

Carbon and Carbon Dioxide
Final Work Plan
Registration Review
August 2008

Case Number: 4019

Approved by: _____

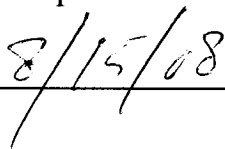


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Date: _____



I. Final Work Plan

This is the Agency's Final Work Plan for the registration review of carbon, carbon dioxide, and sawdust. The work plan includes the expected registration review timeline.

There are three compounds under consideration in this case: carbon, sawdust, and carbon dioxide. Carbon, combined with sodium nitrate, potassium nitrate, and/or sulfur, is used to create a gas bomb for controlling rodents and larger pest mammals such as red foxes and coyotes in burrows and dens. Sawdust is another form of carbon, used in the same manner to create a gas bomb. Carbon dioxide is a gas used as an insecticide fumigant for enclosed areas such as grain storage, or as an inert ingredient or propellant in other types of pesticide products, including insecticides.

The Agency's implementation of the new registration review program will require the review each registered pesticide every 15 years to determine whether it continues to meet the FIFRA standard for registration. Changes in science, public policy, and pesticide use practices will occur over time. The registration review program is intended to make sure that, as the ability to assess risk evolves and as policies and practices change, all registered pesticides continue to meet that statutory standard. The public phase of registration review begins when the initial docket is opened for each case. Information on this program is provided at: http://www.epa.gov/oppsrrd1/registration_review.

Comments Received on Preliminary Work Plan:

The Agency did not receive any public comments on the Preliminary Work Plan during the open comment period between March 26, 2008 and June 24, 2008.

Anticipated Risk Assessment and Data Needs:

The Agency anticipates conducting an ecological risk assessment, including an endangered species assessment, for carbon, carbon dioxide and sawdust. The Agency anticipates conducting a comprehensive ecological risk assessment under registration review that will include an assessment of potential risk to endangered and threatened species ("listed species") in a manner consistent with agreements between the Agency and the U.S. Fish and Wildlife Service and the National Marine Fisheries Service ("the Services"). The Agency will not conduct new human health assessments for carbon, carbon dioxide, and sawdust because it considers past assessments adequate to evaluate risk.

Ecological Risk:

- Ecological risk assessments for most carbon, carbon dioxide and sawdust uses were completed in 1991, and the Agency does not anticipate requiring data in order to conduct a complete ecological risk assessment including an endangered species assessment for all uses.

- All ecological effects data requirements for carbon, carbon dioxide, and sawdust have been waived. All environmental fate data requirements for carbon, carbon dioxide, and sawdust have been waived because the active ingredients are expected to remain inside the sealed burrows in which they are applied or otherwise dissipate by volatilization.
- The planned ecological risk assessment will allow the Agency to determine whether carbon, carbon dioxide, or sawdust use has “no effect” or “may affect” federally listed threatened or endangered species (listed species) or on their designated critical habitat. If the assessment indicates that carbon, carbon dioxide or sawdust “may affect” a listed species or its designated critical habitat, the assessment will be refined. The refined assessment will allow the Agency to determine whether use of carbon, carbon dioxide or sawdust is “likely to adversely affect” the species or critical habitat or “not likely to adversely affect” the species or critical habitat. When an assessment concludes that a pesticide’s use “may affect” a listed species or its designated critical habitat, the Agency will consult with the U.S. Fish and Wildlife Service or National Marine Fisheries Service (Services), as appropriate.
- Please refer to the *Carbon and Carbon Dioxide Summary Document Registration Review: Initial Docket (dated March 2008), Problem Formulation for Ecological Risk Assessment* for a detailed discussion of the anticipated risk assessment needs (Document ID: [EPA-HQ-OPP-2007-0705-0002](#)).

Human Health Risk:

- The Agency believes that previously completed human health assessments from 1991 are adequate and there is no dietary (food and water), residential, occupational, or aggregate risk that exceeds the Agency’s level of concern.

Timeline:

EPA has created the following estimated timeline for the completion of the carbon, carbon dioxide and sawdust registration review.

Registration Review of Carbon/Carbon Dioxide/Sawdust – Projected Registration Review Timeline	
Activities	Estimated Month/Year
Phase 1: Opening the docket	
Open Public Comment Period for carbon/carbon dioxide/sawdust docket	March 2008
Close Public Comment Period	June 2008
Phase 2: Case Development	
Develop Final Work Plan (FWP)	August 2008
Open Public Comment Period for Preliminary Risk Assessments	Feb.-April 2010
Close Public Comment Period	May-July 2010
Phase 3: Registration Review Decision	
Open Public Comment Period for Proposed Reg. Review Decision	Aug.-Oct. 2010
Close Public Comment Period	Nov. 2010-Jan. 2011
Final Decision and Begin Post-Decision Follow-up	May-July 2011
Total (years)	3.5

Currently, the Agency does not anticipate the need to issue a Data Call-In (DCI) for the registration review of carbon/carbon dioxide/sawdust. If a DCI becomes necessary, a revised timeline will be made publicly available.

Next Steps:

An ecological risk assessment, which will include an endangered species assessment, will be conducted as detailed in the Risk Assessment and Data Needs Section above.

To support the continued reregistration of carbon, carbon dioxide, and sawdust, the Agency has previously required the submission of efficacy data for those products with public health uses. If the results of the efficacy studies alter our conceptual model of potential risk to nontarget organisms, the analysis plan detailed in the Problem Formulation for the risk assessment will be adjusted to account for this change. The Agency intends to incorporate the evaluation of this data into the carbon, carbon dioxide, and sawdust risk assessments.