

Assessment Guidelines, Subdivision-D, Product Chemistry for chemical pesticides, and Series 880 and 885 superseded Pesticide Assessment Guidelines, Subdivision M.

The PR Notice was revised to reflect public comments received by the Agency on the draft PR Notice, 62 FR 5228, February 4, 1997 (FRL-5575-3). Generally, revisions included:

(a) Some modifications to the summary form and instructions.

(b) Conversion to the new OPPTS Test Guidelines, Series 830 guideline reference numbers.

(c) Clarification of the GLP requirements.

(d) Revisions to the self-certification statement.

List of Subjects

Environmental protection.

Dated: January 12, 1998.

Stephen L. Johnson,

Acting Director, Office of Pesticide Programs.

[FR Doc. 98-1528 Filed 1-22-98; 8:45 am]

BILLING CODE 6560-50-F

ENVIRONMENTAL PROTECTION AGENCY

[OPPTS-400056; FRL-5762-2]

Phosphoric Acid; Toxic Chemical Release Reporting; Community Right-to-Know

AGENCY: Environmental Protection Agency (EPA).

ACTION: Denial of petition.

SUMMARY: EPA is denying a petition to delete phosphoric acid from the reporting requirements under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and section 6607 of the Pollution Prevention Act of 1990 (PPA). This action is based on EPA's conclusion that phosphoric acid does not meet the deletion criteria of EPCRA section 313(d)(3). Specifically, EPA is denying this petition because EPA's review of the petition and available information resulted in the conclusion that phosphoric acid meets the listing criterion in EPCRA section 313(d)(2)(C) in that the phosphates that result from the neutralization of phosphoric acid may cause algal blooms. Algal blooms result in deoxygenation of the water and other effects that may ultimately lead to a number of serious adverse effects on ecosystems, including fish kills and changes in the composition of animal and plant life.

FOR FURTHER INFORMATION CONTACT:

Daniel R. Bushman, Petitions Coordinator, 202-260-3882, e-mail: bushman.daniel@epamail.epa.gov, for specific information on this document, or for more information on EPCRA section 313, the Emergency Planning and Community Right-to-Know Hotline, Environmental Protection Agency, Mail Code 5101, 401 M St., SW., Washington, DC 20460, Toll free: 1-800-535-0202, in Virginia and Alaska: 703-412-9877 or Toll free TDD: 1-800-553-7672.

SUPPLEMENTARY INFORMATION:

I. Introduction

A. Statutory Authority

This action is taken under sections 313(d) and (e)(1) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), 42 U.S.C. 11023. EPCRA is also referred to as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) (Pub. L. 99-499).

B. Background

Section 313 of EPCRA requires certain facilities that manufacture, process, or otherwise use listed toxic chemicals in amounts above reporting threshold levels, to report their environmental releases of such chemicals annually. Beginning with the 1991 reporting year, such facilities must also report pollution prevention and recycling data for such chemicals, pursuant to section 6607 of the Pollution Prevention Act (42 U.S.C. 13106). Section 313 established an initial list of toxic chemicals that was comprised of more than 300 chemicals and 20 chemical categories. Phosphoric acid (PA) was included in the initial list of chemicals and chemical categories. Section 313(d) authorizes EPA to add chemicals to or delete chemicals from the list, and sets forth criteria for these actions. Under section 313(e)(1), any person may petition EPA to add chemicals to or delete chemicals from the list. EPA has added and deleted chemicals from the original statutory list. Pursuant to EPCRA section 313(e)(1), EPA must respond to petitions within 180 days either by initiating a rulemaking or by publishing an explanation of why the petition has been denied.

EPCRA section 313(d)(2) states that a chemical may be listed if any of the listing criteria are met. Therefore, in order to add a chemical, EPA must demonstrate that at least one criterion is met, but does not need to examine whether all other criteria are also met. Conversely, in order to remove a chemical from the list, EPA must

demonstrate that none of the criteria are met.

EPA issued a statement of petition policy and guidance in the **Federal Register** of February 4, 1987 (52 FR 3479), to provide guidance regarding the recommended content and format for petitions. On May 23, 1991 (56 FR 23703), EPA issued a statement of policy and guidance regarding the recommended content of petitions to delete individual members of the section 313 metal compound categories. EPA has issued a statement clarifying its interpretation of the section 313(d)(2) and (3) criteria for adding and deleting chemicals from the section 313 toxic chemical list (59 FR 61432; November 30, 1994) (FRL-4922-2).

II. Description of Petition

On November 9, 1990, The Fertilizer Institute (TFI) petitioned the Agency to delist PA from the list of toxic chemicals subject to reporting under section 313 of EPCRA (Ref. 1). The TFI petition was very similar to a petition that Ecolab, Inc. submitted on December 14, 1989, requesting EPA to delete PA from the EPCRA section 313 list of toxic chemicals (Ref. 2). During the final days of the review on this first petition, Ecolab, Inc. withdrew the petition. Nevertheless, EPA issued a notice in the **Federal Register** of June 25, 1990 (55 FR 25876), describing its technical review and evaluation of the petition. As part of the notice, the Agency stated that it would have denied the petition and noted that its concern for PA is due to PA's contribution to eutrophication, which results from phosphate loading in the environment. In that notice, the Agency also requested public comment on the creation of an EPCRA section 313 phosphates category that would include PA. Although EPA is not proposing to add a phosphates category at this time, it intends to propose such a category in a separate rulemaking at a later date. Because it believes that the comments received in response to the earlier notice and EPA's responses to those comments provide information relevant to the listing of PA under EPCRA section 313, it addresses those comments in Unit V. of this document.

The petition submitted by TFI was reviewed to identify the issues that differed from the Ecolab petition. The assertions that TFI addressed in its subsequent petition were: (1) PA does not meet the statutory criteria of section 313 of EPCRA; (2) the vast majority of PA releases are by sources not covered by the requirements of EPCRA section 313 at that time and therefore, the environmental effects attributed to phosphate loading caused by PA are not

effects for which the manufacturers subject to section 313 reporting should be held accountable; and (3) EPA in its exposure assessment used "flawed assumptions" and "inaccurate data" in the course of the review.

These issues are addressed in Units IV., V., and VI. of this document. EPA's technical assessment remains basically unchanged since the original review of the Ecolab petition; the previous review is summarized in the following unit.

III. EPA's Technical Review of Phosphoric Acid

A. Toxicity Evaluation

1. *Human health.* In the physiological pH range of 6 to 9, PA dissociates to phosphate ions which predominately exist as a combination of H_2PO_4^- and HPO_4^{2-} . Phosphate is readily absorbed from the gastrointestinal tract. Phosphate levels in the blood of higher animals are regulated by the parathyroid gland and are strongly tied to calcium ion regulation in the body. No information was found in the available literature regarding the absorption of PA from the lungs or skin (Ref. 3).

EPA's hazard assessment resulted in the following conclusions:

a. *Acute effects.* PA may cause irritation and corrosive effects as do many other acids. PA is weaker than the other strong mineral acids. The Poison Index states that "[PA] causes irritation of eyes, skin, and the respiratory tract. When ingested it can produce nausea, vomiting, abdominal pain, bloody diarrhea, acidosis, shock and irritation or burns of the oropharyngeal mucosa, esophagus and stomach." As with other corrosive or caustic materials, the extent of damage is generally determined by the acidity of the solution and duration of contact. PA, however, is not expected to exist beyond facility site boundaries at a pH that will cause these effects (Ref. 3).

b. *Chronic effects.* PA has been shown to cause nephrocalcinosis in rats when administered at relatively high concentrations in the diet (Ref. 3). PA cannot be reasonably anticipated to cause heritable genetic effects in humans (Ref. 4). No information was found in the available literature with which to evaluate the potential of PA to cause carcinogenic effects. PA cannot be reasonably anticipated to cause developmental or reproductive toxicity in humans. No information was found in the available literature with which to evaluate the potential of PA to cause neurotoxic effects (Ref. 3).

2. *Environmental toxicity.* PA, which is a source of phosphates, can reasonably be anticipated to cause

significant adverse effects on the environment. PA, as well as other phosphates have the potential to cause increased algal growth leading to eutrophication in the aquatic environment (Ref. 5). Eutrophication may result when nutrients, especially phosphates, enter into an aquatic ecosystem in the presence of sunlight and nitrogen. The phosphate ion is a plant nutrient and it can be a major limiting factor for plant growth in freshwater environments. In excess, PA can cause extreme algal blooms. Toxic effects result from oxygen depletion as the algae die and decay. Toxic effects have also been related to the release of decay products or direct excretion of toxic substances from sources such as blue-green algae. In addition, phosphates in aquatic environments may encourage the growth of introduced plants to the detriment of native plants and thereby change plant distribution.

Laboratory studies indicate that eutrophication may occur at phosphate concentrations as low as 50 parts per billion (ppb) in lakes. The resulting oxygen depletion and toxic decay products (e.g., hydrogen sulfide) kill many invertebrates and fish (Ref. 5).

Although green algae are more sensitive to growth stimulation by phosphates in fresh water, blue-green algal blooms are also stimulated by phosphates and may cause greater damage. At least three species of blue-green algae are known to excrete toxins. Secretions by cyanobacteria of dialyzable metabolites have inhibited the growth of other species of algae and may result in algal monoculture. When algal blooms of these toxic species occur in a reservoir, lake, slough, or pond, the cells and toxins can become sufficiently concentrated to cause illness or death in invertebrates and vertebrates. Major losses have been reported for cattle, sheep, hogs, birds (domestic and wild) and fishes, minor losses for dogs, horses, small wild animals, amphibians, and invertebrates (Ref. 5).

In addition to eutrophication effects, PA exhibits low toxicity to freshwater organisms where typical toxicity values are greater than 100 milligrams per liter (mg/L) (Ref. 5). Due to the existing pH restrictions under the Clean Water Act (CWA), releases of PA to surface waters are not anticipated to lead to problematic pH excursions. Under the CWA, parameters such as pH may be subject to both technology-based and water quality-based limitations. The technology-based limitations are either derived from nationally applicable effluent guidelines or pretreatment standards (many of which limit pH to a range of 6.0 to 9.0) or are based on: (1)

The permit writer's "Best Professional Judgement" if there is no applicable guideline for a direct discharger, or (2) local pretreatment requirements. Water quality-based limitations generally would be established to ensure that applicable water quality standards are attained and maintained. Dischargers are typically subject to monitoring provisions under which permittees are to report discharges of controlled parameters.

B. Release and Exposure

EPA does not believe that consideration of release or exposure information is necessary in determining whether to keep PA on the list of EPCRA section 313 toxic chemicals. In 1994, EPA clarified its policy on the use of exposure assessments in listing decisions under EPCRA section 313(d)(2) and (3) (November 30, 1994, 59 FR 61432). As part of this clarification, EPA stated that, under the criterion of section 313(d)(2)(C), exposure considerations are not appropriate

... for chemicals that are highly ecotoxic or induce well-established adverse environmental effects. For chemicals which induce well-established serious adverse effects, e.g., chlorofluorocarbons, which cause stratospheric ozone depletion, EPA believes that an exposure assessment is unnecessary. EPA believes that these chemicals typically do not affect solely one or two species but rather cause changes across a whole ecosystem. EPA believes that these effects are sufficiently serious because of the scope of their impact and the well-documented evidence supporting the adverse effects. (November 30, 1994, 59 FR 61432).

Eutrophication due to phosphate loading is a well-established serious adverse effect that induces a number of changes to ecosystems, including fish kills and changes in the composition of animal and plant life. Therefore, an exposure assessment is not necessary in order to determine that phosphates, including PA, meet the listing criterion of EPCRA section 313(d)(2)(C). During its review of Ecolab's earlier petition, however, EPA conducted an exposure assessment for PA. Thus, for informational purposes only, the Agency is setting forth the results of this exposure assessment below.

PA will dissociate in water to hydrogen and phosphate ions (Refs. 6 and 7). Further reactions by abiotic processes are not expected to reduce the amount of PA released to the environment (Ref. 7). PA can be expected to enter the phosphorus cycle and become available as a nutrient in both aquatic and terrestrial settings. In aquatic settings, algae are able to

bioconcentrate low levels of phosphorus. The phosphorus cycle tends to lose phosphorus to soil and bottom sediments. Phosphorus binds to soil so its movement through soil is very slow. Ultimately, phosphorus moves from land to the sea and is deposited in bottom sediments (Ref. 7).

The exposure assessment conducted for EPA's original review of PA was based upon information from the 1987 TRI data base, which listed 1,173 facilities that discharged some amount of PA (Ref. 7). From this EPA identified 150 facilities from which PA is released to the environment in significant quantities. Of these, 46 facilities reported releases to surface waters and 52 facilities reported releases to the atmosphere. The exposure assessment concentrated on releases to water to address environmental toxicity concerns. It is important to note that this assessment only analyzed PA releases, the phosphates that are released as a result of neutralization of PA at a facility are not currently reported to the TRI. Although the currently reported PA releases do indicate which facilities are releasing phosphates, they do not reflect the full magnitude of the actual phosphate loading from facility releases. Therefore, the exposure assessment did not provide a complete picture of the significance of phosphate loading as a result of releases of phosphoric acid and phosphates from facilities that report under EPCRA section 313.

Aquatic exposure to PA was calculated by determining the stream flow at each facility. Surface water concentrations, under low flow conditions, from discharges during manufacture of PA ranged from 8.76 to 72,123 ppb. Surface water concentrations from discharges during processing and use ranged, under low flow conditions, from 0.62 to 337,262 ppb.

Facilities that routinely discharge PA to surface waters must comply with the CWA requirements. Under EPCRA section 313, by neutralizing their releases, facilities are technically releasing phosphates rather than PA to water and thus can report a release of zero. Even with neutralization of the PA, for the 1995 reporting year, TRI facilities still reported over 20 million pounds of releases of PA to surface waters from the more than 2,200 Form R reports filed. As stated above, these facilities are releasing additional phosphates to surface waters from the neutralization of PA, which are not currently captured under EPCRA section 313, but are the basis for concern for facilities that release PA.

C. Summary of Technical Review

PA is acutely toxic to human tissue with effects ranging from irritation to acidosis and burns. The extent of the damage is dependant on the acidity of the PA solution and duration of exposure. There, however, are no acute human health effects expected to result from exposure to PA at an acidity that can reasonably be anticipated to exist in the environment under normal release conditions. Therefore, PA cannot reasonably be anticipated to cause "... significant adverse acute human health effects at concentration levels that are reasonably likely to exist beyond facility site boundaries as a result of continuous, or frequently recurring, releases."

In terms of chronic health effects, the available data indicate that PA cannot reasonably be anticipated to cause cancer, heritable genetic effects, neurotoxicity, developmental or reproductive toxicity, or other chronic health effects with the exception of nephrocalcinosis when PA is administered at relatively high concentrations in the diet.

PA can reasonably be anticipated to cause significant adverse effects on the environment. PA has been demonstrated to cause environmental toxicity by its contribution to phosphate loading in the environment, which can lead to eutrophication. Eutrophication takes place in oceans, rivers, lakes, and estuaries and results when nutrients, such as phosphates, enter into an aquatic ecosystem, well supplied with sunlight and nitrogen, and stimulate excessive algal growth. EPA believes that eutrophication due to phosphate loading is a well-established serious adverse effect that induces a number of changes to ecosystems including fish kills and changes in the composition of animal and plant life.

IV. Technical Issues Addressed by The Fertilizer Institute

TFI's petition to delist PA focused, among other things, on environmental exposure to PA from EPCRA section 313 covered facilities. Specifically, TFI argued that industrial releases of PA have no significant link to eutrophication of the nation's surface waters. EPA believes that the adverse effects associated with phosphates, including phosphoric acid, are well-established effects that cause changes across a whole ecosystem. Further, as stated in Unit III.B. of this document, EPA believes that the effects induced by phosphates are of such sufficient seriousness that factoring exposure considerations into the listing decision

is not warranted because of the scope of their impact and the well-documented evidence supporting the adverse effects. Although information on exposure is not being used in today's action to support the determination that phosphoric acid and phosphates meet the section 313(d)(2)(C) criteria, TFI's comments do pertain to information presented by EPA in the June 25, 1990 (55 FR 25876) **Federal Register** notice and, thus, will be addressed.

TFI claims that the exposure assessment portion of the technical review of Ecolab's petition was flawed. TFI's main claims are: (1) EPA's exposure modeling of releases of PA to surface waters did not sufficiently account for the fate of much of the phosphate which TFI claims would be consumed by plant and/or animal life or would be bound and thus not contribute to the concentration; (2) the modeling incorrectly calculated phosphate concentration rather than phosphorus concentration; and (3) improper receiving streams were used in the models. EPA believes that there is not expected to be any significant abiotic removal of PA after discharge into streams. PA will dissociate to hydrogen and phosphate ions when released to water. In this state there are four possible removal mechanisms: volatilization, photolysis, hydrolysis, and adsorption to sludge and sediments. Phosphate is non-volatile, therefore there will be no removal via this mechanism. Phosphate ions also will not undergo hydrolysis or photolysis. Inorganic phosphate will not adsorb to stream sediments. The only way for a phosphate ion to be able to sorb is for it first to be transformed by other processes. These transformations, however, do not limit the availability of phosphate ions to algae for several reasons. Inorganic phosphate ion is most rapidly taken up by algae, but organic and complexed phosphate can also be readily utilized by most species, particularly those with alkaline phosphatase activity. The transformed phosphate complex that is sorbed to sediments can be released back to the epilimnion by biota in the sediments, and by anaerobic conditions in the water. Lastly, algae are able to effectively utilize phosphorus from the sediments. In conclusion, phosphate ions are capable of several chemical reactions in the environment, but very few of these reactions limit its biological availability (Refs. 3, 6, and 7).

While TFI is correct that phosphate ions will be removed from surface water by organisms, this is precisely the basis for the concern over surface water releases. Uptake of and utilization of

phosphate by algae is the primary concern, since it can lead to eutrophication. While removal of phosphate ions by heterotrophic organisms could theoretically be significant, in reality it accounts for only a minor amount of removal because there is a far larger biomass of algae, and bacteria are poor competitors under carbon limiting conditions.

TFI claims that the background levels of phosphorus are above the level of concern at each of the receiving streams examined by EPA. TFI did not provide data to support this blanket statement nor did TFI describe the type of phosphorous measurement it was examining.

EPA agrees that the exposure evaluation report details the phosphate concentrations in analyzed receiving streams, whereas the concern concentration is expressed in terms of total phosphorous. Phosphate amounts are 3.07 times the phosphorous atom in the ion. Therefore, the concern concentration could be expressed as 153.5 ppb of phosphate (converted from concentration of concern of 50 ppb total phosphorous). Comparing this value to the exposure concentrations shows that 27 of the 46 surface water dischargers analyzed exceeded the concern concentration, rather than the 30 referred to in the exposure assessment. This does not alter the significance of the releases.

TFI claims that EPA used incorrect flow data for one facility in its exposure modeling. A reexamination of the river flow data, which is contained in EPA's Industrial Facilities Discharge file, showed that the original flow values used by EPA were correct. This file, which uses U.S. Geological Survey data, is maintained by EPA's Office of Water.

For a second facility, TFI claims that EPA identified and used an incorrect receiving stream. A reexamination of the information available to EPA at the time of the initial assessment confirmed the original estimated discharge site. Further inquiry substantiated the claim that surface water discharges go to the receiving waters identified by TFI. Nevertheless, the discrepancy in the flow data of the streams is of a magnitude that would not substantially affect the estimated concentrations of phosphate. Thus, the reexamination of the exposure data based on the comments by TFI has had little effect on the final concentration numbers generated in the review conducted in response to the Ecolab petition.

V. Public Comment

In the notice issuing the results of EPA's technical review and evaluation

of the Ecolab petition to delete PA (June 25, 1990, 55 FR 25876), the Agency requested public comment on the creation of a phosphates category. In 1990, EPA received 12 comments on the creation of this category, 2 of which were in favor of the creation and 10 of which were opposed to it. Although EPA is not proposing to add a phosphates category at this time, because PA is a source of phosphates, EPA believes that the comments received and EPA's responses to those comments provide information relevant to the listing of PA under EPCRA section 313. Therefore, EPA is including the comments and responses to the issue of the addition of a phosphates category in this document. EPA intends to propose the creation of a phosphates category at a later date.

The majority of the commenters contended that eutrophication is an indirect toxic effect and that a phosphates category should not be listed under section 313 because phosphates do not exhibit direct toxicity. They asserted that Congress intended that the section 313 list of toxic chemicals include only chemicals that induce direct toxicity, and that Congress did not intend the list to include chemicals which are only indirectly toxic.

EPA disagrees with these commenters. The EPCRA section 313(d)(2) listing criteria each state that EPA may list a chemical that it determines "is known to cause or can reasonably be anticipated to cause" the relevant adverse human health or environmental effect. It further provides that "[a] determination under this paragraph shall be based on generally accepted scientific principles." Ultimately, the crux of the issue commenters raise lies in interpreting the phrase "cause or can reasonably be anticipated to cause," which Congress chose not to define. In arguing that EPA lacks the statutory authority to base its listing decisions on "indirect toxicity," the commenters would have the Agency adopt an artificially narrow view of causation that would require a single-step path between exposure to the toxic chemical and the effect. Such a mechanistic approach confuses the mode or mechanism of the chemical's action (i.e., the chain of causation) with the fundamental question of whether, regardless of the number of intervening steps, there is a natural and continuous line, unbroken by any intervening causes, between exposure to the chemical and the toxic effect. By contrast, EPA believes that Congress granted the Agency broad discretion in making listing decisions and directed

EPA to rely on generally accepted scientific principles in making determinations to implement this section of EPCRA.

It is a generally accepted scientific principle that causality need not be linear, i.e., a one-step process. e.g., Proposed Guidelines for Ecological Risk Assessment, 61 FR 47552, September 9, 1996; Proposed Guidelines for Carcinogen Risk Assessment, 61 FR 17960, April 23, 1996. For purposes of EPCRA section 313, the distinction between direct and indirect effects is technically an artificial one. Whether the toxic effect is caused directly by a chemical through a one-step process, or indirectly by a degradation product of the chemical, a second chemical that is created through chemical reactions involving the first chemical, or some other mechanism, the toxic effect still occurs as a result of exposure to the chemical. It makes no difference to the affected organism whether the toxic agent was a result of chemical degradation or chemical reactions. Fundamentally, EPCRA section 313 is concerned with adverse effects on humans and the environment, not the chain of causation by which such effects occur. In fact, this type of "indirect" toxicity is not unlike the effects of certain nonlinear carcinogens. Some carcinogens induce cancer through a two step mechanism in which the chemical causes an intervening pathological change, and this pathological change is the direct cause of the cancer, but this does not mean that the chemical is not known or reasonably anticipated to cause cancer. It is therefore reasonable for EPA to consider such effects in light of the broad statutory purpose to inform the public about releases to the environment. Were EPA to exclude indirect effects from consideration, it would dilute the purpose of the statute by precluding public access to information about chemicals that cause a wide range of adverse health and environmental effects.

In prior petition decisions, EPA has considered other types of significant adverse effects on the environment that result from the releases of chemicals. For example, the addition of seven chlorofluorocarbons (CFCs) and halons (August 3, 1990, 55 FR 31594) and the denial of petitions on volatile organic compounds (VOCs), specifically, the ethylene and propylene petition (January 27, 1989, 54 FR 4072) and the cyclohexane petition (March 15, 1989, 54 FR 10668) all concerned adverse effects on the environment.

Some commenters do not believe that it is probable that eutrophication will

occur and believe that if it does occur it is not necessarily tied to phosphate releases.

Although a number of nutrients in addition to phosphorus (as phosphates) are required for eutrophication to occur, in many cases phosphorus levels are the limiting factor. Phosphorus (as phosphate) is the most critical nutrient in controlling the growth of blue-green algal species. There is no indication in the literature that the connection between phosphates and algal blooms and fish kills is tenuous.

A number of communities have experienced problems with eutrophication that is a result of phosphate loading. For example, in the Chowan River in North Carolina significant algal blooms have occurred in 1987, 1989, and 1990 (Ref. 8).

Many commenters believe that a phosphates category should not be added because releases of phosphates from industrial facilities subject to section 313 reporting requirements are an insignificant part of total phosphates released to the environment.

Nationwide, approximately two to three percent of all releases of phosphates to the environment are from industrial facilities that are required to report under EPCRA section 313. However, discharges from industrial facilities can contribute significantly to the levels of phosphates in a receiving stream. There are cases in which the major contributor of phosphates to a stream or river is an industrial facility that is covered by EPCRA section 313. Whether EPCRA section 313 covered facilities are a significant source of a toxic chemical in the environment compared to other sources does not change the fact that a toxic chemical that meets the listing criteria of EPCRA section 313 is being released to the environment and adding to the overall amount of the chemical in the environment.

Many commenters believe that a phosphates category should not be added to the section 313 list because information on phosphate releases are captured by the National Pollutant Discharge Elimination System (NPDES).

Not all industries required to report under EPCRA section 313 are required to have NPDES permits. Moreover, even if an individual discharger is regulated and has monitoring data related to its releases of PA, this information is not readily available to the public, as it would be if the discharger were required to comply with EPCRA section 313. Rather, the public would have to resort to the more cumbersome Freedom of Information Act process to obtain the information. Thus, contrary to

commenters suggestions, listing phosphates on TRI would provide useful, easily accessible information to the public.

VI. Explanation of Denial of Petition

EPA believes that the types of deleterious changes that PA effects in aquatic ecosystems meet the listing criteria under EPCRA section 313(d)(2). As stated in the Conference Report accompanying EPCRA, 99-962, October 3, 1986, Joint Explanatory Statement of the Committee of Conference (p. 295):

In determining what constitutes a significant adverse effect on the environment...the Administrator should consider the extent to which the toxic chemical causes or can reasonably be anticipated to cause any of the following adverse reactions, even if restricted to the immediate vicinity adjacent to the site:

(1) Gradual or sudden changes in the composition of animal life or plant life, including fungal or microbial organisms in an area.

(2) Abnormal number of deaths of organisms (e.g., fish kills).

(3) Reduction of the reproductive success or the vigor of a species.

(4) Reduction in agricultural productivity, whether crops or livestock.

(5) Alterations in the behavior or distribution of a species.

(6) Long lasting or irreversible contamination of components of the physical environment, especially in the case of ground water, and surface water and soil resources that have limited self-cleansing capability.

The effect of phosphates, including PA, on the environment is to induce a number of changes to the environment specified above, particularly fish kills and changes in the composition of animal and plant life in an area.

EPA has serious concerns for the contribution of PA to phosphate loading in the environment and its potential eutrophic effects. EPA believes that the adverse effects associated with phosphates, including phosphoric acid, are well-established effects that cause changes across a whole ecosystem. Further, EPA believes that the effects induced by phosphates, including PA, are of such sufficient seriousness that additional exposure considerations are not warranted because of the scope of the impact of the effects and the well-documented evidence supporting the adverse effects. This determination is consistent with EPA's stated policy on the use of exposure assessments in EPCRA section 313 listing and delisting decisions (59 FR 61432, November 30, 1994). Therefore, EPA is denying TFI's petition to delete PA from the EPCRA section 313 list of toxic chemicals because EPA has determined that PA meets the listing criteria of EPCRA section 313(d)(2)(C).

The Agency believes that the most efficient manner to address its concerns for phosphates is by the formation of a phosphates category. However, at this time, EPA is not proposing to create a phosphates category under EPCRA section 313. EPA intends to propose the creation of such a category as a separate rulemaking at a later date.

VII. References

1. TFI. Petition to Delete Phosphoric Acid from the List of Toxic Chemicals Subject to the Requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1996 (SARA). The Fertilizer Institute. (November 9, 1990).

2. ECOLAB. Letter from John R. Keenan to EPA Administrator William K. Reilly. Subject: Phosphoric Acid (CAS 7664-38-2) Petition for Deletion from SARA 313. Ecolab Inc. (December 8, 1989).

3. USEPA, OPPT. Memorandum from Janette Houk, Ph.D., Hazard Integrator, Chemical Review and Evaluation Branch, Health and Environmental Review Division. Re: Petition to Delist Phosphoric Acid. (February 14, 1990).

4. USEPA, OPPT. Memorandum from Michael C. Cimino, Ph.D., Biologist, Toxic Effects Section, Toxic Effects Branch, Health and Environmental Review Division. Re: Mutagenicity Review of Delist Petition for Phosphoric Acid. (February 9, 1990).

5. USEPA, OPPT. Memorandum from Ossi Meyn, D.Env., Environmental Effects Branch, Health and Environmental Review Division. Re: Petition to Delist Phosphoric Acid - Ecological Hazard. (February 27, 1990).

6. USEPA, OPPT. DeVito, Stephen C., "Phosphoric Acid Chemistry Report." (January 11, 1990).

7. USEPA, OPPT. LaVeck, Gerald, "Exposure Assessment for a Petition to Delist Phosphoric Acid." (1990).

8. NCDNRCD. "Chowan River Water Quality Management Plan 1990 Update." North Carolina Department of Natural Resources and Community Development. (September 28, 1990).

VIII. Administrative Record

The record supporting this decision is contained in docket control number OPPTS-400056. Comments on EPA's previous phosphoric acid petition response are contained in docket number OPPTS-400048. All documents, including the references listed in Unit VII. of this document and an index of the docket, are available to the public in the TSCA Nonconfidential Information Center (NCIC), also known as the Public Docket Office, from noon to 4 p.m., Monday through Friday, excluding legal

holidays. The TSCA NCIC is located at EPA Headquarters, Rm. NE-B607, 401 M St., SW., Washington, DC 20460.

List of Subjects

Environmental protection, Chemicals, Community right-to-know, Reporting and recordkeeping requirements, Toxic chemicals.

Dated: January 12, 1998.

Lynn R. Goldman,

Assistant Administrator for Prevention, Pesticides and Toxic Substances.

[FR Doc. 98-1644 Filed 1-22-98; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

[FRL-5952-1]

Proposed Cost Recovery Settlement Under Section 122(h)(1) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as Amended, 42 U.S.C. 9622(h)(1), Hadley Street Drum Site, St. Louis, Missouri

AGENCY: Environmental Protection Agency (EAP).

ACTION: Notice of proposed cost recovery settlement under section 122(h)(1) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. 9662(h)(1), Hadley Street Drum Site, St. Louis, Missouri.

SUMMARY: The United States Environmental Protection Agency (EPA) is proposing to enter into a cost recovery administrative settlement to resolve claims under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. 9622(h)(1). This settlement is intended to resolve the liability of Hadley Street Real Estate Company, Inc. ("Hadley Street Real Estate") for the response costs incurred by the EPA in overseeing a removal action conducted by Hadley Street Real Estate at the Hadley Street Drum Superfund Site, St. Louis, Missouri. The proposed settlement was signed by the Environmental Protection Agency (EPA) on October 8, 1997. Because EPA's total response costs did not exceed \$500,000, the Attorney General's concurrence is not required for this settlement.

DATES: Written comments must be provided on or before February 23, 1998.

ADDRESSES: Comments should be addressed to Daniel J. Shiel, Office of Regional Counsel, United States Environmental Protection Agency,

Region VII, 726 Minnesota Avenue, Kansas City, Kansas 66101 and should refer to: *In the matter of Hadley Street, Real Estate Company, Inc.*, EPA Docket NO. VII-98-F-0001.

The proposed administrative settlement may be examined in person at the United States Environmental Protection Agency, Region VII, 726 Minnesota Avenue, Kansas City, Kansas 66101. To request a copy by mail please refer to the matter name and docket number set forth above and enclose a check in the amount of \$3.75 (25 cents per page for reproduction costs), payable to the United States Environmental Protection Agency.

SUPPLEMENTARY INFORMATION: The proposed administrative settlement concerns the Hadley Street Drum Superfund Site in St. Louis, Missouri. On July 24, 1992, EPA issued a CERCLA 106(a) Unilateral Administrative Order ("the Order") to Respondent requiring it to conduct removal actions at the Site. This administrative action was captioned *In the matter of Hadley Street Drum Site*, EPA Docket NO. VII-92-F-0024. The Hadley Street Drum Site included properties located at 1515 and 1531-1541 Hadley Street, St. Louis, Missouri. Hadley Street Real Estate owned a portion of the Site at the time EPA issued the UAO. Hadley Street Real Estate conducted the removal actions ordered by EPA on its property and EPA conducted the necessary removal actions on the other portion of the Site.

Hadley Street Real Estate did not agree to reimburse EPA's costs of overseeing the removal action. By letter dated October 12, 1995, EPA mailed Respondent an Itemized Cost Summary with a demand that Respondent pay EPA \$31,806.21 in response costs. This led to submittal of information on behalf of Hadley Street Real Estate supporting its claim of inability to pay the full amount of EPA's costs. Hadley Street Real Estate ultimately offered to pay \$5,000 of EPA's costs. EPA Region VII reviewed the information submitted by Hadley Street Real Estate and concluded that it could not pay more than the \$5,000 offered in settlement.

Dated: December 15, 1997.

Dennis Grams,

Regional Administrator.

[FR Doc. 98-1641 Filed 1-22-98; 8:45 am]

BILLING CODE 6560-50-M

FARM CREDIT ADMINISTRATION

Sunshine Act Meeting; Farm Credit Administration Board; Regular Meeting

AGENCY: Farm Credit Administration.

SUMMARY: Notice is hereby given, pursuant to the Government in the Sunshine Act (5 U.S.C. 552b(e)(3)), that the March 12, 1998 regular meeting of the Farm Credit Administration Board (Board) will not be held.

FOR FURTHER INFORMATION CONTACT: Floyd Fithian, Secretary to the Farm Credit Administration Board, (703) 883-4025, TDD (703) 883-4444.

ADDRESSES: Farm Credit Administration, 1501 Farm Credit Drive, McLean, Virginia 22102-5090.

Dated: January 22, 1998.

Floyd Fithian,

Secretary, Farm Credit Administration Board.

[FR Doc. 98-1773 Filed 1-21-98; 2:17 pm]

BILLING CODE 6705-01-P

FARM CREDIT ADMINISTRATION

Sunshine Act Meeting; Farm Credit Administration Board; Special Meeting

AGENCY: Farm Credit Administration.

SUMMARY: Notice is hereby given, pursuant to the Government in the Sunshine Act (5 U.S.C. 552b(e)(3)), of the forthcoming special meeting of the Farm Credit Administration Board (Board).

DATE AND TIME: The special meeting of the Board will be held at the offices of the Farm Credit Administration in McLean, Virginia, on January 27, 1998, from 9:00 a.m. until such time as the Board concludes its business.

FOR FURTHER INFORMATION CONTACT: Floyd Fithian, Secretary to the Farm Credit Administration Board, (703) 883-4025, TDD (703) 883-4444.

ADDRESSES: Farm Credit Administration, 1501 Farm Credit Drive, McLean, Virginia 22102-5090.

SUPPLEMENTARY INFORMATION: Parts of this meeting of the Board will be open to the public (limited space available), and parts of this meeting will be closed to the public. In order to increase the accessibility to Board meetings, persons requiring assistance should make arrangements in advance. The matters to be considered at the meeting are:

Open Session

- A. Approval of Minutes
- B. New Business Regulation General Financing Agreements [12 CFR Part 614] (Final)

* Closed Session

- C. Report OGC Litigation Report
- * Session closed-exempt pursuant to 5 U.S.C. 552b(c)(10).