricultural fencing ..	15
7.6. Possible alternative materials to be used for industrial and highway fencing.....	16
7.7. Possible alternative materials to be used for cladding for non-residential buildings .....	17
7.8. Possible alternative materials to be used for marine installations .....	17
8. RESEARCH ACTIVITIES IN BELGIUM .....	17
9. OVERALL CONCLUSION OF COMPARATIVE ASSESSMENT.....	18
APPENDIXES .....	20
Appendix I - Documentation submitted by the applicants.....	20
Appendix II - Opinions submitted by the applicants.....	22
Appendix III - Summary of the outcome of the stakeholder consultation on creosote which was performed in 2008 and initiated by the EU Commission .....	23



## 1. Background

The Belgian Biocides Competent Authority (BE CA) has as concerned Member State (cMS) received two mutual recognition applications of PT8 Biocidal Product Families (wood preservatives) containing creosote as the active substance.

Creosote has a harmonised classification as carcinogen in category 1B in accordance with Regulation (EC) No 1272/2008<sup>1</sup> and contains constituents that have been considered as persistent, bio-accumulative and toxic in accordance with the criteria set out in Annex XIII to Regulation (EC) No 1907/2006<sup>2,3</sup>. Therefore creosote fulfils the exclusion criteria according to Art. 5.1(a) and (e) of the Biocidal Products Regulation (EU) No 528/2012 (BPR)<sup>4</sup> and consequently, in line with Art. 10.1(a) of the BPR, should be regarded as a candidate for substitution. Thus, as outlined in Art. 23(1) of the BPR, the BE CA has performed a comparative assessment for the biocidal products.

Additionally this comparative assessment also aims to fulfil the specific provision stated in the Commission Directive 2011/71/EU of 26 July 2011 amending Directive 98/8/EC of the European Parliament and of the Council to include creosote as an active substance in Annex I of the Directive 98/8/EC (BPD)<sup>5</sup>:

*“Biocidal products containing creosote may only be authorised for uses where the authorising Member State, based on an analysis regarding the technical and economic feasibility of substitution which it shall request from the applicant, as*

---

<sup>1</sup> Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

<sup>2</sup> Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

<sup>3</sup> The Committee for Risk Assessment of the European Chemicals Agency has considered the constituent anthracene to be persistent, bioaccumulative and toxic (PBT) and fluoranthene, phenanthrene and pyrene to be very persistent and very bioaccumulative (vPvB).

<sup>4</sup> Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

<sup>5</sup> Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market.



## COMPARATIVE ASSESSMENT REPORT: CREOSOTE

March 2019

*well as on any other information available to it, concludes that no appropriate alternatives are available. Those Member States authorising such products in their territory shall [...] submit a report to the Commission justifying their conclusion that there are no appropriate alternatives and indicating how the development of alternatives is promoted. The Commission will make these reports publicly available.”*

The results of this comparative assessment are presented in this report. Focus was placed on the use areas specified in the applications for product authorisation which are intended for the products in Belgium and potential alternative wood preservatives or non-chemical methods that are applicable to use in Belgium. The following use areas are addressed in this assessment:

- Railway sleepers
- Poles for overhead electricity and telecommunication
- Agricultural fencing & posts/stakes for agricultural fencing
- Tree support posts (such as tree stakes (e.g. fruit, vineyard) and hop poles)
- Equestrian fencing & posts/stakes for equestrian fencing
- Industrial and highway fencing (e.g. noise barriers, snow barriers)
- Cladding for non-residential buildings
- Marine installations



## 2. Legislation and Guidance

### 2.1. Comparative assessment in accordance with Art. 23 of the BPR

Art. 23 of the BPR lays down the conditions for a comparative assessment of biocidal products. According to Art. 23(3) the receiving competent authority shall prohibit or restrict the making available on the market or the use of a biocidal product containing an active substance that is a candidate for substitution where a comparative assessment demonstrates that both of the following criteria are met:

- a) for the uses specified in the application, another authorised biocidal product or a non-chemical control or prevention method already exists which presents a significantly lower overall risk for human health, animal health and the environment, is sufficiently effective and presents no other significant economic or practical disadvantages;
- b) the chemical diversity of the active substances is adequate to minimise the occurrence of resistance in the target harmful organism.

The comparative assessment shall be performed in accordance with the technical guidance notes referred to in Art. 24 of the BPR, and is based on the guidance document “Technical Guidance Note on comparative assessment of biocidal products” (CA-May15-Doc.4.3a-final), hereafter referred to as *the guidance document on comparative assessment*.

### 2.2. Specific provision according to the Commission Directive 2011/71/EU

As recognised above, the inclusion directive for creosote includes a specific provision stating that products containing creosote may only be authorised for uses where the authorising Member State concludes that no appropriate alternatives are available. The conclusions shall be based on an analysis regarding the technical and economic feasibility of substitution which it shall request from the applicant, as well as on any other information available to it.

No guidance has been developed under the BPD in order to facilitate for applicants or authorising Member States how to comply with this provision. The BE CA however considers that a



comparative assessment made in accordance with Art. 23 of the BPR covers the aspects that shall be considered according to the specific provision. In accordance with the specific provision for creosote a Member State can only authorise a creosote containing product if their analysis show that there are no alternatives available. Hence, there is a difference to the provisions in Art. 23 of the BPR, where in order to prohibit a product it must be demonstrated that both criteria in Art. 23 of the BPR are fulfilled.

### 3. Administrative information on the products falling within the scope of the comparative assessment

Applicant 1: [REDACTED]	
Application Type	Biocidal Product Family
Name	[REDACTED]
Case Number R4BP3	[REDACTED]
Family Members	[REDACTED] [REDACTED] [REDACTED]

Applicant 2: [REDACTED]	
Application Type	Biocidal Product Family
Name	[REDACTED]
Case Number R4BP3	[REDACTED]
Family Members	[REDACTED] [REDACTED]



#### 4. Uses intended in Belgium for the biocidal products

The applicants have applied for the following uses of the creosote products in Belgium:

<b>Table 1: Intended uses in BE</b>	
Product Type	PT8 Wood Preservatives
Aim of Treatment	Preventive Protection
Use Class Wood	UC 3 UC 4 UC 5
Target Organism	Wood rotting basidiomycetes Soft rot micro-fungi Marine crustaceae and molluscs (marine borers)
Field of Use	<ul style="list-style-type: none"><li>• Wooden railway sleepers</li><li>• Poles for overhead electricity and telecommunication</li><li>• Agricultural fencing &amp; posts/stakes for agricultural fencing</li><li>• Tree support posts</li><li>• Equestrian fencing &amp; posts/stakes for equestrian fencing</li><li>• Industrial and highway fencing</li><li>• Cladding for non-residential buildings</li><li>• Marine installations</li></ul>
Application Method	Pressure impregnation Hot and cold impregnation Brush treatment
Application Rate	UC 3: 50-185 kg/m <sup>3</sup> for softwood 20-185 kg/m <sup>3</sup> for hardwood UC 4: 76-195 kg/m <sup>3</sup> for softwood 39-210 kg/m <sup>3</sup> for hardwood UC 5: 240-400 kg/m <sup>3</sup> for softwood 240-290 kg/m <sup>3</sup> for hardwood
Category of Users	Professional (industrial)

Currently, there are in Belgium two wood preservatives containing creosote authorised under national rules in accordance with the transitional measures in Art. 89 of the BPR. They are from





the same applicants as described above, and their national authorisation numbers are 1983B and 505B.

## 5. Screening phase of the comparative assessment

In accordance with the guidance document on comparative assessment, it shall be checked during the screening phase whether the diversity of the active substance, product type and mode of action combination in authorised biocidal products is adequate to minimise the occurrence of resistance in the target organisms. Art. 23(3)(b) of the BPR refers to the adequate chemical diversity of the available active substances within a given product type/use/target organism combination as one of the two sine qua non conditions to be met in order to allow a restriction or prohibition of a biocidal product subject to comparative assessment. The screening phase shall allow through a simple assessment to judge whether it is required or not to perform a comprehensive comparative assessment.

Also according to the guidance document on comparative assessment, adequate chemical diversity means that at least three different active substances - mode of action combinations should remain available through authorised biocidal products. The refMS Sweden (Kemi), should, according the guidance document on comparative assessment, have discussed the suitability of identified biocidal products authorised under the BPD or BPR under its own market as well as under other Member States markets. However, since detailed information regarding products authorised in other Member States was not yet searchable in R4BP3 at the time the refMS SE conducted its comparative assessment, only products authorised in Sweden were included in their assessment.<sup>6</sup> Nevertheless it should be used as a valuable addition to this report.

---

<sup>6</sup> Comparative assessment report: Creosote; versus other wood preservatives, other materials or techniques. (Kemi, version 1.1, July 2016)



## COMPARATIVE ASSESSMENT REPORT: CREOSOTE

March 2019

Therefore, the BE CA has reviewed the biocidal products on the Belgian market in search of biocidal products which can be considered as alternatives for the relevant biocidal products subject to this comparative assessment. In accordance with the guidance document on comparative assessment, the existing products placed on the Belgian market according to the national systems operating during the transitional period have been excluded from the comparison.

According to the information available to the BE CA in February 2017, 25 wood preservatives have been authorized under the BPD or BPR. These products contain all together 8 active substances and their combinations: basic copper carbonate (CAS: 12069-69-1), boric acid (CAS: 10043-35-3), dazomet (CAS: 533-74-4), IPBC (CAS: 55406-53-6), propiconazole (CAS: 60207-90-1), sulfuryl fluoride (CAS: 2699-79-8), tebuconazole (CAS: 107534-96-3) and thiacloprid (CAS: 111988-49-9).

The largest part (20 products) is intended to be used for the protection of wood in use class 3. None of the authorised products have been authorised for all uses intended for the creosote products in order to protect wood in UC 3. There is only one product intended to be used for the protection of wood in use class 4. It is however only intended to be used on pre-impregnated wood which has already undergone initial treatment for use class 4. And finally, there are in Belgium no authorised biocidal products aimed for protection of wood in use class 5.

As a conclusion, based on the above described mapping of existing products, there are so far no products in Belgium, that have been authorised under the BPD or BPR, which can be identified as alternative biocidal products that can replace the creosote products in order to protect wood in UC 3, UC 4 or UC 5.



## **6. Tier I. Comparison to other authorised biocidal products**

Products containing an active substance meeting an exclusion criteria should according to the guidance document on comparative assessment be subject to a detailed comparative assessment whether there is adequate chemical diversity or not. In doing so, the use of that product could be restricted or banned if products with the same active substances - mode of action combination and with a better profile are available. A comparison according to Tier I-B is however not possible since there are no products containing creosote on the Belgian market that have been authorised under BPD or BPR.

## **7. Tier II. Comparison to non-chemical alternatives**

According to Art. 10(3) of the BPR, information on non-chemical alternatives are to be collected during the public consultation carried out by ECHA in connection with the approval or renewal of an active substance which is a candidate for substitution. As creosote was approved as an active substance for use in wood preservatives under the BPD, a public consultation by ECHA has not been performed. However, a stakeholder consultation on creosote, commissioned by the EU Commission, was performed in 2008. A link to the summary of the outcome of this stakeholder consultation is included in Appendix III.

Additionally, the applicants were asked to provide information on the technical and economic feasibility of substitution. They submitted several analyses containing existing alternatives for railway sleepers, agricultural fencing, equestrian fencing, tree support posts,... A comprehensive list of documents submitted by the applicants in context of the comparative assessment is given in Appendix I & II.

The main goal of Tier II is to conclude whether or not substitution of the relevant biocidal product would be possible by a non-chemical method. For a non-chemical alternative to be considered as



an eligible alternative for a use intended for the creosote products, the non-chemical alternative must according to Art. 23(3)(a) of the BPR meet the following requirements:

- it shall already exist
- it shall present a significant lower overall risk for humans, animals and the environment
- it shall be sufficiently effective
- it shall present no other significant economic or practical disadvantages

This excludes, according to the guidance document on comparative assessment, those methods which are still in an early development phase or have not demonstrated sufficient effectiveness under field conditions. The main focus in this comparative assessment has been to consider potential non-chemical alternatives to creosote treated wood that are suitable for use in Belgium.

## **7.1. Possible alternative materials to be used for railway sleepers**

According to information from Infrabel (the Belgian railway infrastructure manager), the only types of railway sleepers used in Belgium are concrete and wooden sleepers. Today, about 88 % of the main tracks of the Belgian railway network consist of concrete sleepers. This used to be 80 % in 2011 and 50 % in 2000. Concrete sleepers are also used when new lines are established and for replacement of wooden sleepers on longer parts of tracks if this is needed. The remaining 12 % of the main tracks is equipped with wooden sleepers, for the most part of creosote impregnated wooden sleepers. On secondary tracks the situation is 75 % wooden sleepers and 25 % concrete sleepers. In 2011 this was 80 % versus 20 %. The total estimated amount of creosote treated wooden sleepers is 4 million, compared to 10 million concrete sleepers. In order to maintain the existing wooden lines by replacing individual worn out sleepers, sleepers with the same characteristics must be available since sleepers with different technical properties cannot be mixed on the same line. Standard concrete sleepers are therefore not an option as replacement of single creosote sleepers. According to Infrabel it is not economically feasible, either in the short or medium term, to substitute all wooden sleepers with concrete sleepers. This is also supported by a



study on Sustainable Wooden Railway Sleepers (SUWO) from 2013, published by The International Union of Railways (UIC).

The refMS Sweden described in their comparative assessment report a Life Cycle Assessment (LCA) of concrete sleepers, linseed oil sleepers (a pine sleeper impregnated with a linseed oil based impregnation) and creosote impregnated pine sleepers. The conclusion from this LCA is that there is no coherent picture of which of the three sleeper types has the least negative impact on the objectives studied: impact on the climate, health and ecotoxicological effects.

The BE CA has further received information from manufacturers of alternative materials such as plastic railway sleepers and sleepers from wood treated with creosote-free wood preservatives. However, these alternative materials have not been tested yet on a large scale in Belgium. If these materials will be tested, they might be included as possible eligible alternatives in the future.

## **7.2. Possible alternative materials to be used for poles for overhead electricity and telecommunication**

The BE CA has very limited information on the extent to which creosote treated wood is used for poles for overhead electricity and telecommunication, compared to other materials. The applicants have not submitted sufficient information to prove that this use is essential in Belgium and that there are no alternatives for creosote products.

## **7.3. Possible alternative materials to be used for agricultural fencing & posts/stakes for agricultural fencing**

The applicants introduced, amongst others, a Socio-Economic Analysis (SEA) from 2016 for creosoted fencing applications, including agricultural fencing, conducted in name of the *European industry trade association representing the pressure treated wood industry* (WEI). Therein it is described that, according to the authors, there is no alternative already available on the market that is a suitable replacement for creosote. A total of 13 alternatives were considered (ranging from alternative wood preservatives, wood modification techniques, types of wood, and



alternative materials to wood). The two most relevant alternatives that are already on the market are alternative copper based wood preservatives (copper azole and alkaline copper quaternary) and metal fencing. The alternative copper based wood preservatives are already used in the domestic sector (as creosoted fencing is not available to the general public) but are thought to have a very small market share in the agricultural fencing market due to their shorter lifetime and susceptibility to critical failure, which collectively results in a significantly higher lifetime cost to end-users. Metal fencing is assumed to last as long as creosoted fencing but is not highly demanded by end-users. Consultation suggests that metal fencing is more expensive to buy and install. Metal fencing also has a higher environmental impact than wooden fencing (which uses sustainable local wood sources) when considering resource efficiency, energy use and greenhouse gas emissions.

A position paper by Fedustria (Federation of the Belgian textile, wood and furniture industry) supports this view, and focusses on the disadvantages of concrete fences for use in the agricultural sector: concrete rot, breaking of poles when cattle pushes against it and limited lifespan.

#### **7.4. Possible alternative materials to be used for tree support posts**

The applicants introduced, amongst others, a Socio-Economic Analysis (SEA) from 2016 for creosoted tree stakes applications, conducted in name of the *European industry trade association representing the pressure treated wood industry* (WEI). Therein it is described that, according to the authors, there is no alternative already available on the market that is a suitable replacement for creosote for all tree stake applications. A total of 14 alternatives were considered (ranging from alternative wood preservatives, wood modification techniques, types of wood, and alternative materials to wood). The two most relevant alternatives that are already on the market are concrete and galvanised steel. Galvanised steel is already extensively used by vineyards which only require short tree stakes (height wise). They are however not suitable for other applications which require much longer tree stakes. The required added thickness of the metal makes these stakes much heavier and more costly than creosoted tree stakes to purchase, transport, handle and install (in the ground due to the need for reinforced supports). Concrete tree stakes are currently used but are more expensive to purchase and install. Another issue is that several respondents have



indicated that concrete stakes have critically failed (i.e. not lasting 25 years) due to certain soil and weather conditions (e.g. heavy rainfall on soft soil, cold weather and strong winds). This is also a view supported by limited publicly available information. Consultation responses indicate that some end-users are returning to using creosoted tree stakes. Hop and hail protection typically require even longer stakes (e.g. 6 meters high) and based on limited available data, concrete stakes are only available up to 4.8 meters. Therefore it is unclear if concrete can be used for these purposes.

Again a position paper by Fedustria (Federation of the Belgian textile, wood and furniture industry) supports this view, and focusses on the disadvantages of concrete fences and salt impregnated wood for tree support: lack of flexibility of concrete compared to wood causes problems with storms (breaking), which can have effects for a whole plantation, and salt impregnated wood does not fulfil the service life of 25-30 years required for fruit cultivation, again affecting a substantial part of a plantation when one pole fails.

## **7.5. Possible alternative materials to be used for equestrian fencing & posts/stakes for agricultural fencing**

The applicants introduced, amongst others, a Socio-Economic Analysis (SEA) from 2016 for creosoted fencing applications, including equestrian fencing, conducted in name of the *European industry trade association representing the pressure treated wood industry* (WEI). Therein it is described that, according to the authors, there is no alternative already available on the market that is a suitable replacement for creosote. A total of 13 alternatives were considered (ranging from alternative wood preservatives, wood modification techniques, types of wood, and alternative materials to wood). The two most relevant alternatives that are already on the market are alternative copper based wood preservatives (copper azole and alkaline copper quaternary) and metal fencing. The alternative copper based wood preservatives are already used in the domestic sector (as creosoted fencing is not available to the general public) but are thought to have a very small market share in the equestrian fencing market due to their shorter lifetime, susceptibility to critical failure, and inability to prevent cribbing without further measures (e.g. electrification of



the fencing) which collectively results in a significantly higher lifetime cost to end-users. Metal fencing is assumed to last as long as creosoted fencing but is not highly demanded by end-users. Consultation suggests that metal fencing is more expensive to buy and install, and animals are more susceptible to injuries with metal fencing (e.g. farmers (and stud farmers) have indicated that because metal fences are harder to see, young horses run into them causing injury). Metal fencing also has a higher environmental impact than wooden fencing (which uses sustainable local wood sources) when considering resource efficiency, energy use and greenhouse gas emissions.

Other organisations, such as the *Belgische Confederatie van het Paard* (national Belgian umbrella organisation of the equestrian sector) and *Paardenpunt Vlaanderen* (official umbrella organisation of the Flemish equestrian sector) stressed that wooden fences are the reference for safe keeping of horses, considering factors such as safety, outbreak and not hurting the horses. In particular creosote treated wood is preventing the animals to bite, nibble and scrub the fence, all which can result in injuries for the horses.

A position paper by Fedustria (Federation of the Belgian textile, wood and furniture industry) focusses on the disadvantages of salt impregnation of wood for equestrian fencing: the desirable lifetime is not reached and horses tend to nibble on salt impregnated wood.

## **7.6. Possible alternative materials to be used for industrial and highway fencing**

The BE CA has very limited information on the extent to which creosote treated wood is used for industrial and highway fencing, compared to other materials. The applicants have not submitted sufficient information to prove that this use is essential in Belgium and that there are no alternatives for creosote products.





### **7.7. Possible alternative materials to be used for cladding for non-residential buildings**

The BE CA has very limited information on the extent to which creosote treated wood is used in cladding for non-residential buildings, compared to other materials. The applicants have not submitted sufficient information to prove that this use is essential in Belgium and that there are no alternatives for creosote products.

### **7.8. Possible alternative materials to be used for marine installations**

The BE CA has very limited information on the extent to which creosote treated wood is used in different marine installations, compared to other materials. The applicants have not submitted sufficient information to prove that this use is essential in Belgium and that there are no alternatives for creosote products.

## **8. Research activities in Belgium**

The BE CA is facilitating research aiming at finding a replacement for creosote through the granting of research and development notifications. This either through the provisions given under Art. 56 of the BPR, or through national provisions according to Art. 34 of the Royal Decree of 8 May 2014.

At the moment there are three such research and development notifications granted and testing ongoing. All three test projects aim to develop a different alternative chemical method for the treatment of wood for use in railway sleepers.

Their references are: BC-AE038776-45 (R4BP3 case number), 201711B and 201801B (national trial number).



## 9. Overall conclusion of comparative assessment

Results from the screening phase showed that there are at the moment no suitable wood preservatives on the Belgian market (authorised under the BPD or BPR) that could replace the creosote products in order to protect wood in UC 3, UC 4 or UC 5. Only the creosote products already authorised in Belgium under national rules in accordance with the transitional measures in Art. 89 of the BPR are suitable for these uses. The BE CA has received information about a number of non-chemical materials that can potentially be used as alternatives for several fields of use of creosote. However, except of concrete railway sleepers, it is still not fully feasible to apply these alternatives to an extent so that they can replace creosote treated wood. Most of the potential substitutes for creosote protected wood are not widely used, are at an R&D stage or are only used for a short period of time, where long term experience is needed to in the end decide if an alternative is fit enough to replace creosote treated wood (something that is in particular the case for railway sleepers since railway lines are part of a safety-critical field where confidence in performance and long service life of sleepers are important factors). This type of information on the various alternatives is not sufficiently available at the time of the decision regarding the authorisation of the two biocidal product families in Belgium.

Next to that, the BE CA has also received information that a majority of wood treated with creosote in Belgium is destined for export. This ranges between 70 % for railway sleepers and 95 % for equestrian fencing. Taking into account that it is at the moment not possible to restrict the free movement across the EU of wooden articles treated with creosote,<sup>7</sup> a ban of creosote would only result in a significant negative economic impact in Belgium, whilst wood treated with creosote would still be available on the Belgian market through import.

Based on this comparative assessment, the BE CA cannot exclude that a ban of creosote products used for the protection of wood would lead to significant economic or practical disadvantages. The

---

<sup>7</sup> Document from the 66<sup>th</sup> meeting of representatives of Members States Competent Authorities for the implementation of Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products: [CA-Sept16-Doc.6.2 - Wooden articles treated with creosote](#)



criteria in Art. 23 of the BPR are therefore not met, and a ban based on that article is not possible. The comparative assessment shows that there are at this time in Belgium no appropriate alternatives to creosote products to be used for railway sleepers, agricultural fencing & posts/stakes for agricultural fencing, tree support posts and equestrian fencing & posts/stakes for equestrian fencing. Therefore these uses should not be banned or restricted based on this comparative assessment report and based on the specific provision for creosote.

The applicants have also requested the authorisation of other uses. However, there was not sufficient information submitted to prove that there are no alternatives for creosote products to be used for poles for overhead electricity and telecommunication, for industrial and highway fencing, for cladding for non-residential buildings and for marine installations. Therefore, the BE CA cannot conclude that a ban of creosote products for these uses would lead to significant economic or practical disadvantages. The criteria in Art. 23 of the BPR are for these uses also not met, therefore a ban based on that article is not possible. However, the lack of evidence that these uses are essential in Belgium suggest that there seem to be appropriate alternatives to creosote products for these uses. These uses should therefore, based on this comparative assessment and the specific provision for creosote, not be authorised in Belgium.

#### Uses to be authorised in Belgium:

- Railway sleepers
- Agricultural fencing & posts/stakes for agricultural fencing
- Tree support posts (such as tree stakes (e.g. fruit, vineyard) and hop poles)
- Equestrian fencing & posts/stakes for equestrian fencing

#### Uses not to be authorised in Belgium:

- Poles for overhead electricity and telecommunication
- Industrial and highway fencing (e.g. noise barriers, snow barriers)
- Cladding for non-residential buildings
- Marine installations



## Appendixes

### Appendix I - Documentation submitted by the applicants

Reference	Authors/Owner	Year
Conséquences technico - économiques de l'interdiction de la créosote pour Infrabel	Infrabel/Infrabel	2016
SUWOS: Sustainable Wooden railway Sleepers	International Union of Railways (UIC)	2013
Socioeconomic Aanalysis (SEA) of Creosoted Fencing Applications	Eftec/WEI-IEO	2016
Socioeconomic Aanalysis (SEA) of Creosoted Tree Stakes Applications	Eftec/WEI-IEO	2016
Conclusions and Summary Report on an Environmental Life Cycle Assessment of ACQ-Treated Lumber Decking with Comparisons to Wood Plastic Composite Decking	AquAeTer, Inc./ Treated Wood Council	2012
Conclusions and Summary Report on an Environmental Life Cycle Assessment of Borate-Treated Lumber Structural Framing with Comparisons to Galvanized Steel Framing	AquAeTer, Inc./ Treated Wood Council	2012
Life Cycle Assessment Procedures and Findings for Creosote-Treated Railroad Ties	AquAeTer, Inc./ Treated Wood Council	2013
Conclusions and Summary Report Environmental Life Cycle Assessment of Highway Guard Rail Posts	AquAeTer, Inc./ Treated Wood Council	2013
Conclusions and Summary Report Environmental Life Cycle Assessment of Marine Pilings	AquAeTer, Inc./ Treated Wood Council	2012
Conclusions and Summary Report on an Environmental Life Cycle Assessment of Utility Poles	AquAeTer, Inc./ Treated Wood Council	2012
Inventory and emission factors of creosote, Polycyclic Aromatic hydrocarbons (PAH), and Phenols from Railroad Ties Treated with Creosote	EMPA	2000
Emissions of polycyclic aromatic hydrocarbons (PAH) from creosoted railroad ties and their relevance for lice cycle assessment (LCA)	EMPA	2003
Background data and assumptions made for an LCA on creosote poles	IVL	2009



## COMPARATIVE ASSESSMENT REPORT: CREOSOTE

March 2019

Technical feasibility of substitution of creosote for the treatment of wood for poles, sleepers, fencing, agricultural uses (including tree stakes), fresh and sea water uses and professional use in the context of application for authorisation of creosote in accordance with the Biocidal Products Directive	WoodPro Consulting	2013
Socio Economic Case for the Continued Use of Creosote as a Wood Preservative for Wood Poles	WEI Brussels	2013
Life cycle assessment (LCA) of railway sleepers Comparison of railway sleepers made from concrete, steel, beech wood and oak wood	Studiengesellschaft Holzschwellenoberbau e.V.	2009
Qualität von Obstbaumpfählen	Esteburg Obstbauzentrum Jork	2012



**Appendix II** - Opinions submitted by the applicants

<b>Reference</b>	<b>Author</b>	<b>Year</b>
Autorisation pour les clôtures traités à la créosote	Belgische Confederatie van het Paard	2016
Geschikte weideafsluitingen voor paarden	Paardenpunt Vlaanderen	2016
Gebruik van creosoot in België voor de toepassingen fruitboompalen, hagelnetpalen en afsluitingen	Fedustria and CIBB	2016



**Appendix III** - Summary of the outcome of the stakeholder consultation on creosote which was performed in 2008 and initiated by the EU Commission

Available on CIRCABC: [CA-Sept08-Doc.8.4](#)

Available through [another source](#) on the internet