

on manufactured home unit loans, lot loans, and combination manufactured home unit and lot loans in order to assure an adequate supply of funds from lenders and investors to make these types of VA loans.

The Secretary is also required by section 3703(c) (formerly 1803(c), title 38, United States Code, to establish maximum interest rates for home and condominium loans, including graduated payment mortgage loans, and loans for home improvement purposes. Recent market indicators—including the rate of discount charged by lenders on VA loans and the general increase in interest rates charged by lenders on conventional loans, have shown that the mortgage money market has become more restrictive. The maximum rates in effect for VA guaranteed home and condominium loans and those for energy conservation and home improvement purposes have not been sufficiently competitive to induce private sector lenders to make these types of VA guaranteed or insured loans without imposing substantial discounts. To assure a continuing supply of funds for home mortgages through the VA loan guaranty program, it has been determined that an increase in the maximum permissible rates applicable to home and improvement loans is necessary. The increased return to the lender will make VA loans competitive with other available investments and assure a continuing supply of funds for guaranteed and insured mortgages.

#### Regulatory Flexibility Act/Executive Order 12291

For the reasons discussed in the May 7, 1981 Federal Register, (46 FR 25443), it has previously been determined that final regulations of this type which change the maximum interest rates for loans guaranteed, insured, or made pursuant to chapter 37 of title 38, United States Code, are not subject to the provisions of the Regulatory Flexibility Act, 5 U.S.C. 601-612.

These regulatory amendments have also been reviewed under the provisions of Executive Order 12291. VA finds that they are not "major rules" as defined in that Order. The existing process of informal consultation among representatives within the Executive Office of the President, OMB, VA and the Department of Housing and Urban Development has been determined to be adequate to satisfy the intent of this Executive Order for this category of regulations. This alternative consultation process permits timely rate adjustments with minimal risk of premature disclosure. In summary, this consultation process will fulfill the

intent of the Executive Order while still permitting compliance with statutory responsibilities for timely rate adjustments and a stable flow of mortgage credit at rates consistent with the market.

These final regulations come within exceptions to the general VA policy of prior publication of proposed rules as contained in 38 CFR 1.12. The publication of notice of a regulatory change in VA maximum interest rates for VA guaranteed, insured, and direct home and condominium loans, loans for energy conservation and other home improvement purposes, and loans for manufactured home purposes would create an acute shortage of funds pending the final rule publication date which would necessarily be more than 30 days after publication in proposed form. Accordingly, it has been determined that publication of proposed regulations prior to publication of final regulations is impracticable, unnecessary, and contrary to the public interest.

(Catalog of Federal Domestic Assistance Program numbers, 64.113, 64.114, and 64.119.)

These regulations are adopted under authority granted to the Secretary by sections 210(c), 3703(c)(1), 3711(d)(1) and 3712 (f) and (g) of title 38, United States Code. The regulations are clearly within that statutory authority and are consistent with Congressional intent.

These increases are accomplished by amending sections 36.4212(a) (1), (2), and (3), and 36.4311 (a), (b), and (c), and 36.4503(a), title 38, Code of Federal Regulations.

#### List of Subjects in 38 CFR Part 36

Condominiums, Handicapped, Housing, Loan programs—housing and community development, Manufactured homes, Veterans.

Approved: February 21, 1992.  
Anthony J. Principi,  
Deputy Secretary of Veterans Affairs.

For the reasons set out in the preamble, 38 CFR part 36 is amended as set forth below:

#### PART 36—LOAN GUARANTY

1. The authority citation for §§ 36.4201 through 36.4287 continues to read as follows:

Authority: Sections 36.4201 through 36.4287 issued under 72 Stat. 1114, 84 Stat. 1110 (38 U.S.C. 210, 3712).

#### § 36.4212 [Amended]

2. In § 36.4212, remove the date "December 20, 1991", wherever it appears, and add, in its place, the date "February 24, 1992".

3. In § 36.4212, paragraph (a)(1), remove the number "10½", wherever it appears, and add, in its place, the number "11"; in paragraphs (a)(2) and (a)(3), remove the number "10", wherever it appears, and add, in its place, the number "10½".

4. The authority citation for §§ 36.4300 through 36.4375 continues to read as follows:

Authority: Sections 36.4300 through 36.4375 issued under 72 Stat. 1114 (38 U.S.C. 210).

#### § 36.4311 [Amended]

5. In § 36.4311, remove the date "December 20, 1991", wherever it appears, and add, in its place, the date "February 24, 1992".

6. In § 36.4311, paragraph (a), remove the number "8", wherever it appears, and add, in its place, the number "8½"; in paragraph (b), remove the number "8¼", wherever it appears, and add, in its place, the number "8¾"; in paragraph (c), remove the number "9½", wherever it appears, and add, in its place, the number "10".

7. The authority citation for §§ 36.4500 through 36.4600 continues to read as follows:

Authority: Sections 36.4500 to 36.4600 issued under 72 Stat. 1114 (38 U.S.C. 210).

#### § 36.4503 [Amended]

8. In § 36.4503, paragraph (a), remove the numbers "8" and "9½", wherever they appear, and add in their place, the numbers "8½" and "10", respectively.

[FR Doc. 92-4991 Filed 3-3-92; 8:45 am]  
BILLING CODE 8320-01-M

## ENVIRONMENTAL PROTECTION AGENCY

[OPPTS-42146A; FRL 3998-1]

### 40 CFR Part 799

#### Testing Consent Order For Acrylic Acid

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: This document announces that EPA has signed an enforceable testing Consent Order with BASF Corporation, Dow Chemical U.S.A., Hoechst Celanese Chemical Group, Rohm and Haas Company, and Union Carbide Chemicals and Plastics, Inc., hereinafter referred to as "the Companies." The Companies have agreed to perform certain health effects tests on acrylic acid (CAS No. 79-10-7).

Acrylic acid is added to the list of testing Consent Orders in 40 CFR 799.5000 for which export notification requirements of 40 CFR part 707 apply. This rule constitutes EPA's response to the Interagency Testing Committee's (ITC) designation of acrylic acid for testing consideration.

**EFFECTIVE DATE:** March 4, 1992.

**FOR FURTHER INFORMATION CONTACT:**

David Kling, Acting Director,  
Environmental Assistance Division (TS-799), Office of Pollution Prevention and Toxics, rm. E-543B, 401 M St., SW., Washington, DC 20460, (202) 554-1404, TDD (202) 554-0551.

**SUPPLEMENTARY INFORMATION:** Under procedures described in 40 CFR part 790, the Companies have entered into a testing Consent Order with EPA in which they have agreed to perform certain health effects tests for acrylic acid. This rule amends 40 CFR 799.5000 by adding acrylic acid to the list of chemical substances and mixtures subject to testing Consent Orders and export notification requirements.

### I. ITC Designation

In its Twenty-seventh Report to the Administrator of the Environmental Protection Agency, published in the Federal Register on March 6, 1991 (56 FR 9534), the ITC designated acrylic acid for priority testing consideration for certain chemical fate and health effects testing. The rationale for the original designation appeared in that Report.

### II. Testing Consent Order Negotiations

In accordance with 40 CFR 790.28, EPA issued a Federal Register notice on August 20, 1991 (56 FR 41353), announcing a public meeting and EPA's intent to develop a testing Consent Order for acrylic acid. EPA requested persons interested in participating in or monitoring testing negotiations on acrylic acid to contact EPA by September 5, 1991. BASF Corporation, Dow Chemical U.S.A., Hoechst Celanese Corporation, Rohm and Haas Company, and Union Carbide Chemicals Plastics Company Inc. identified themselves through their agent, the Basic Acrylic Monomer Manufacturers (BAMM), as interested parties. On September 12, 1991, EPA convened a public meeting attended by representatives of the interested parties. At the public meeting BAMM, on behalf of its member companies, presented a proposed testing plan and provided test protocols. Protocols were presented for an inhalation developmental toxicity study, an oral (drinking water) two-generation reproductive and fertility study and a bioavailability study.

The ITC report also recommended testing for mutagenicity, neurotoxicity, inhalation oncogenicity, and river die-away biodegradation. After consideration of BAMM's proposed testing plan and review of new studies submitted to EPA by BAMM in response to the ITC report, EPA has determined that these tests are not needed at this time.

The ITC report stated that *in vivo* mutagenicity data may be needed for acrylic acid. A number of mutagenicity studies were identified by BAMM as missing from the EPA's database for acrylic acid. These studies were supplied in BAMM's response to the ITC list (Ref. 1). EPA identified three principal studies (Refs. 2, 3, and 4) and reviewed the data. The *in vivo* cytogenetics and the *Drosophila* sex-linked recessive lethal tests were negative; the dominant lethal study is still under review. EPA may require additional mutagenicity testing (e.g., heritable translocation study or another dominant lethal test), if the existing dominant lethal study is not negative. Any additional testing would be done under either a separate Consent Order or a test rule under section 4 of TSCA. The relative priority for future testing will be developed after considering the range of potential testing needs as identified by the Master Testing List (MTL) process (56 FR 42055; August 26, 1991).

EPA considered neurotoxicity testing for acrylic acid but decided not to require these tests because it is unlikely that neurotoxic effects would be observed in inhalation studies at concentrations lower than those producing irritation to the nasal mucosa and/or olfactory epithelium (Ref. 5). EPA's reference dose for inhalation (concentration) exposure (RfC) for acrylic acid is 0.0003 mg/m<sup>3</sup>. This RfC is calculated from data demonstrating that the critical effects of exposure to acrylic acid by the inhalation route are effects on the nasal mucosa (Ref. 25). Based on these data, the EPA does not believe that neurotoxicity testing is necessary at this time.

The ITC members recommended an inhalation bioassay on acrylic acid. The ITC member from the National Cancer Institute (NCI) reviewed a draft drinking water chronic study conducted by BASF in Germany and submitted by BAMM as reported in the 27th ITC Report. The NCI was concerned that the study may have been run at doses below what would be considered a maximum tolerated dose and, based on data on the monofunctional esters of acrylic acid, questioned how such rapidly hydrolyzing compounds could cause

forestomach tumors by the oral route, unless a release of acrylic acid served as the active gastric irritant (Ref. 6). Based on the available data the ITC concluded that there was insufficient data to reasonably predict the potential carcinogenic effects of inhalation exposure to acrylic acid.

In response to the ITC Report, BAMM submitted studies on acrylic acid relevant to its potential oncogenicity (Refs. 7 through 11) and referenced negative inhalation studies conducted on the methyl, ethyl, and *n*-butyl esters of acrylic acid (Refs. 1, and 12 through 16). Scientists from NCI, EPA and the National Toxicology Program met with industry representatives to discuss these data (Ref. 17). At this meeting, BAMM also presented plans to do additional testing on acrylic acid including bioavailability testing. Subsequent to this meeting, both NCI and EPA scientists reviewed the entire data set on acrylic acid. The available data suggests that acrylic acid, like other nasal irritants tested, should lead to some metaplasia (change in tissue type) of the respiratory epithelium. This is a common finding with many inhalation studies (Ref. 18). NCI believes that, based on the available oral data on acrylic acid and inhalation data on acrylic acid esters, it can be assumed that the acrylic acid monomer will behave in a similar manner to the esters and, if administered by the inhalation route, will act as an olfactory irritant, but should not be carcinogenic. Thus, it was concluded by NCI that the drinking water and dermal chronic studies showed that toxicity of acrylic acid was limited to the site of exposure. In the inhalation studies on acrylate esters, the nasal lesions produced were very minimal irritant effects and were not associated with neoplastic changes at this site (Refs. 18 and 19). Having reviewed these data, EPA concurs with NCI and concludes that these data and the data that will be developed pursuant to this Consent Order will be sufficient and that additional chronic inhalation bioassay testing on acrylic acid is not warranted at this time.

The Companies have consented to conduct bioavailability studies on acrylic acid to aid in developing pharmacokinetic models that will be helpful in understanding the mechanisms of action for observed toxicity of acrylic acid and its esters. These data may explain the responses seen in the forestomach with the esters and help resolve other issues associated with exposure to acrylic acid by other routes of exposure.

The 27th ITC Report, considering the chemical fate of acrylic acid, stated that "available persistence data are probably inadequate to predict the biodegradation rate of acrylic acid in the environment, because the data were not generated in test systems that simulated *in situ* biodegradation." Therefore, the ITC recommended "chemical fate testing because there are insufficient data to reasonably determine or predict the persistence of acrylic acid and because there are potentially substantial environmental releases." Studies on anaerobic biodegradation and aerobic aquatic biodegradation were identified and supplied by BAMM (Refs. 1 and 20). In a recent BAMM 28-day Ready Biodegradability study using the "closed bottle" method, 81 percent of acrylic acid biodegraded within 28 days. This assay uses low concentrations of the test substance and low microbial concentrations in order to simulate natural conditions (Ref. 20). EPA believes that available data indicates

that acrylic acid biodegrades in the environment. In addition, 95 percent of the acrylic acid released is disposed of by underground injection according to information provided by the Toxics Release Inventory (TRI) (Ref. 21). This type of disposal method combined with new information provided by BAMM on acrylic acid mitigates EPA's concerns about potential risk due to environmental release. EPA decided that existing data are sufficient and that additional chemical fate testing is not necessary at this time.

The Companies agreed to perform an inhalation developmental toxicity study, an oral (drinking water) two generation reproductive and fertility study and a bioavailability study by specified dates according to test standards included in the Order.

### III. Production, Use and Exposure

Acrylic acid is a liquid at room temperature and miscible in water. EPA estimates a U.S. annual production of

acrylic acid for 1989 of over 1 billion pounds by four manufacturers at four sites (Ref. 22). The estimated U.S. annual consumption for 1989 is 977 million lbs. (Ref. 22). The National Occupational Exposure Survey indicates that 56,512 workers are potentially exposed to acrylic acid (Ref. 23).

The following uses for acrylic acid were given in the 27th ITC Report: surface coatings (25 percent); polyacrylic acid and salts, including superabsorbant polymers, detergents, water treatment and dispersants (20 percent); textiles and nonwovens (23 percent); exports (12 percent); adhesives and sealants (9 percent); leather and polishes (4 percent); paper coating (3 percent); miscellaneous acid and ester uses, including specialty acrylates (8 percent).

### IV. Testing Program

The Companies have agreed to complete the testing program in the following Table 1:

TABLE 1.— TESTING REQUIRED FOR ACRYLIC ACID

Test	Test standard	Start date <sup>1</sup>	Final report date <sup>2</sup>
Developmental Toxicity Test: <sup>3</sup>	40 CFR 798.4350 <sup>4</sup>	7	16
Reproductive effects Test: <sup>5</sup>	40 CFR 798.4700 <sup>6</sup>	3	30
Bioavailability: <sup>7</sup>	Reference 24	6	18

<sup>1</sup>Number of months after the effective date of the Consent Order.

<sup>2</sup>Number of months after the effective date of the Consent Order. Interim (6-month) progress reports shall be submitted to EPA for all tests having final report dates greater than 9 months, starting 6 months after the start date.

<sup>3</sup>This test shall be conducted in rabbits by the inhalation route.

<sup>4</sup>Amendments to this study are attached to the Consent Order as Appendix 2.

<sup>5</sup>This test shall be conducted in rats by the drinking water route.

<sup>6</sup>Amendments to this study are attached to the Consent Order as Appendix 1.

<sup>7</sup>This test shall be conducted in rats and mice by the intravenous, oral and dermal routes.

### V. Test Substance

The test substance, acrylic acid (CAS No. 79-10-7), shall be as pure a technical grade as can be reasonably attained, but shall be at least 98.0 percent pure.

### VI. Export Notification

The issuance of the testing Consent Order subjects any person who exports or intends to export the chemical substance, acrylic acid (CAS No. 79-10-7), of any purity, to the export notification requirements of section 12(b) of TSCA. The specific requirements are listed at 40 CFR part 707. Chemicals subject to testing Consent Orders are listed at 40 CFR 799.5000. This listing serves as a notification to persons who export or intend to export the chemical substance which is the subject of this testing Consent Order that 40 CFR part 707 applies.

### VII. Rulemaking Record

#### A. Supporting Documentation

EPA has established a record for this Consent Order under TSCA section 4, docket number OPTS-42146A, which is available for inspection Monday through Friday, excluding legal holidays, in Rm. NE-G004, 401 M St., SW., Washington, DC., 20460 from 8 a.m. to 12 noon and from 1 p.m. to 4 p.m. Confidential Business Information (CBI) while part of the record, is not available for public review. This record includes basic information considered by EPA in developing this Consent Order. This record includes the following information:

(1) Testing Consent Order for acrylic acid and associated testing protocols.

(2) Federal Register notices pertaining to this notice and consent order consisting of:

(a) 27th Report of the ITC (March 6, 1991, 56 FR 9534).

(b) Notice soliciting interested parties for developing a consent order for acrylic acid (August 20, 1991, 56 FR 41353).

(3) Communications consisting of:

(a) Written letters.

(b) Contact reports of telephone summaries.

(c) Meeting summaries.

(4) Reports - published and unpublished factual materials.

#### B. References

(1) BAMM. Letter and appendices from Louise Noell, BAMM Chair to Andrea Blaschka, EPA Project Manager. Comments on ITC designation of acrylic acid. April 5, 1991.

(2) Celanese Corporation. Cytogenicity study - Rat bone marrow *in vivo*; test article CJP-60 (Acrylic Acid). Testing Laboratory: Microbiological Associates, Inc. July 23, 1988.

(3) Celanese Corporation. *Drosophila* sex-linked recessive lethal assay of acrylic acid (CJP-60). Testing Laboratory: Zoology Department, University of Wisconsin. April 15, 1987.

(4) Putman, D.L. Dominant lethal mutations in mice. Study number T5618.112004. Testing Laboratory: Microbiological Associates, Inc. May 16, 1991.

(5) EPA memorandum from Robert C. MacPhail, Chief Neurobehavioral Toxicology Branch/NTD to Letty Tahan, Existing Chemical Assessment Division, concerning neurotoxicity testing of acrylic acid. September 19, 1991.

(6) Letter from Thomas Cameron, Special Assistant on Environmental Cancer, National Cancer Institute to William Eastin, Chemical Carcinogenesis Branch, National Institute of Environmental Health Sciences concerning the review of studies pertinent to the oncogenicity of acrylic acid and comments resulting from the May 29, 1990 meeting of NCI's Chemical Selection Planning Group. June 12, 1990.

(7) BASF. Report on the study of the toxicity of acrylic acid in rats after 3-month administration by gavage. Project No. 35C0380/8250; report date: April 28, 1987. Submitted by Louise Noell of BASF on April 2, 1991.

(8) De Pass, L.R., M.D. Woodside, R.H. Garman, and C.S. Weil. Subchronic and reproductive toxicology studies on acrylic acid in the drinking water. Drug Chemical Toxicology 6(1): 1-20. 1983.

(9) Hoechst Celanese Corporation. Chronic dermal oncogenicity study with acrylic acid in [C3H/HeN Hsd BR] and [Hsd (ICR) BR] mice; Report date: Dec. 5, 1990. Attachment to submission by Louise Noell of BASF (Ref.1); submitted April 5, 1991.

(10) BASF. Report-Study of a potential carcinogenic effect of acrylic acid in rats after long-term administration in the drinking water. Project No. 72C0380/8240; report date: March 30, 1989. Submitted by Louise Noell of BASF April 2, 1991.

(11) BASF. Report on the study of the toxicity of acrylic acid in rats after 12-month administration in the drinking water. Project No. 74C380/8239; report date: December 11, 1987. Submitted by Louise Noell April 2, 1991.

(12) Rohm and Haas Company. 2-Year inhalation study with methyl acrylate in rats; Report A 0135/1530; FYI OTS 1087-0367. March 5, 1985.

(13) Miller, R.R., J.T. Young, J.A. Ayres and C.N. Park. Ethyl acrylate: 27-month vapor inhalation study in rats. Sponsored by Dow Chemical U.S.A.; final report date: January 31, 1983. EPA submission: 8EHQ-0383-0250; fiche # OTS 0204492. Submitted by George Rodenhausen of Celanese Corp. on March 23, 1991.

(14) Miller, R.R., R.J. Kociba, D.G. Keyes, J.A. Ayres and K.M. Bodner. Ethyl acrylate: 27-month vapor inhalation study in mice. Sponsored by Dow Chemical U.S.A.; final

report date: April 4, 1983. EPA submission: 8EHQ-0383-0250; fiche # OTS 0204492. Submitted by George Rodenhausen of Celanese Corp. on April 29, 1983.

(15) NTP. Carcinogenesis studies of ethyl acrylate (CAS No. 140-88-5) in F344/N Rats and B6C3F1 Mice (Gavage Studies). Technical Report Series No. 259. December 1986.

(16) Rohm and Haas Company. 2-Year inhalation study with n-butyl acrylate in rats with a 6-month follow-up period. Report A0135/1531; FYI-OTS-0767-0367; report date March 1, 1985. Submitted by Gelbke Hildebrand of BASF (Germany) on May 21, 1986.

(17) Letter from Louise Noell, BMM Chair to Andrea Blaschka, Project Manager, EPA conveying a meeting summary of the June 6, 1991 meeting and a copy of materials used in the presentation. June 24, 1991.

(18) Letter from Harold E. Seifried, Program Director, Chemical and Physical Carcinogenesis Branch, National Cancer Institute, NIH to Victor Fung, Chemical Selection Coordinator, National Toxicology Program, concerning the evaluation of oncogenicity data for acrylic acid and acrylic acid esters. August 16, 1991.

(19) Letter from William C. Eastin, Head Study Priority, Chemical Carcinogenesis Branch, NIEHS to Charles M. Auer, Director, Existing Chemicals Assessment Division, USEPA on the status of acrylic acid oncogenicity studies. August 9, 1991.

(20) Letter from Louise Noell, BMM Chair to Andrea Blaschka, EPA project manager, submitting additional comments on the environmental fate of acrylic acid. The submission contains the following attachments: reference list and background information concerning the river die-away study, draft #3 of study entitled "adsorption and desorption of acrylic acid to soils" by M. K. Horvath, and a March 27, 1991 draft of a study entitled "Assessment of ready biodegradability of acrylic acid". September 25, 1991.

(21) EPA Memorandum from Mark Pederson, Chemical Engineering Branch to John Schaeffer, Chemical Testing Branch providing chemical release data for IRIS chemicals. September 19, 1991.

(22) Note from Pat Szarek, Regulatory Impact Branch to Andrea Blaschka, Chemical Testing Branch concerning preliminary production and use information for IRIS chemicals test rule. April 22, 1991.

(23) National Institute for Occupational Safety and Health (NIOSH). National Occupational Exposure Survey (NOES). 1990.

(24) BMM. Protocol entitled: 14<sup>c</sup>-Acrylic acid comparative bioavailability study in mice and rats. Protocol prepared on September 18, 1991.

(25) IRIS database. Printout for acrylic acid from EPA's Integrated Risk Information System database. Retrieved June 1991.

**VIII. Other Regulatory Requirements**

The Office of Management and Budget (OMB) has approved the information collection requirements contained in the Consent Order under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., and has assigned OMB control number 2070-0033.

Public reporting burden for this collection of information is estimated to be 40 hours per response. The estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and to OMB, Paperwork Reduction Project (2070-0033), Washington, DC 20503.

**List of Subjects in 40 CFR Part 799**

Chemicals, Chemical export, Environmental protection, Hazardous substances, Recordkeeping and reporting requirements, and Testing.

Dated: February 18, 1992.

Victor J. Kimm,

Acting Assistant Administrator for Prevention, Pesticides and Toxic Substances.

Therefore, 40 CFR chapter I is amended as follows:

**PART 799—[AMENDED]**

1. The authority citation for part 799 continues to read as follows:  
Authority: 15 U.S.C. 2603, 2611, 2625.

2. Section 799.5000 is amended by adding acrylic acid to the table in CAS Number order, to read as follows:

**§ 799.5000 Testing consent orders for substances and mixtures with Chemical Abstract Service Registry Numbers.**

CAS Number	Substance or mixture name	Testing	FR citation
79-10-7	Acrylic Acid	Health effects	[FR date]