

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

March 7, 2008

# **MEMORANDUM**

**SUBJECT:** Case Overview for Creosote for the Reregistration Eligibility Decision

(RED) Document

**DP Barcode:** None Reregistration Case No.: 0139

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# **CREOSOTE - CASE OVERVIEW**

# II. CASE OVERVIEW

#### A. Chemical Overview

The following active ingredients are covered by this Creosote Reregistration Eligibility Decision:

**Common Name:** Creosote

Case Number: 0139

Chemical Names:	CAS Registry Numbers:	<b>OPP Chemical Codes:</b>
Coal Tar Creosote	8001-58-9	25004
Creosote Oil	61789-28-4	25003
Coal Tar	8007-45-2	22003

Basic Manufacturers:	Primary Registrants	Total Number of Registered Products
	Coopers Creek Chemical Corp	o. 2
	KMG-Bernuth, Inc.	4
	Koppers Industries, Inc.	4
	Rutgers VFT	1
	Tangent Rail Products Inc	2

# B. Use Profile

The following is information on the currently registered uses for Creosote with an overview of use sites and application methods. A detailed table of the uses can be found in Appendix A.

**TYPE OF PESTICIDE**: Fungicide, Insecticide, Miticide, and Sporicide

<u>USE SITES</u>: Creosote used for wood/wood structure protection treatments via pressure methods to utility poles and railroad ties. Treated wood intended for exterior/outdoor uses only.

# **Terrestrial Non-Food Crop**

(e.g., Utility Poles/Crossarms, Crossties, Railroad Ties, Fence posts, Fences, Foundation Timbers, Timbers, Lumber)

Wood or Wood Structure Protection Treatments:

- Wood Pressure Treatment to Forest Products
- Pesticides for Manufacturing, Reformulating or Repackage Use
- Pesticide Products for Formulation of Other Products

# **Aquatic Non-Food Outdoor**

(e.g., Pilings, Posts)

Wood or Wood Structure Protection Treatments:

- Pressurized Wood Protection Treatment to Wooden Aquatic Structures and Items

# **TARGET PESTS**:

#### **INVERTEBRATES**

(Insects, Miscellaneous Invertebrates, and Related Organisms.)

- Insects
- Wood Destroying Insects
- Wood Boring Insects
- Roundheaded Wood Borers
- Marine Borers
- Wood Infesting Insects
- Termites
- Beetles
- Powderpost Beetles
- Bees
- Carpenter Bees
- Carpenter Ants

### PLANT PATHOGENIC ORGANISMS

(Bacteria, Fungi, and Other Fouling Organisms.)

- Fungi
- Dry Rot Fungi
- Wood Rot/Decay Fungi
- Fungal Rot/Decay Organisms
- Wood Rot/Decay Organisms
- Slime

# **FORMULATION TYPES REGISTERED**:

At present there are a total of 16 products registered with the U.S.EPA for wood preservation uses which contain the Creosote active ingredients in the following formulations:

Manufacturing-Use Product (MUP):	Percent A.I.	Total No. of Registered <u>Products</u>
Soluble Concentrate (Liquid)	97.00 to 98.50%	1
End-Use Product (EUP):		
Ready-to-Use Compound (Grease) (a Coal tar/Creosote oil mixture)	37.00 to 60.00	0% 1
Ready-to-Use Solution (liquid)	97.00 to 98.50	0% 11

#### **TYPES AND RATES OF APPLICATION:**

The following covers <u>only</u> those application rates which are specified on the Creosote product labeling:

# **Terrestrial Non-Food Crop**

# **Wood Pressure Treatment to Forest Products:**

Wood Protection Treatment by Pressure (Pressure Treating Vessel) - apply at rate of 12 lbs. per cu. ft..

# **Aquatic Non-Food Outdoor**

# **Wood Pressure Treatment to Aquatic Structures/Items**:

Wood Protection Treatment by Pressure (Pressure Treating Vessel) - apply

at rate of 12 lbs. per cu. ft..

# **Types of Treatment:**

Pressure Treatment

# **Equipment:**

Pressure Treating Vessel

# **Timing:**

Prior to end use of wood.

# C. Regulatory History

Creosote, one of the three "heavy duty wood preservatives" (the others being the wood preservatives containing arsenic and/or chromium, and Pentacholorphenol) was first registered in the United States in 1948 as a coal tar creosote active ingredient. Presently, 13 products are registered for use as industrial wood preservatives for above and below ground wood protection treatments, as well as treating wood in marine environments. All 13 Creosote products are Restricted Use Pesticides; 12 are Ready-to-Use End-Use Products and 1 is a Manufacturing-Use Product for formulating industrial end-use wood preservative products. Creosote wood preservatives are used primarily in the pressure treatment of railroad ties/crossties (about 70% of all Creosote use) and utility poles/crossarms (about 15 - 20% of all Creosote use). Assorted Creosote-treated lumber products (e.g., timbers, poles, posts and ground-line support structures) account for the remaining uses for this wood preservative. The industry refers to different blends of Creosote based on the wood treatment standards set by the American Wood-Preservers' Association (AWPA). For instance, P1/P13 and P2 are the predominant blends used by the wood treating industry. Typically, railroad ties/crossties are treated with a P2 blend which is more viscous than the P1/P13 blend typically used for treating utility poles.

In October 1978, an administrative review process was initiated to consider whether the pesticide registration of the three heavy duty wood preservative uses (including Creosote) should be canceled or modified. The Federal Register (Vol.49, No.139) of July 13, 1984 concluded that process and announced that certain changes in the terms and conditions of registration were required if registrants and applicants wished to avoid cancellation.

After carefully evaluating the risks to public health posed by these three heavy duty wood preservative chemicals (including Creosote) along with the significant economic benefits resulting from their use, the Agency determined that the use of Creosote as a wood preservative chemical in accordance with certain modifications to terms of registration would satisfy the statutory standard for registration. These modifications (classification as restricted use pesticide, workers protection/protective clothing and equipment requirements, restricted to non-residential uses, etc.) are noted in the Federal Register of January 13, 1986 (Vol.51, No. 7).

The Agency has announced and is currently processing a notice of receipt of requests by registrants of pesticide products containing creosote to voluntarily cancel certain registrations and/or to amend to terminate certain uses of affected products. Specifically, the five registrants who are members of the Creosote Council III (Coopers Creek Chemical Corporation, KMG-Bernuth, Inc., Koppers, Inc., Railworks Wood Products, and Rutgers Chemicals AG) have requested in letters dated September 5, 2003 to cancel the registrations for their creosote non-pressure treatment end-use products and/or to amend to terminate all non-pressure treatment uses of other creosote products. These registrants are requesting that the voluntary product cancellations and/or use terminations become effective December 31, 2004. The registrants waived all but 30 days of the 180-day comment period and have not requested any existing stocks provision. At the request of a registrant, the Agency published an extension to the public comment period on November 26, 2003, for an additional 30 days. Unless a request is withdrawn by December 26, 2003, the Agency intends to issue orders granting these requests to cancel certain products, and to amend to terminate certain uses.