

## ANTIFREEZE BITTERING ACT OF 2006

DECEMBER 8, 2006.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BARTON of Texas, from the Committee on Energy and Commerce, submitted the following

### R E P O R T

together with

### DISSENTING VIEWS

[To accompany H.R. 2567]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 2567) to amend the Federal Hazardous Substances Act to require engine coolant and antifreeze to contain a bittering agent so as to render it unpalatable, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

### CONTENTS

	Page
Amendment .....	2
Purpose and Summary .....	3
Background and Need for Legislation .....	3
Hearings .....	4
Committee Consideration .....	5
Committee Votes .....	5
Committee Oversight Findings .....	11
Statement of General Performance Goals and Objectives .....	11
New Budget Authority, Entitlement Authority, and Tax Expenditures .....	11
Committee Cost Estimate .....	11
Congressional Budget Office Estimate .....	11
Federal Mandates Statement .....	13
Advisory Committee Statement .....	13
Constitutional Authority Statement .....	13
Applicability to Legislative Branch .....	13
Section-by-Section Analysis of the Legislation .....	13
Changes in Existing Law Made by the Bill, as Reported .....	15
Dissenting Views .....	18

## AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Antifreeze Bittering Act of 2006”.

**SEC. 2. ADDITION OF BITTERING AGENT IN ANTIFREEZE REQUIRED.**

The Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) is amended by adding after section 24 (15 U.S.C. 1278) the following new section:

**“SEC. 25. ADDITION OF BITTERING AGENT IN ANTIFREEZE REQUIRED.**

“(a) BITTERING AGENT.—

“(1) ENVIRONMENTAL EVALUATION REQUIRED.—

“(A) IN GENERAL.—Not later than 30 days after the date of enactment of this section, the Consumer Product Safety Commission shall commence an evaluation, in cooperation with the Environmental Protection Agency and appropriate State health and environmental officials in those States that, as of the date of enactment of this section, have enacted laws requiring a bittering agent in engine coolant or antifreeze, to determine whether there is evidence that the use of the bittering agent denatonium benzoate in engine coolant or antifreeze has an unreasonable adverse effect on the environment.

“(B) CERTAIN TESTS PROHIBITED.—The evaluation required under subparagraph (A) may not include any new animal or human testing.

“(C) REQUIRED DATE OF COMPLETION.—The Commission shall complete the evaluation within 180 days after the date of enactment of this section and publish its findings in the Federal Register.

“(2) USE OF BITTERING AGENT.—

“(A) GENERAL REQUIREMENT.—Unless the Commission, in its evaluation under paragraph (1), finds there is evidence of an unreasonable adverse effect on the environment, any engine coolant or antifreeze that is manufactured on or after the date that is 180 days after the date of publication of the Commission’s finding in the Federal Register pursuant to paragraph (1)(C), and that contains more than 10 percent ethylene glycol, shall include not less than 30 parts per million, and not more than 50 parts per million, denatonium benzoate as a bittering agent in order to render the coolant or antifreeze unpalatable.

“(B) ALTERNATIVE AGENT.—If the inclusion of denatonium benzoate in engine coolant or antifreeze is required under subparagraph (A) and the Commission finds that—

“(i) an alternative bittering agent is as effective as denatonium benzoate in rendering coolant or antifreeze unpalatable in terms of both its bittering capacity and its compatibility with motor vehicle engine coolant and antifreeze, and

“(ii) in cooperation with the Environmental Protection Agency, there is no evidence that the use of the alternative bittering agent has an unreasonable adverse effect on the environment,

the Commission may initiate a rulemaking to permit the use of the alternative bittering agent in lieu of denatonium benzoate.

“(3) UNREASONABLE ADVERSE EFFECT ON THE ENVIRONMENT DEFINED.—As used in this subsection, the term ‘unreasonable adverse effect on the environment’ means an unreasonable risk to human health or the environment, taking into account the economic, social, and environmental costs and benefits.

“(4) FAILURE TO COMPLY.—Any engine coolant or antifreeze that is required to contain a bittering agent under paragraph (2) that is not in compliance with that paragraph shall be considered to be a banned hazardous substance within the meaning of section 2(q) (15 U.S.C. 1261(q)), and shall be subject to the penalties provided for in section 5 (15 U.S.C. 1264).

“(b) RECORD KEEPING.—

“(1) NAME AND ACTIVE INGREDIENT.—A manufacturer of an engine coolant or antifreeze that is required to contain a bittering agent under subsection (a) shall maintain a record of the trade name, scientific name, and any active ingredients of a bittering agent used in compliance with such subsection.

“(2) AVAILABILITY TO THE PUBLIC.—Any record maintained under paragraph (1) shall be made available to the public on receipt by the manufacturer of a request from any person.

“(c) LIMITATION OF LIABILITY.—

“(1) IN GENERAL.—Subject to paragraph (2), a manufacturer, processor, distributor, recycler, or seller of an engine coolant or antifreeze that is required to contain a bittering agent under subsection (a) shall not be liable to a person for any personal injury, death, property damage, damage to the environment (including natural resources), or economic loss that results from the inclusion in the engine coolant or antifreeze of the bittering agent, provided that the bittering agent is present in concentrations mandated by subsection (a)(2)(A) or permitted pursuant to a rulemaking under subsection (a)(2)(B).

“(2) EXCEPTION.—Paragraph (1) shall not apply in any case in which a cause of liability referred to in that paragraph is unrelated to the inclusion in an engine coolant or antifreeze of the bittering agent as required by subsection (a). Nothing in this subsection shall be construed to exempt any manufacturer or distributor of denatonium benzoate, or an alternative bittering agent the use of which is required or permitted under subsection (a)(2), from any liability related to denatonium benzoate or the alternative bittering agent.

“(d) PREEMPTION.—No State or political subdivision of a State shall establish or continue to enforce with respect to retail containers containing less than 55 gallons of engine coolant or antifreeze any prohibition, limitation, standard or other requirement relating to the inclusion of a bittering agent in engine coolant or antifreeze that is different from, or in addition to, the requirements of this section.

“(e) EXEMPTION.—This section shall not be construed to apply to—

- “(1) the sale of a motor vehicle that contains engine coolant or antifreeze; or
- “(2) a wholesale container of engine coolant or antifreeze that contains 55 gallons or more of engine coolant or antifreeze.”.

#### PURPOSE AND SUMMARY

The purpose of the Antifreeze Bittering Act of 2005 is to reduce the number of exposures of people and animals to ethylene glycol-based engine coolant and antifreeze products through the addition of denatonium benzoate, or other suitable bittering agents.

#### BACKGROUND AND NEED FOR LEGISLATION

Increasing concerns are being raised about the health effects of ingestion of antifreeze, particularly by pets and small children. Dogs and cats find antifreeze sweet tasting and, if not deterred, are prone to consume it. Ethylene glycol is the primary active ingredient in many engine coolant and antifreeze products sold to consumers. According to the Agency for Toxic Substances and Disease Registry, ethylene glycol can damage the kidneys, heart, and nervous system of humans. In addition, the Washington State University College of Veterinary Medicine states on its website that about five tablespoons can kill a medium-sized dog and that treatment for antifreeze exposure and poisoning needs to be started as soon as possible after ingestion to be effective.

Notwithstanding Federal packaging requirements for retail sales of antifreeze and engine coolant, the 2003 Toxic Exposure Surveillance System (TESS) report of the American Association of Poison Control Centers (AAPCC) stated that it recorded 5,081 cases of persons who had been exposed to the poison, ethylene glycol. The following year (2004), the AAPCC TESS report showed an increase in total ethylene glycol exposure cases to 5,562. Of note, the 2004 figures bore out a 12 percent increase (from 592 to 672) in the number of reported cases for children under the age of 6 and growth in the number of cases yielding a “moderate” or “major” health outcome—from 9.2 percent of all reported cases to 11.5 percent. There was also an increase from 16 to 23 reported cases of intentional exposures between 2003 and 2004 resulting in death, 18 of which were intentional adult suicides. These statistics regarding an increase in adult deaths and the increase in number of reported cases

for children under the age of 6 stand in contrast to the AAPCC data-base numbers from 1985–2002, where there were both no deaths of patients reported under the age of 12 years or no deaths reported from unintentional exposures. While the Committee is concerned about the poisoning of any child, regardless of whether it results in death, it is not aware of any reported deaths from exposure to ethylene glycol from 2003–2004. The Washington State University College of Veterinary Medicine has also found that approximately 10,000 dogs and cats are exposed to antifreeze or engine coolant each year.

In order to deter children and pets from ingesting unhealthy quantities of ethylene glycol-based antifreeze or engine coolant, three States have enacted laws to require the inclusion of a bittering agent. Currently, California, Oregon, and New Mexico have adopted legal requirements that certain automotive products—particularly consumer sales of ethylene glycol-based antifreeze and engine coolants—contain prescribed levels of aversive agents/bitterants. With a number of other States and some localities contemplating legislation of this nature, there is a concern that inconsistent State laws would force antifreeze or engine coolant manufacturers into creating several different formulations, thereby affecting the production and flow in interstate commerce of engine coolant and antifreeze products. This legislation would set forth one national standard for the production of embittered engine coolant and antifreeze products.

H.R. 2567 amends the Federal Hazardous Substances Act (FHSA) (15 U.S.C. 1261–1278), under which the Consumer Product Safety Commission (CPSC) has the authority to regulate engine coolant and antifreeze and require that a bittering agent, either denatonium benzoate (DB) or another similarly effective substance, be added to antifreeze and thereby reduce the possibility that a child or animal is enticed to accidentally ingest an unsafe—and potentially fatal—amount of antifreeze.

According to the California Institute of Technology's Center for Science and Engineering of Materials, DB is recognized as the bitterest substance known. Minute quantities of DB can render household, garden, or automotive products unpalatable, deterring ingestion by children and animals. While testing has determined that DB is aversively bitter at 1 to 10 parts per million (ppm) in water, most consumer products become bitter at 30 to 100 ppm. This aversive method also has been used to deter ingestion of a multitude of other consumer products, including deer repellant, nail polish, household cleaners, paints, windshield washing fluid, and to coat electrical cables.

#### HEARINGS

The Subcommittee on Environment and Hazardous Materials held a hearing on H.R. 2567, the Antifreeze Bittering Act of 2005 on May 23, 2006. The Subcommittee received testimony from: the Honorable Gary Ackerman, Member, U.S. House of Representatives; Mr. Jim Willis, Division Director, Chemical Control Division Office of Pollution Prevention and Toxic Substances, U.S. Environmental Protection Agency; Mr. Jeffrey Bye, Vice President, Prestone, Honeywell International, Inc., on behalf of Consumer Specialty Products Association; Mr. Patrice L. Simms, Senior Project

Attorney, Natural Resources Defense Council; Ms. Sarah Amundson, Deputy and Legislative Director, Doris Day Animal League; Dr. Melinda Eyrich, Co-owner, Urgent Care Veterinary Hospital, Albuquerque, NM; and Mr. Tom Bonacquisti, Director of Water Quality and Production, Fairfax County Water Authority on behalf of the American Water Works Association.

#### COMMITTEE CONSIDERATION

On Wednesday, July 12, 2006, the Committee on Energy and Commerce met in open markup session and ordered H.R. 2567 favorably reported to the House, amended, by a record vote of 30 yeas and 15 nays, a quorum being present.

#### COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list the record votes on the motion to report legislation and amendments thereto. The following are the recorded votes taken on amendments offered to the measure, including the names of those Members voting for and against. A motion by Mr. Barton to order H.R. 2567 favorably reported to the House, amended, was agreed to by a record vote of 30 yeas and 15 nays.

**COMMITTEE ON ENERGY AND COMMERCE -- 109TH CONGRESS**  
**ROLL CALL VOTE # 132**

**Bill:** H.R. 2567, the Antifreeze Bittering Act of 2005

**MOTION:** Motion by Mr. Dingell to postpone the consideration of the bill until July 19, 2006.

**DISPOSITION:** **NOT AGREED TO**, by a roll call vote of 17 yeas to 26 nays.

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Barton		X		Mr. Dingell	X		
Mr. Hall				Mr. Waxman			
Mr. Bilirakis		X		Mr. Markey	X		
Mr. Upton		X		Mr. Boucher			
Mr. Stearns		X		Mr. Towns	X		
Mr. Gillmor				Mr. Pallone	X		
Mr. Deal		X		Mr. Brown			
Mr. Whitfield		X		Mr. Gordon	X		
Mr. Norwood				Mr. Rush	X		
Ms. Cubin		X		Ms. Eshoo	X		
Mr. Shimkus		X		Mr. Stupak	X		
Ms. Wilson		X		Mr. Engel			
Mr. Shadegg		X		Mr. Wynn	X		
Mr. Pickering		X		Mr. Green			
Mr. Fossella				Mr. Strickland			
Mr. Blunt				Ms. DeGette			
Mr. Buyer		X		Ms. Capps	X		
Mr. Radanovich		X		Mr. Doyle	X		
Mr. Bass		X		Mr. Allen	X		
Mr. Pitts		X		Mr. Davis			
Ms. Bono		X		Ms. Schakowsky	X		
Mr. Walden		X		Ms. Solis	X		
Mr. Terry		X		Mr. Gonzalez	X		
Mr. Ferguson		X		Mr. Inslee	X		
Mr. Rogers		X		Ms. Baldwin			
Mr. Otter		X		Mr. Ross	X		
Ms. Myrick		X					
Mr. Sullivan		X					
Mr. Murphy		X					
Mr. Burgess		X					
Ms. Blackburn		X					

07/12/2006

**COMMITTEE ON ENERGY AND COMMERCE -- 109TH CONGRESS**  
**ROLL CALL VOTE # 133**

**Bill:** H.R. 2567, the Antifreeze Bittering Act of 2005

**AMENDMENT:** An amendment by Mrs. Wilson, No. 1, to (1) require the Consumer Product Safety Commission (CPSC), with the Environmental Protection Agency (EPA) and state health and environmental officials, to conduct a study to determine whether the inclusion of denatonium benzoate (DB) in coolant/antifreeze has an unreasonable adverse effect on the environment, prohibits the use of new human/animal studies as part of that study, and requires the use of DB in coolant/antifreeze at levels between 30-50 parts/million unless CPSC finds DB poses an unreasonable adverse effect on the environment; (2) allow the CPSC to approve the use of other bittering agents for inclusion in coolant/antifreeze; (3) require a manufacturer of coolant/antifreeze maintain a list of any trade name, scientific name, and active ingredients of any bittering agents used pursuant to this legislation and make them available, if requested, by the public; (4) and sets conditions and exceptions to certain types of legal liability for compliance with this legislation.

**DISPOSITION:** **AGREED TO**, by a roll call vote of 26 yeas to 13 nays.

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Barton				Mr. Dingell		X	
Mr. Hall				Mr. Waxman		X	
Mr. Bilirakis	X			Mr. Markey			
Mr. Upton	X			Mr. Boucher			
Mr. Stearns				Mr. Towns		X	
Mr. Gillmor	X			Mr. Pallone		X	
Mr. Deal	X			Mr. Brown			
Mr. Whitfield				Mr. Gordon			
Mr. Norwood				Mr. Rush			
Ms. Cubin	X			Ms. Eshoo		X	
Mr. Shimkus	X			Mr. Stupak		X	
Ms. Wilson	X			Mr. Engel			
Mr. Shadegg	X			Mr. Wynn		X	
Mr. Pickering	X			Mr. Green			
Mr. Fossella	X			Mr. Strickland			
Mr. Blunt				Ms. DeGette			
Mr. Buyer	X			Ms. Capps		X	
Mr. Radanovich	X			Mr. Doyle		X	
Mr. Bass	X			Mr. Allen		X	
Mr. Pitts	X			Mr. Davis			
Ms. Bono	X			Ms. Schakowsky		X	
Mr. Walden	X			Ms. Solis		X	
Mr. Terry	X			Mr. Gonzalez	X		
Mr. Ferguson	X			Mr. Inslee		X	
Mr. Rogers	X			Ms. Baldwin			
Mr. Otter	X			Mr. Ross	X		
Ms. Myrick	X						
Mr. Sullivan	X						
Mr. Murphy	X						
Mr. Burgess							
Ms. Blackburn	X						

07/12/2006

**COMMITTEE ON ENERGY AND COMMERCE -- 109TH CONGRESS**  
**ROLL CALL VOTE # 134**

**Bill:** H.R. 2567, the Antifreeze Bittering Act of 2005

**AMENDMENT:** An amendment in the nature of a substitute by Ms. Solis, No. 2, to require (1) the U.S. Environmental Protection Agency (EPA) to conduct a comprehensive toxicological, exposure, and risk evaluation of denatonium benzoate (DB) and report its findings to Congress within 18 months of enactment, (2) to require, 18 months later, DB to be emplaced in antifreeze or engine coolant at amounts between 30 and 50 parts per million if EPA finds in its study that DB does not endanger public health, welfare, or the environment; (3) to require a manufacturer of antifreeze or engine coolant to maintain a list of any trade name, scientific name, and active ingredients of any bittering agent used pursuant to this legislation and make them available, if requested, by the public; (4) and provides that the provisions do not apply to the sale of a motor vehicle containing engine coolant or antifreeze or a wholesale container of engine coolant or antifreeze that is 55 gallons or larger.

**DISPOSITION:** NOT AGREED TO, by a roll call vote of 17 yeas to 27 nays.

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Barton		X		Mr. Dingell	X		
Mr. Hall				Mr. Waxman	X		
Mr. Bilirakis		X		Mr. Markey	X		
Mr. Upton		X		Mr. Boucher			
Mr. Stearns				Mr. Towns			
Mr. Gillmor		X		Mr. Pallone	X		
Mr. Deal		X		Mr. Brown			
Mr. Whitfield				Mr. Gordon	X		
Mr. Norwood				Mr. Rush			
Ms. Cubin		X		Ms. Eshoo	X		
Mr. Shimkus		X		Mr. Stupak	X		
Ms. Wilson		X		Mr. Engel	X		
Mr. Shadegg		X		Mr. Wynn	X		
Mr. Pickering		X		Mr. Green	X		
Mr. Fossella		X		Mr. Strickland			
Mr. Blunt				Ms. DeGette			
Mr. Buyer		X		Ms. Capps	X		
Mr. Radanovich		X		Mr. Doyle		X	
Mr. Bass		X		Mr. Allen	X		
Mr. Pitts		X		Mr. Davis			
Ms. Bono		X		Ms. Schakowsky	X		
Mr. Walden		X		Ms. Solis	X		
Mr. Terry	X			Mr. Gonzalez		X	
Mr. Ferguson		X		Mr. Inslee	X		
Mr. Rogers		X		Ms. Baldwin			
Mr. Otter		X		Mr. Ross	X		
Ms. Myrick		X					
Mr. Sullivan		X					
Mr. Murphy		X					
Mr. Burgess		X					
Ms. Blackburn		X					



**COMMITTEE ON ENERGY AND COMMERCE -- 109TH CONGRESS**  
**ROLL CALL VOTE # 135**

**Bill:** H.R. 2567, the Antifreeze Bittering Act of 2005

**AMENDMENT:** An amendment by Ms. Schakowsky, No. 3, to strike "damage to the environment (including damage to natural resources)" and insert "property damage (not including damage to the environment or natural resources)" from the section placing limits on the application of legal liability.

**DISPOSITION:** **NOT AGREED TO**, by a roll call vote of 15 yeas to 27 nays.

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Barton		X		Mr. Dingell	X		
Mr. Hall				Mr. Waxman	X		
Mr. Bilirakis		X		Mr. Markey			
Mr. Upton		X		Mr. Boucher			
Mr. Stearns		X		Mr. Towns	X		
Mr. Gillmor		X		Mr. Pallone	X		
Mr. Deal		X		Mr. Brown			
Mr. Whitfield				Mr. Gordon			
Mr. Norwood				Mr. Rush	X		
Ms. Cubin		X		Ms. Eshoo	X		
Mr. Shimkus		X		Mr. Stupak	X		
Ms. Wilson		X		Mr. Engel	X		
Mr. Shadegg		X		Mr. Wynn		X	
Mr. Pickering		X		Mr. Green	X		
Mr. Fossella				Mr. Strickland			
Mr. Blunt				Ms. DeGette			
Mr. Buyer		X		Ms. Capps	X		
Mr. Radanovich				Mr. Doyle		X	
Mr. Bass		X		Mr. Allen	X		
Mr. Pitts		X		Mr. Davis			
Ms. Bono		X		Ms. Schakowsky	X		
Mr. Walden		X		Ms. Solis	X		
Mr. Terry		X		Mr. Gonzalez		X	
Mr. Ferguson		X		Mr. Inslee	X		
Mr. Rogers		X		Ms. Baldwin			
Mr. Otter		X		Mr. Ross	X		
Ms. Myrick							
Mr. Sullivan		X					
Mr. Murphy		X					
Mr. Burgess		X					
Ms. Blackburn		X					

**COMMITTEE ON ENERGY AND COMMERCE -- 109TH CONGRESS**  
**ROLL CALL VOTE # 136**

**Bill:** H.R. 2567, the Antifreeze Bittering Act of 2005

**MOTION:** A motion by Mr. Barton to order the bill reported, as amended.

**DISPOSITION:** **AGREED TO**, by a roll call vote of 30 yeas to 15 nays.

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Barton	X			Mr. Dingell		X	
Mr. Hall	X			Mr. Waxman		X	
Mr. Bilirakis	X			Mr. Markey		X	
Mr. Upton	X			Mr. Boucher			
Mr. Stearns	X			Mr. Towns		X	
Mr. Gillmor	X			Mr. Pallone		X	
Mr. Deal	X			Mr. Brown			
Mr. Whitfield				Mr. Gordon	X		
Mr. Norwood				Mr. Rush		X	
Ms. Cubin	X			Ms. Eshoo		X	
Mr. Shimkus	X			Mr. Stupak		X	
Ms. Wilson	X			Mr. Engel	X		
Mr. Shadegg	X			Mr. Wynn		X	
Mr. Pickering	X			Mr. Green		X	
Mr. Fossella				Mr. Strickland			
Mr. Blunt				Ms. DeGette			
Mr. Buyer	X			Ms. Capps		X	
Mr. Radanovich				Mr. Doyle	X		
Mr. Bass	X			Mr. Allen		X	
Mr. Pitts	X			Mr. Davis			
Ms. Bono	X			Ms. Schakowsky		X	
Mr. Walden	X			Ms. Solis		X	
Mr. Terry	X			Mr. Gonzalez	X		
Mr. Ferguson	X			Mr. Inslee		X	
Mr. Rogers	X			Ms. Baldwin			
Mr. Otter	X			Mr. Ross	X		
Ms. Myrick							
Mr. Sullivan	X						
Mr. Murphy	X						
Mr. Burgess	X						
Ms. Blackburn	X						

07/12/2006

COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Subcommittee on Environment and Hazardous Materials held a legislative hearing and made findings that are reflected in this report.

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

The objective of H.R. 2567 is to require engine coolant and antifreeze to contain a bittering agent so as to render it unpalatable.

NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

In compliance with clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee finds that H.R. 2567, the Antifreeze Bittering Act of 2005, would result in no new or increased budget authority, entitlement authority, or tax expenditures or revenues.

COMMITTEE COST ESTIMATE

The Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

CONGRESSIONAL BUDGET OFFICE ESTIMATE

Pursuant to clause 3(c)(3) of rule XIII of the Rules of the House of Representatives, the following is the cost estimate provided by the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, July 27, 2006.*

Hon. JOE BARTON,  
*Chairman, Committee on Energy and Commerce,  
House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2567, the Antifreeze Bittering Agent Act of 2006.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Geoffrey Gerhardt.

Sincerely,

DONALD B. MARRON,  
*Acting Director.*

Enclosure.

*H.R. 2567—Antifreeze Bittering Agent Act of 2006*

H.R. 2567 would direct the Consumer Product Safety Commission (CPSC) to issue regulations requiring the use of a bittering agent in antifreeze and other engine coolants. The purpose of the bittering agent would be to make antifreeze unpalatable to humans and animals. Prior to issuing its regulations, the CPSC would be required to conduct an environmental impact evaluation in con-

junction with the Environmental Protection Agency. The bill would require the CPSC to ensure that manufacturers comply with the new regulations and maintain compliance records. Based on information provided by the CPSC, CBO estimates that implementing H.R. 2567 would cost less than \$500,000 annually, subject to the availability of appropriated funds.

The legislation would preempt state laws that require the addition of bittering agents in antifreeze and would establish a uniform federal standard. The bill also would limit liability claims associated with the addition of bittering agents to antifreeze. The preemption and the limitation on liability would be intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Although the preemption would limit the application of state law, it would not impose a duty on states that would require additional spending. The liability protection would be narrow in scope—providing protection primarily to manufacturers and other entities involved in distributing antifreeze that includes a bittering agent. CBO is unaware of any current or pending case that would be affected by the bill; consequently, we estimate that the costs of the mandates would be small and would not exceed the threshold established in UMRA (\$64 million in 2006, adjusted annually for inflation).

H.R. 2567 contains private-sector mandates as defined in UMRA on manufacturers of engine coolant and antifreeze that distribute their products to be sold by retail businesses. In the event that the CPSC finds evidence that the use of the bittering agent denatonium benzoate (or a comparable alternative) has no “unreasonable adverse effect on the environment,” those manufacturers would be required to:

- Add denatonium benzoate to their product mixtures that are comprised of more than 10 percent ethylene glycol; and
- Keep detailed records of any bittering agents used in their products.

As noted above, the bill also would limit liability claims associated with the addition of bittering agents to antifreeze. CBO estimates that the aggregate direct costs of complying with those mandates would be minimal compared to the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation).

Under H.R. 2567, if the CPSC determines that the use of the bittering agent in engine coolant or antifreeze would have no adverse effects on the environment, coolant and antifreeze manufacturers would be required to add the agent to certain product mixtures. The bill would exempt coolant and antifreeze distributed to original manufacturers (such as motor vehicle manufacturers) and garages that purchase wholesale engine coolant or antifreeze for purposes other than retail sales. According to industry sources, about 160 million gallons of coolant and antifreeze are sold in the U.S. retail market each year. Industry and government sources indicate that adding the bittering agent to product mixtures would cost manufacturers less than \$0.03 per gallon of coolant or antifreeze. Furthermore, the industry expects to incur some costs associated with upgrades necessary for storing denatonium benzoate at manufacturing plants. Industry sources estimate such costs fall be-

tween \$50,000 and \$70,000 per plant. Based on those data, CBO estimates that the costs associated with this mandate would not exceed \$6 million per year.

Also, contingent upon CPSC's determination, coolant and antifreeze manufacturers would be required to record the trade name, scientific name, and any active ingredient of any bittering agent used in product mixtures. The bill also would require manufacturers to make those records available to the public. Since manufacturers would already have such information, CBO expects the costs associated with such record keeping to be minimal.

On December 14, 2005, CBO transmitted a cost estimate for S. 1110, the Engine Coolant and Antifreeze Bittering Agent Act of 2005, as ordered reported by the Senate Committee on Commerce, Science, and Transportation on November 17, 2005. The mandates contained in H.R. 2567 are identical to those in S. 1110.

The CBO staff contacts for this estimate are Geoffrey Gerhardt (for federal costs), Leo Lex (for the state and local impact), and Craig Cammarata (for the private-sector impact). This estimate was approved by Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

#### FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

#### ADVISORY COMMITTEE STATEMENT

No advisory committees within the meaning of section 5(b) of the Federal Advisory Committee Act were created by this legislation.

#### CONSTITUTIONAL AUTHORITY STATEMENT

Pursuant to clause 3(d)(1) of rule XIII of the Rules of the House of Representatives, the Committee finds that the Constitutional authority for this legislation is provided in Article I, section 8, clause 3, which grants Congress the power to regulate commerce with foreign nations, among the several States, and with the Indian tribes.

#### APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

#### SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

##### *Section 1. Short title*

Section 1 sets forth the short title of the bill as the "Engine Coolant and Antifreeze Bittering Agent Act of 2005."

##### *Section 2. Addition of bittering agent in antifreeze*

Section 2 amends the Federal Hazardous Substances Act (FHSA) by adding a new Section 25 to FHSA establishing a national standard for the production and distribution of engine coolant and anti-

freeze products by requiring the addition of a bittering agent, subject to Section 25(a)(1)(A–C).

*Section 25. Addition of bittering agent in antifreeze required*

New Section 25(a)(1)(A–C) requires the CPSC, in cooperation with the U.S. Environmental Protection Agency (EPA) and State and local officials in States that have already enacted an antifreeze or engine coolant bitterant requirement, to evaluate whether evidence exists of any unreasonable adverse effect on the environment resulting from the addition of denatonium benzoate in engine coolant and antifreeze products. In addition, new Section 25(a)(1)(C) prohibits the use of new animal or human testing studies to be used as part of the evaluations required under this paragraph.

New Section 25(a)(2)(A) requires all antifreeze products containing more than 10 percent ethylene glycol to have a chemical concentration of at least 30–50 parts per million of the bittering agent denatonium benzoate. The 10 percent threshold covers all off-the-shelf, retail antifreeze products made with ethylene glycol.

New Section 25(a)(2)(B) allows for additional bittering agents to enter the market if the CPSC decides, through a rulemaking, that an alternative additive is as effective as denatonium benzoate and does not present an unreasonable adverse effect to the environment.

New Section 25(a)(3) defines “unreasonable adverse effect” as that which poses an unreasonable risk to human health or the environment, after taking into account economic, social, and environmental costs and benefits.

New Section 25(a)(4) establishes that any antifreeze product manufactured without denatonium benzoate, or an approved alternative, be considered a banned hazardous substance. The CPSC would have the authority to impose penalties on manufacturers of antifreeze that fail to add the bittering agent. If the omission is purposeful, or a repeat offense, the CPSC could fine a manufacturer up to \$500,000 when a human death occurs, under current regulations.

New Section 25(b) requires antifreeze manufacturers to maintain a record, available to the public upon request, of the antifreeze product trade name, a record of the scientific name (ethylene glycol), and a compilation of any active ingredients of the relevant bittering agent (denatonium benzoate).

New Section 25(c) assigns liability to manufacturers, processors, distributors, recyclers, or sellers of engine coolant and antifreeze products, manufacturers and distributors of denatonium benzoate, and manufacturers and distributors of any alternative bittering agent. It would assign liability based upon which product, i.e., antifreeze, or bittering agent, is proven to have caused personal injury, death, property damage, damage to the environment (including natural resources), or economic loss. If the injury, death, damage, or loss stems from the inclusion of a bittering agent in an engine coolant or antifreeze product, the manufacturer, processor, distributor, recycler, or seller of the engine coolant or antifreeze product would not be held liable. The bill would not afford any protection from liability to manufacturers and distributors of DB or alternative bittering agents. The liability protection for the antifreeze or coolant manufacturer does not attach unless and until the bittering

agent is present in concentrations mandated by the Act, therefore injury or damage caused by mishandling of the bittering agent prior to or separate from being blended with the antifreeze or coolant is not limited. The assignment of liability established in the statute should not be construed to prevent or deter both manufacturers from being named as parties to a lawsuit. Each manufacturer remains wholly liable for its respective product of manufacture, and to the extent a court determines causation and liability for that respective product under State or Federal law.

New Section 25(d) preempts all State or political subdivision statutes and regulations that prohibit, limit, standardize, or impose any requirement different from the Federal standard set forth by this Act. The Committee does not intend these preemption provisions to apply to any part or provision of a State law that addresses the inclusion of a bittering agent in any product other than engine coolant or antifreeze, especially if that State law requiring the bittering agent in another product also contains provisions directing the inclusion of a bittering agent in engine coolant or antifreeze.

New Section 25(e) exempts sales of motor vehicles that contain engine coolant or antifreeze, or sales of wholesale containers of engine coolant or antifreeze containing more than 55 gallons of antifreeze, from the Federal standard imposed by this Act.

#### CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (new matter is printed in italic and existing law in which no change is proposed is shown in roman):

### FEDERAL HAZARDOUS SUBSTANCES ACT

\* \* \* \* \*

#### SEC. 25. ADDITION OF BITTERING AGENT IN ANTIFREEZE REQUIRED.

##### (a) BITTERING AGENT.—

##### (1) ENVIRONMENTAL EVALUATION REQUIRED.—

(A) *IN GENERAL.*—Not later than 30 days after the date of enactment of this section, the Consumer Product Safety Commission shall commence an evaluation, in cooperation with the Environmental Protection Agency and appropriate State health and environmental officials in those States that, as of the date of enactment of this section, have enacted laws requiring a bittering agent in engine coolant or antifreeze, to determine whether there is evidence that the use of the bittering agent denatonium benzoate in engine coolant or antifreeze has an unreasonable adverse effect on the environment.

(B) *CERTAIN TESTS PROHIBITED.*—The evaluation required under subparagraph (A) may not include any new animal or human testing.

(C) *REQUIRED DATE OF COMPLETION.*—The Commission shall complete the evaluation within 180 days after the date of enactment of this section and publish its findings in the Federal Register.

(2) *USE OF BITTERING AGENT.*—

(A) *GENERAL REQUIREMENT.*—Unless the Commission, in its evaluation under paragraph (1), finds there is evidence of an unreasonable adverse effect on the environment, any engine coolant or antifreeze that is manufactured on or after the date that is 180 days after the date of publication of the Commission's finding in the Federal Register pursuant to paragraph (1)(C), and that contains more than 10 percent ethylene glycol, shall include not less than 30 parts per million, and not more than 50 parts per million, denatonium benzoate as a bittering agent in order to render the coolant or antifreeze unpalatable.

(B) *ALTERNATIVE AGENT.*—If the inclusion of denatonium benzoate in engine coolant or antifreeze is required under subparagraph (A) and the Commission finds that—

(i) an alternative bittering agent is as effective as denatonium benzoate in rendering coolant or antifreeze unpalatable in terms of both its bittering capacity and its compatibility with motor vehicle engine coolant and antifreeze, and

(ii) in cooperation with the Environmental Protection Agency, there is no evidence that the use of the alternative bittering agent has an unreasonable adverse effect on the environment,

the Commission may initiate a rulemaking to permit the use of the alternative bittering agent in lieu of denatonium benzoate.

(3) *UNREASONABLE ADVERSE EFFECT ON THE ENVIRONMENT DEFINED.*—As used in this subsection, the term “unreasonable adverse effect on the environment” means an unreasonable risk to human health or the environment, taking into account the economic, social, and environmental costs and benefits.

(4) *FAILURE TO COMPLY.*—Any engine coolant or antifreeze that is required to contain a bittering agent under paragraph (2) that is not in compliance with that paragraph shall be considered to be a banned hazardous substance within the meaning of section 2(q) (15 U.S.C. 1261(q)), and shall be subject to the penalties provided for in section 5 (15 U.S.C. 1264).

(b) *RECORD KEEPING.*—

(1) *NAME AND ACTIVE INGREDIENT.*—A manufacturer of an engine coolant or antifreeze that is required to contain a bittering agent under subsection (a) shall maintain a record of the trade name, scientific name, and any active ingredients of a bittering agent used in compliance with such subsection.

(2) *AVAILABILITY TO THE PUBLIC.*—Any record maintained under paragraph (1) shall be made available to the public on receipt by the manufacturer of a request from any person.

(c) *LIMITATION OF LIABILITY.*—

(1) *IN GENERAL.*—Subject to paragraph (2), a manufacturer, processor, distributor, recycler, or seller of an engine coolant or antifreeze that is required to contain a bittering agent under subsection (a) shall not be liable to a person for any personal injury, death, property damage, damage to the environment (including natural resources), or economic loss that results from the inclusion in the engine coolant or antifreeze of the bittering



*agent, provided that the bittering agent is present in concentrations mandated by subsection (a)(2)(A) or permitted pursuant to a rulemaking under subsection (a)(2)(B).*

*(2) EXCEPTION.—Paragraph (1) shall not apply in any case in which a cause of liability referred to in that paragraph is unrelated to the inclusion in an engine coolant or antifreeze of the bittering agent as required by subsection (a). Nothing in this subsection shall be construed to exempt any manufacturer or distributor of denatonium benzoate, or an alternative bittering agent the use of which is required or permitted under subsection (a)(2), from any liability related to denatonium benzoate or the alternative bittering agent.*

*(d) PREEMPTION.—No State or political subdivision of a State shall establish or continue to enforce with respect to retail containers containing less than 55 gallons of engine coolant or antifreeze any prohibition, limitation, standard or other requirement relating to the inclusion of a bittering agent in engine coolant or antifreeze that is different from, or in addition to, the requirements of this section.*

*(e) EXEMPTION.—This section shall not be construed to apply to—*

*(1) the sale of a motor vehicle that contains engine coolant or antifreeze; or*

*(2) a wholesale container of engine coolant or antifreeze that contains 55 gallons or more of engine coolant or antifreeze.*

DISSENTING VIEWS OF THE HONORABLE JOHN D. DINGELL, HENRY A. WAXMAN, EDWARD J. MARKEY, EDOLPHUS TOWNS, FRANK PALLONE, JR., ANNA G. ESHOO, BART STUPAK, GENE GREEN, DIANA DEGETTE, LOIS CAPS, TOM ALLEN, JAN SCHAKOWSKY, HILDA L. SOLIS, JAY INSLEE, AND TAMMY BALDWIN

H.R. 2567, the “Antifreeze Bittering Act of 2005”, as reported by the Committee on Energy and Commerce is a bill with a worthy goal, but a fundamentally flawed approach that puts drinking water supplies at risk, eliminates environmental liability (including Superfund), and preempts all existing and future State laws.

Under the terms of the bill, Congress will be effectively mandating the use of a particular chemical bittering agent, denatonium benzoate, in all antifreeze manufactured and sold in any container smaller than 55 gallons. The Committee is taking this action in the absence of sound science showing this chemical is safe for the environment and public health and is effective and efficacious in preventing children and pets from ingesting antifreeze.

While many questions remain about the environmental impact of this chemical, what we do know is very disturbing. We know that multiple studies by reputable companies, such as Roy F. Westin, Inc., have shown that denatonium benzoate does not biodegrade, that it would pass through publicly-owned treatment facilities, and could reasonably be expected to contaminate groundwater and make it bitter.

One such study conducted for the Chemical Specialties Manufacturers Association concluded:

\* \* \* denatonium benzoate does not “stick” in the soil. Rather, it stays in and travels with the groundwater. Therefore, it is reasonable to expect contamination problems as the denatonium benzoate accumulates in the groundwater—the net result is that the groundwater may become bitter (and thus, well water in the area would potentially be unpotable).

The American Water Works Association (AWWA), representing 4,800 utilities and 57,000 drinking water professionals, testified on May 23, 2006, before the Subcommittee on Environment and Hazardous Materials that “we believe it is reasonable to expect contamination problems as DB [denatonium benzoate] accumulates in the groundwater supplies. Given the extreme bitter properties of DB, it appears that tiny amounts of the chemical could render drinking water supplies bitter and unpalatable.”

The water utility industry also informed the Committee that taste and odor concerns are extremely important to drinking water utility customers. According to the U.S. distributor of DB, consumers would taste denatonium benzoate in water at levels of 1–

10 parts per million (ppm), and according to AWWA, consumers would taste DB on the order of low part per billion levels, if not lower.

The President of the Consumer Specialty Product Association, representing antifreeze manufacturers such as Honeywell, raised the same environmental concerns publicly in a letter to a New Mexico newspaper when he stated:

Not only is the effectiveness of mandating the use of a bittering agent in antifreeze questionable, there are also concerns about the impact of denatonium on the environment. Independent scientific studies have determined that DB does not biodegrade and is not removed during the processes used to treat wastewater at publicly owned treatment facilities. If poured onto the ground, DB could contaminate ground water, potentially threatening public drinking water. (Letter from Chris Cathcart, President, Consumer Specialty Product Association, to Albuquerque Journal, July 28, 2004.)

In the face of these credible and serious public health and environmental concerns, we strongly believe that the Committee should require the Environmental Protection Agency (EPA) to conduct a comprehensive toxicological, exposure, and risk evaluation of the bitterant denatonium benzoate and make a finding that it will not endanger public health or the environment before we mandate its use in antifreeze. Representative Solis offered this approach, but it was rejected by a vote of 27–17.

The amendment offered by Representative Wilson and adopted by a vote of 26–13 that proponents claim provides for an environmental review actually stacks the deck in favor of mandating the one chemical, denatonium benzoate, as a bittering agent. It gives the final decision to the Consumer Product Safety Commission (CPSC), an agency with no environmental expertise, prohibits any new animal testing, does not allow for public comment or judicial review under the Federal Hazardous Substances Act, and places an unrealistic time frame of 180 days for the decision by the CPSC.

Further, the regulatory standard that the CPSC must use (unreasonable risk to human health or the environment, taking into account the economic, social, and environmental costs and benefits) is similar to one EPA used in its failed attempt to regulate asbestos, a known carcinogen, after a 10-year rulemaking and a 100,000 page record.

Under the Democratic Substitute we would get the facts first, assure the American public that denatonium benzoate is safe, and only then require denatonium benzoate or another equally effective aversive agent in antifreeze.

We find the opposition to this sensible and responsible approach surprising since it is exactly what the antifreeze industry recommended two years ago when they were opposing the mandating of denatonium benzoate in antifreeze. In a July 16, 2004, letter the Consumer Specialty Product Association said:

\* \* \* In addition we believe that any additional requirements for the inclusion of bitterants in antifreeze and other [automotive products/engine coolants] should be de-

ferred at least until such time as full toxicological, exposure and risk evaluations are publicly available for the bitterants themselves—both as discrete chemicals, and as incorporated into automotive products. Just as our members have developed scientific profiles of their automotive products, it is important both that comprehensive scientific assessments of the bitterants be performed, and that the complete results of those assessments be made to the producers of the automotive products, to government officials, and to the general public. This has not happened to date. (Letter dated July 16, 2004, from the Consumer Specialty Product Association to Macfarlan Smith Limited.)

The antifreeze industry was so concerned about the environmental consequences of the bittering agent, denatonium benzoate, that they attempted to get information about its environmental fate, environmental toxicology, and mammalian toxicology from the foreign manufacturers. These attempts have been totally unsuccessful to date.

The EPA has not performed any comprehensive evaluation and has extremely limited actual data about the chemical denatonium benzoate. At the Subcommittee on Environment and Hazardous Materials hearing on May 23, 2006, the EPA witness testified that the EPA had “not actually done any testing,” “did not do a data call in,” had “no extensive database of toxicity or environmental fate information on DB,” had “not conducted a full risk assessment,” and had “not enough information for the agency to conduct a thorough human health or environmental assessment on this chemical.” In fact, at the Subcommittee’s hearing the EPA witness acknowledged that he was not aware of the myriad of scientific studies that the Consumer Specialty Products Association had submitted to the Congressional Research Service indicating serious environmental concerns that could lead to the pollution of drinking water supplies. In addition, the EPA could not guarantee that DB will not have harmful human health effects as the following exchange reflects:

Mr. INSLEE. . . . can the Federal government guarantee that DB will not be harmful to human health in any manifestation?

Mr. WILLIS. No, Congressman, we cannot make that guarantee.

Mr. INSLEE. And why can’t you make that guarantee?

Mr. WILLIS. Because we don’t have the test data for all possible endpoints, nor do we have the fate and exposure data that would allow us to do that sort of assessment.

#### LIABILITY SHIELD

It appears that these serious environmental concerns, and absence of any comprehensive evaluation showing that denatonium benzoate is safe, is the reason that the antifreeze manufacturers have insisted on the sweeping legal immunity provision that would eliminate all environmental liability, including Superfund liability for the manufacturers, processors, distributors, recyclers, or sellers of antifreeze from the inclusion of the prescribed amount of denatonium benzoate. Under H.R. 2567 they would be immune

from liability for the harm caused by denatonium benzoate even if the antifreeze spill was caused by their own negligence or gross negligence. This provision violates the “polluter pays” principle. This liability shield would also override State tort laws. Three States: Oregon, California, and New Mexico, have passed laws requiring aversive agents in antifreeze. Neither the California or Oregon laws provide a shield against environmental liability, including natural resources damages. The New Mexico law has an environmental liability waiver from State laws but it has no effect on federal Superfund liability, and Governor Richardson informed the Committee by letter dated May 22, 2006, that he does not support an exemption from Superfund liability.

In the case of public drinking water supplies or rural potable wells contaminated by denatonium benzoate from an antifreeze spill, H.R. 2567 would shift the costs of cleanup or alternative water supplies onto the community ratepayers or the local rancher or farmer. It gives us no comfort that in the case of a spill caused by the negligence or gross negligence of an antifreeze manufacturer that results in denatonium benzoate contamination that the bill does not exempt the liability of the foreign manufacturer of DB—a liability they in all likelihood do not have in the circumstances described.

We do not support overriding our Superfund and other environmental laws in this manner to leave our citizens with no effective legal redress. While denatonium benzoate may be used in other household products, we are aware of no such product where the manufacturer of the product has been given a liability exemption from Federal laws, including environmental laws.

The American Water Works Association, the American Metropolitan Water Association, the League of Conservation Voters, the Natural Resources Defense Council, Clean Water Action, Earth Justice, National Environment Trust, Friends of the Earth, the Sierra Club, and the U.S. Public Interest Research Group have told the Committee that they strongly oppose the environmental liability shield for the antifreeze manufacturers. Therefore, an amendment was offered by Reps. Schakowsky, Pallone, and Inslee to strike the environmental liability shield from the bill. It was rejected by a vote of 27–15.

#### EFFECTIVENESS OF DENATONIUM BENZOATE QUESTIONED

Very serious questions have also been raised about the effectiveness and efficacy of denatonium benzoate in preventing unwanted toxic ingestion of antifreeze by children or dogs. The Animal Poison Control Center has taken the position that legislation requiring the addition of taste deterrents to certain commercial products to protect animals is not appropriate without scientific data demonstrating that commercial products containing taste aversive deterrent agents consistently protect dogs from consuming toxic amounts of commercial products. Further, the Animal Poison Control Center has stated:

However, we are not aware of any well-controlled published scientific research demonstrating that dogs can be consistently protected from poisoning through the addition

of taste aversive agents including denatonium benzoate. Furthermore, we are concerned that pet owners will have a false sense of security if products containing taste aversive substances were marketed as “safer” for use in households with pets. (Letter dated March 30, 2004, from Animal Poison Control Center to Consumer Specialty Products Association.)

According to a June 30, 2004, memorandum from the Congressional Research Service assessing the studies that have been done to determine its effectiveness as a bittering agent and deterrent in animals and humans:

Few studies have been conducted to assess the effectiveness of denatonium benzoate in discouraging tasting, swallowing, or otherwise repelling wildlife, pets, or children. A recent review concluded that with respect to carnivores, “products that contain denatonium derivatives . . . are ineffective repellents, almost regardless of species . . . or method of application (e.g., topical spray, incorporated into products). Canids [i.e., dogs], in particular coyotes, are markedly insensitive to denatonium benzoate.”<sup>1</sup> A comparison of 20 deer repellents reportedly concluded that compared to repellents that emitted sulfurous odors, “. . .[p]roducts that use a bitter taste (denatonium benzoate) were usually the least effective in reducing damage by herbivores.”<sup>2</sup>

Only a few studies have been conducted with children, and these were too small and narrowly focused to allow conclusions regarding the efficacy of denatonium benzoate.<sup>3</sup> Because the chemical is odorless, its bitter chemical taste could not deter children from taking an initial drink of the available liquids. Of 30 children in one study, 7 took more than a single taste, despite the bitter taste. A comment in the journal *Pediatrics* provides a succinct summary of the situation and a recommendation.

We recommend that the use of denatonium benzoate be studied in a limited number of products including those containing ethylene glycol, methanol, and toxic pesticides. Such studies must be monitored prospectively to determine the impact of this intervention. The surveillance data annually compiled by the American Association of Poison Control Centers is one tool that could be utilized. Future use of denatonium benzoate as an aversive agent should depend on the clear demonstration of efficacy in such prospective studies. The use of aversive agents must not be a

<sup>1</sup>Mason, J.R., and J.A. McConnell. 1997. Hedonic responsiveness of coyotes to 15 aqueous taste solutions. *Journal of Wildlife Research*, v. 2, p. 21–24.

<sup>2</sup>Nolte, D.L., and K.K. Wagner. 2000. Comparing the efficacy of delivery systems and active ingredients of deer repellents. In: T.P. Salmon and A.C. Crabb (eds.) *Proceedings, Nineteenth Vertebrate Pest Conference*, University of California, Davis, CA, p. 93–100. [<http://www.aphis.usda.gov/ws/nwrc/is/00pubs/00-52.PDF>], visited June 30, 2004.

<sup>3</sup>Klein-Schwartz, W. 1991. Denatonium benzoate: review of efficacy and safety. *Veterinary and Human Toxicology*, v. 33, n. 6, p. 545–547.

substitute for other preventive measures, such as child-resistant closures.<sup>4</sup>

Similar concerns have been raised by governmental agencies and private industry.

In a final report of the Congressionally directed study of aversive agents by the U.S. Consumer Product Safety Commission, the Commission found that: “. . . there is no evidence that denatonium benzoate or any other possible aversive agent is actually effective at limiting ingestions of consumer products.” (Consumer Product Safety Commission, Final Report—Study of Aversive Agents, Nov. 18, 1992.)

In the early 1990s, Texaco, Inc., conducted studies on Bitrex, a brand name for denatonium benzoate, and concluded: “We have found no evidence to date that Bitrex imparts any aversive properties to antifreeze, regardless of composition.” (Letter dated Aug. 26, 1991, from Texaco to the Consumer Product Safety Commission.)

Another study dated November 21, 1990, submitted by the antifreeze industry to the Congressional Research Service was conducted by the Procter & Gamble Company to evaluate the effectiveness of denatonium benzoate as an aversive. The Procter & Gamble study concluded the following:

- (1) Denatonium benzoate does not reduce the incidence of ingestions.
- (2) Even though the number of ingestions greater than one ounce is very small, the data demonstrate that even with denatonium benzoate large volume ingestions can occur, and that the percent of ingestions greater than one ounce is similar between products with and without aversive.

Oregon was the first State in the country to mandate the addition of an aversive agent to antifreeze. In 2004, two medical doctors from the Oregon Poison Control Center published the results of their analysis of whether it was necessary to add denatonium benzoate to automotive products:

The first law mandating addition of DB was never necessary, as unintentional EG [ethylene glycol] or MeOH [methanol] exposures in preschool age children did not cause measurable toxicity. The mandatory addition of DB to automotive products has produced no measurable reduction in unintentional pediatric toxic alcohol exposures in Oregon. There is no compelling reason to consider similar legislation in other jurisdictions. (Mullins, Michael E. and B. Zane Horowitz, Veterinary and Human Toxicology, June 2004, p. 46.)

Unfortunately, we have no other information from any of the three States that have passed laws as to whether they are effective in preventing unwanted ingestion of antifreeze since the States are not collecting or recording such data.

<sup>4</sup>Rodgers, G.D. and M. Tenenbein. 1994. The role of aversive bittering agents in the prevention of pediatric poisonings. *Pediatrics*, v. 93, n. 1, p. 68–69.

Nationally, we are aware that without an aversive agent, a review of U.S. poison center fatality data for the 18-year period between 1985–2002 did not find any suspected suicides or deaths from ethylene glycol reported in children under the age of 12 years. (American Association of Poison Control Centers report in *Journal of Clinical Toxicology* (2005).)

Until this year’s version of the legislation, H.R. 2567, provided the antifreeze industry with broad liability immunity and preempted all State laws, the industry opposed the inclusion of the bitterant denatonium benzoate in antifreeze, stating that “there is no demonstrated scientific basis for these State and local requirements.” (Letter dated July 16, 2004, from the Consumer Specialty Product Association to Macfarlan Smith Limited.)

H.R. 2567 would not allow a State to enact and enforce a requirement that manufacturers of antifreeze use an “aversive agent” in antifreeze rather than a bittering agent. The Federal Government should not enact legislation that strips away the ability of a State to better protect the health and safety of its citizens.

We believe that we should follow a normal and responsible legislative process and obtain the facts first, so as to resolve the serious questions about the environmental risks and effectiveness of denatonium benzoate before nationally mandating it or another equally effective aversive agent in antifreeze. H.R. 2567 as reported is a deeply-flawed piece of legislation and does not merit support.

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