

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF POLLUTION PREVENTION AND TOXICS
REGULATION OF A NEW CHEMICAL SUBSTANCE
PENDING DEVELOPMENT OF INFORMATION

In the matter of:

)

)

)

)

)

)

)

)

)

)

)

)

Premanufacture Notice Number:

P-18-0047

Consent Order and Determinations Supporting Consent Order

**TSCA CONFIDENTIAL
BUSINESS INFORMATION
DOES NOT CONTAIN NATIONAL
SECURITY INFORMATION (E.O. 12065)**

TABLE OF CONTENTS

Preamble

- I. Introduction
- II. Summary of Terms of the Consent Order
- III. Contents of PMN
- IV. EPA's Assessment of Exposure and Risk
- V. EPA's Determination
- VI. Information Required to Evaluate Human Health and Environmental Effects

Consent Order

- I. Scope of Applicability and Exemptions
- II. Terms of Manufacture, Processing, Distribution in Commerce, and Disposal Pending Submission and Evaluation of Information
- III. Recordkeeping
- IV. Requests for Pre-Inspection Information
- V. Successor Liability Upon Transfer of Consent Order
- VI. Modification and Revocation of Consent Order
- VII. Effect of Consent Order

Attachment A - Definitions

Attachment B - Notice of Transfer of Consent Order

PREAMBLE

I. INTRODUCTION

This Consent Order is entered into voluntarily by the Environmental Protection Agency (“EPA” or “the Agency”) and [REDACTED] (“the Company”), regarding premanufacture notice (“PMN”) P-18-0047 for the chemical substance 1,2-ethanediol, 1,2-dibenzoate (CAS Number: 94-49-5) (“the PMN substance”). The Consent Order is issued under § 5(e) of the Toxic Substances Control Act (“TSCA”) (15 U.S.C. 2604(e)). The Company submitted the PMN to EPA pursuant to § 5(a)(1)(B) of TSCA and 40 C.F.R. pt. 720.

Under § 15 of TSCA, it is unlawful for any person to fail or refuse to comply with any provision of TSCA, any order issued under TSCA, or any consent order entered into under TSCA. Violators may be subject to various penalties and to both criminal and civil liability pursuant to § 16 of TSCA, and to specific enforcement and seizure pursuant to § 17 of TSCA. In addition, chemical substances subject to an order issued under § 5 of TSCA, such as this one, are subject to the § 12(b) export notice requirement.

II. SUMMARY OF TERMS OF THE CONSENT ORDER

The Consent Order requires the Company to:

- (a) provide personal protective equipment to its workers to prevent dermal exposure;
- (b) provide NIOSH-certified respirators with an APF of at least 25 to its workers to mitigate inhalation exposure during processing of the PMN substance;

- (c) label containers of the PMN substance and provide Safety Data Sheets ("SDSs") or Material Safety Data Sheets ("MSDSs") and worker training in accordance with the provisions of the Hazard Communication Program section;
- (d) refrain from manufacturing (excluding import) the PMN substance in the United States (i.e., import only);
- (e) refrain from processing the PMN substance other than for use as a phlegmatizer (stabilizer for compounds susceptible to detonation) for peroxides for use with polyester and vinyl ester resins as well as with curable unsaturated polyester and methacrylic resins;
- (f) distribute the PMN substance only to a person who agrees to follow the same restrictions (except the testing requirements), to provide personal protective equipment to prevent dermal exposure during use of the PMN substance, and to not further distribute the PMN substance until it has been entrained in a cured resin;
- (g) comply with the Release to Water provisions of the attached Consent Order; and,
- (h) maintain certain records.

III. CONTENTS OF PMN

By signing the Consent Order, the Company represents that it has carefully reviewed this document and agrees that all information herein that is claimed as confidential by the Company is correctly identified within brackets, that any information that is not bracketed is not claimed as confidential, and that the Company has previously submitted any information so marked to EPA under a claim of confidentiality in accordance with the requirements of TSCA and applicable regulations. To make this document available for public viewing, EPA will remove only the information contained within the brackets.

Confidential Business Information Claims (Bracketed in the Preamble and the Consent Order):

Company Identity, Submitter and Technical Contact Information, Trade Identity, Production Volume, Formulation Information, Processing Information, Destination of Water Releases, SDSs.

Specific Chemical Identity: 1,2-Ethanediol, 1,2-dibenzoate.

Specific Use: Phlegmatizer (stabilizer for compounds susceptible to detonation) for peroxides for use with polyester and vinyl ester resins as well as with curable unsaturated polyester and methacrylic resins.

Maximum Estimated 12-Month Production Volume: [REDACTED]

Test Data Submitted with PMN: Health effects data (including 90-day OECD 408/422, OECD 423, OECD 473, OECD 429 LLNA, Direct Peptide Reactivity Assay, OECD 490, OECD 492, OECD 439/EC 440), Environmental effects data (including OECD 210, OECD 211), Environmental fate data (including OECD 301D), Physical/chemical properties, Structure/activity relationships. This is not an exhaustive list of the submitted test data.

IV. EPA'S ASSESSMENT OF EXPOSURE AND RISK

The following is EPA's assessment regarding the probable human and environmental toxicity, human exposure and environmental release of the PMN substance, based on the information currently available to the Agency.

Human Health Effects Summary:

Absorption: Absorption through the skin is expected to be poor to moderate, gastrointestinal absorption is expected to be moderate, and lung absorption is expected to be poor based on physical/chemical properties of the PMN substance.

Toxicological Endpoints of Concern and Basis: There are concerns for blood and liver toxicity, neurotoxicity, and immunotoxicity based on submitted data on the PMN substance. Additionally, there are concerns for reproductive and developmental toxicity based on the release of benzoic acid and test data on analogs. Finally, there is concern for kidney toxicity based on the potential release of ethylene glycol.

Environmental Effects Summary:

Based on test data on the PMN substance, and test data on similar esters, ecotoxicity hazard for this substance is estimated to be moderate (chronic and acute concentrations of concern of 10 ppb and 477 ppb, respectively). EPA did not identify unreasonable risk to the environment under the intended conditions of use due to no exceedances of the concentrations of concern.

See <https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/chemical-categories-used-review-new>

Exposure Summary:

	Process	Use
# Sites	■	■

Workers (#/site)	■	■
Exposure (days/year)	■	■
Dermal Exposure (mg/day)	■	■
Inhalation Exposure (mg/day)	■	■

Risk to Workers: EPA identified risks for workers for neurotoxicity and other systemic toxicity endpoints via inhalation and dermal exposures based on quantitative hazard data for the PMN substance: inhalation MOE=53, dermal MOE=4.3, benchmark MOE=1000. EPA's assessment of worker inhalation exposure based on the intended uses of the PMN substance is substantially lower than the expected exposure during processing, and the attached Consent Order requires respiratory protection during processing only (where engineering, work practice, and administrative controls are not feasible or, if feasible, do not prevent exposure). Uses other than as stated in the PMN could result in risks via inhalation. The attached Consent Order limits use of the PMN substance to only those uses described in the PMN; there are no unreasonable worker risks expected with the controls stipulated in the attached Consent Order.

Risk to General Population: EPA did not identify risks for the general population for neurotoxicity, or other systemic toxicity endpoints, via ingestion based on quantitative hazard data on the PMN substance (all MOEs are greater than the benchmark MOE of 1000).

Risk to Consumers: EPA did not evaluate risks to consumers as consumer exposures are not expected.

V. EPA'S DETERMINATION

Based on the foregoing:

- (a) EPA determines, pursuant to §§ 5(a)(3)(B)(i) and 5(e)(1)(A)(i) of TSCA, that the information available to the Agency is insufficient to permit a reasoned evaluation of the human health and environmental effects of the PMN substance under reasonably foreseen conditions of use. This is because of the limitations of the health effects and environmental effects data specific to your PMN substance.
- (b) EPA is unable to determine whether the PMN substance will present an unreasonable risk to health or the environment under reasonably foreseen conditions of use. Information available to EPA indicates that there is a potential for human or environmental exposure to the PMN substance and that the PMN substance may cause the human health and environmental effects discussed above. Therefore, pursuant to §§ 5(a)(3)(B)(ii)(I) and 5(e)(1)(A)(ii)(I) of TSCA, EPA determines that uncontrolled manufacture, processing, distribution in commerce, use, or disposal of the PMN substance may present an unreasonable risk of injury to health or the environment and that the limitations imposed by the Consent Order are necessary to protect against such risk.
- (c) In light of the estimated production volume of, and human exposure to the PMN substance, EPA determines, pursuant to §§ 5(a)(3)(B)(ii)(II) and 5(e)(1)(A)(ii)(II) of TSCA, that the PMN

substance is or will be produced in substantial quantities and that there is or may be significant (or substantial) human exposure to the PMN substance.

VI. INFORMATION REQUIRED OR POTENTIALLY USEFUL TO EVALUATE HUMAN HEALTH AND ENVIRONMENTAL EFFECTS

Potentially Useful Information. The attached Consent Order's restrictions on manufacture (including importing), processing, distribution in commerce, and disposal of the PMN substance will remain in effect until the attached Consent Order is modified or revoked by EPA based on submission of information described below or other relevant information to inform potential risks. Information may be required if a modification is requested to deviate from the conditions of the attached Consent Order. EPA encourages dialogue with Agency representatives to help determine how best the submitter can meet both the information needs and the objective of TSCA section 4(h).

The following types of information could be useful:

Information	Effects
Acute aquatic toxicity	Ecological
Neurotoxicity/developmental neurotoxicity/prenatal development	Human Health

NOTE: Any required triggered testing and/or potentially useful information described in the attached Consent Order was made based on EPA's consideration of available screening-level data, if any, as well as other available information on appropriate testing for the PMN substance. Further, any such testing/information identified by EPA that includes testing on vertebrates was made after consideration of available toxicity information, computational toxicology and

bioinformatics, and high-throughput screening methods and their prediction models. Pursuant to TSCA section 4(h), which pertains to reduction of testing in vertebrate animals, EPA encourages consultation with the Agency on the use of alternative test methods and strategies (also called New Approach Methodologies, or NAMs), if available, to generate the potentially useful information.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

**TSCA CONFIDENTIAL
BUSINESS INFORMATION
DOES NOT CONTAIN NATIONAL
SECURITY INFORMATION (E.O. 12065)**

CONSENT ORDER

I. SCOPE OF APPLICABILITY AND EXEMPTIONS

(a) Scope. The requirements of this Consent Order apply to all commercial manufacturing (including importing), processing, distribution in commerce, use and disposal of the chemical substance 1,2-ethanediol, 1,2-dibenzoate (CAS No.: 94-49-5) (P-18-0047) ("the PMN substance") in the United States by [REDACTED] ("the Company"), except to the extent that those activities are exempted by paragraph (b).

(b) Exemptions. Manufacturing, processing, distribution in commerce, use and disposal of the PMN substance is exempt from the requirements of this Consent Order (except the requirements in the Recordkeeping and Successor Liability Upon Transfer Of Consent Order sections) only to the extent that (1) these activities are conducted in full compliance with all applicable requirements of the following exemptions, and (2) such compliance is documented by appropriate recordkeeping as required in the Recordkeeping section of this Consent Order.

(1) Export. Until the Company begins commercial manufacture of the PMN substance for use in the United States, the requirements of this Consent Order do not apply to manufacture, processing or distribution in commerce of the PMN substance solely for export in accordance with TSCA §§12(a) and 12(b), 40 C.F.R. § 720.3(s) and 40 C.F.R. Part 707. However, once the Company begins to manufacture, process, or distribute in commerce the PMN substance for use in the United States, no further activity by the Company involving the PMN substance is exempt as

“solely for export” even if some amount of the PMN substance is later exported. At that point, the requirements of this Consent Order apply to all activities associated with the PMN substance while in the territory of the United States. Prior to leaving U.S. territory, even those quantities or batches of the PMN substance that are destined for export are subject to terms of the Consent Order.

(2) Research & Development (“R&D”). The requirements of this Consent Order do not apply to manufacturing, processing, distribution in commerce, use and disposal of the PMN substance in small quantities solely for research and development in accordance with TSCA §5(h)(3), 40 C.F.R. § 720.3(cc), and 40 C.F.R. § 720.36. The requirements of this Consent Order also do not apply to manufacturing, processing, distribution in commerce, use and disposal of the PMN substance when manufactured solely for non-commercial research and development as defined at 40 C.F.R. § 720.30(i).

(3) Completely Entrained. The requirements of this Consent Order do not apply to quantities of the PMN substance after they have been completely entrained in cured resin.

(c) Automatic Sunset. If the Company has obtained for the PMN substance a Test Market Exemption (“TME”) under TSCA §5(h)(1) and 40 C.F.R. § 720.38 or a Low Volume Exemption (“LVE”) or Low Release and Exposure Exemption (“LoREX”) under TSCA §5(h)(4) and 40 C.F.R. § 723.50(c)(1) and (2) respectively, the Company must cease manufacture and processing under these exemptions as of the effective date of this Consent Order.

**II. TERMS OF MANUFACTURE, PROCESSING,
DISTRIBUTION IN COMMERCE, AND DISPOSAL
PENDING SUBMISSION AND EVALUATION
OF INFORMATION**

PROHIBITION

Except in accordance with the conditions described in this Order, the Company is prohibited from manufacturing (which under TSCA includes importing), processing, distributing in commerce, using, or disposing of the PMN substance in the United States, for any nonexempt commercial purpose, pending the development of information necessary for a reasoned evaluation of the human health and environmental effects of the PMN substance, and the completion of EPA's review of, and regulatory action based on, that information.

TESTING

(a) Section 8(e) Reporting. Reports of information on the PMN substance which reasonably supports the conclusion that the PMN substance presents a substantial risk of injury to health or the environment and which is required to be reported under § 8(e) of TSCA must reference the appropriate PMN identification number for the PMN substance and contain a statement that the PMN substance is subject to this Consent Order. Additional information regarding § 8(e) reporting requirements can be found at www.epa.gov/oppt/tsca8e.

(b) Notice of Study Scheduling. The Company must notify, in writing, the EPA Monitoring Assistance and Media Programs Division, Office of Enforcement and Compliance Assurance (OECA), U.S. Environmental Protection Agency, of the following information within 10 days of

scheduling any study required to be performed pursuant to this Consent Order, or within 15 days after the effective date of this Consent Order, whichever is later:

- (1) The date when the study is scheduled to commence;
- (2) The name and address of the laboratory which will conduct the study;
- (3) The name and telephone number of a person at the Company or the laboratory whom EPA may contact regarding the study; and,
- (4) The appropriate PMN identification number for each PMN substance and a statement that the PMN substance is subject to this Consent Order.

The written notice should be submitted to EPA/OECA as follows:

Postal Mail Address

U.S. Environmental Protection Agency
GLP Section Chief – Pesticides, Water and Toxics Branch
Monitoring Assistance and Media Programs Division (2227A)
Office of Enforcement and Compliance Assurance
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Courier Delivery Address

U.S. Environmental Protection Agency
GLP Section Chief – Pesticides, Water and Toxics Branch
Monitoring Assistance and Media Programs Division (2227A)
Office of Enforcement and Compliance Assurance
Room 7117B

1200 Pennsylvania Avenue, N.W.

Washington, DC 20004

A copy of the letter submitted to EPA/OECA must also be submitted concurrently as a support document for the PMN, using the procedures set out in 40 C.F.R. § 720.40.

(c) Good Laboratory Practice Standards and Test Protocols. Each study performed to address the risks identified in this Consent Order must be conducted according to TSCA Good Laboratory Practice Standards at 40 C.F.R. Part 792 and using methodologies generally accepted in the relevant scientific community at the time the study is initiated. Before starting to conduct any study that will use a modified version of a published test guideline, the Company must submit written test protocols to EPA for review (submission of written test protocols is optional for tests that are to be conducted using unmodified published test guidelines). Protocols must be submitted as a support document for the PMN, using the procedures set out in 40 C.F.R. § 720.40. EPA will respond to the Company within 4 weeks of receiving the written protocols. EPA review of a test protocol does not mean pre-acceptance of test results.

(d) Unreasonable Risk.

EPA may notify the Company in writing that EPA finds that the data generated by a study (including studies not performed or information not generated under this Consent Order) are scientifically valid and unequivocal and indicate that, despite the terms of this Consent Order, the PMN substance will or may present an unreasonable risk of injury to human health or the environment. EPA's notice may specify that the Company undertake certain actions concerning further testing, manufacture, processing, distribution, use and/or disposal of the PMN substance to

mitigate exposures to or to better characterize the risks presented by the PMN substance. Within 2 weeks from receipt of such a notice, the Company must cease all manufacture, processing, distribution, use and disposal of the PMN substance, unless either:

(1) within 2 weeks from receipt of the EPA notice, the Company complies with such requirements as the notice specifies; or

(2) within 4 weeks from receipt of the EPA notice, the Company submits to EPA a written report refuting EPA's finding and/or the appropriateness of any additional requirements imposed by EPA. The Company may continue to manufacture, process, distribute, use and dispose of the PMN substance in accordance with the terms of this Consent Order pending EPA's response to the Company's written report. EPA will respond to the Company, in writing, within 4 weeks of receiving the Company's report. Within 2 weeks of receipt of EPA's written response, the Company must comply with any requirements imposed by EPA's response or cease all manufacture, processing, distribution, use and disposal of the PMN substance.

(e) Other Requirements. Regardless of the satisfaction of any other conditions in this Testing section, the Company must continue to obey all the terms of this Consent Order until otherwise notified in writing by EPA. The Company may, based upon submitted test data or other relevant information, petition EPA to modify or revoke provisions of this Consent Order pursuant to Section VI of this Consent Order.

PROTECTION IN THE WORKPLACE

(a) Establishment of Program. During manufacturing (which includes import) and processing of the PMN substance at any site controlled by the Company (including any associated packaging and

storage and during any cleaning or maintenance of equipment associated with the PMN substance), the Company must establish a program whereby:

(1) General Dermal Protection. Engineering control measures (e.g. enclosure or confinement of the operation, general and local ventilation) or administrative control measures (e.g. workplace policies and procedures) shall be considered and implemented to prevent exposure, where feasible to each person who is reasonably likely to be dermally exposed in the work area to the PMN substance through direct handling of the PMN substance or through contact with equipment on which the PMN substance may exist, or because the PMN substance becomes airborne in a form listed in subparagraph (a)(4) of this section. Where engineering, work practice, and administrative controls are not feasible or, if feasible, do not prevent exposure, each person subject to this exposure must be provided with, and is required to wear, personal protective equipment that provides a barrier to prevent dermal exposure to the PMN substance in the specific work area where it is selected for use. Each such item of personal protective equipment must be selected and used in accordance with Occupational Safety and Health Administration ("OSHA") dermal protection requirements at 29 C.F.R. §§ 1910.132, 1910.133, and 1910.138.

(2) Demonstration of Imperviousness. The Company must demonstrate that each item of chemical protective clothing selected, including gloves, provides an impervious barrier to prevent dermal exposure during normal and expected duration and conditions of exposure within the work area. The Company may make this demonstration by any one or a combination of the following:

(i) Permeation Testing. Testing the material used to make the chemical protective clothing and the construction of the clothing to establish that the protective clothing will be impervious for the expected duration and conditions of exposure. The testing must subject the chemical protective clothing to the expected conditions of exposure, including the likely

combinations of chemical substances to which the clothing may be exposed in the work area.

Permeation testing may be conducted according to the American Society for Testing and Materials ("ASTM") F739 "Standard Test Method for Permeation of Liquids and Gases through Protective Clothing Materials under Conditions of Continuous Contact." Results must be reported as the cumulative permeation rate as a function of time, and must be documented in accordance with ASTM F739 using the format specified in ASTM F1194-99(2010) "Standard Guide for Documenting the Results of Chemical Permeation Testing of Materials Used in Protective Clothing Materials." Gloves may not be used for a time period longer than they are actually tested and must be replaced at the end of each work shift during which they are exposed to the PMN substance.

(ii) Manufacturer's Specifications. Evaluating the specifications from the manufacturer or supplier of the chemical protective clothing, or of the material used in construction of the clothing, to establish that the chemical protective clothing will be impervious to the PMN substance alone and in likely combination with other chemical substances in the work area.

(3) Respiratory Protection. Engineering control measures (e.g. enclosure or confinement of the operation, general and local ventilation) or administrative control measures (e.g. workplace policies and procedures) shall be considered and implemented to prevent exposure, where feasible, to each person who is reasonably likely to be exposed by inhalation in the work area to the PMN substance in the form listed in subparagraph (a)(4) of this section. Where engineering, work practice, and administrative controls are not feasible or, if feasible, do not prevent exposure, each person subject to this exposure must be provided with and is required to wear, at a minimum, a National Institute for Occupational Safety and Health ("NIOSH")-certified respirator with an

Assigned Protection Factor ("APF") of at least 25, from the respirators listed in subparagraph (a)(5) of this section, and the respirator is used in accordance with OSHA and NIOSH respiratory protection requirements at 29 C.F.R. § 1910.134 and 42 C.F.R. Part 84. All respirators must be issued, used, and maintained according to an appropriate respiratory protection program under the OSHA requirements in 29 C.F.R. § 1910.134.

(4) Physical States. The following physical states of airborne chemical substances are listed for subparagraphs (a)(1) and (3) of this section:

- (i) Particulate (including solids or liquid droplets),
- (ii) Gas/vapor (all substances in the gas form), or
- (iii) Combination Gas/Vapor and Particulate (gas and liquid/solid physical states are present; a good example is paint spray mist, which contains both liquid droplets and vapor).

(5) Authorized Respirators. The following NIOSH-certified respirators meet the minimum requirements for subparagraph (a)(3) of this section:

Minimum Assigned Protection Factor (APF)	Type of Respirator
25	(I) Any NIOSH-certified powered air-purifying respirator equipped with a hood or helmet and HEPA filters. (II) Any NIOSH-certified powered air-purifying respirator equipped with a loose fitting facepiece and HEPA filters. (III) Any NIOSH-certified continuous flow supplied-air respirator equipped with a hood or helmet. (IV) Any NIOSH-certified continuous flow supplied-air respirator equipped with a loose fitting facepiece.

Minimum Assigned Protection Factor (APF)	Type of Respirator
50	<p>(I) Any NIOSH-certified air-purifying full facepiece respirator equipped with N100 (if oil aerosols absent), R-100, or P-100 filter(s).</p> <p>(II) Any NIOSH-certified powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and equipped with HEPA filters.</p> <p>(III) Any NIOSH-certified pressure-demand or other positive pressure mode supplied-air respirator equipped with a half-mask.</p> <p>(IV) Any NIOSH-certified negative pressure (demand) supplied-air respirator equipped with a full facepiece.</p> <p>(V) Any NIOSH-certified continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece).</p> <p>(VI) Any NIOSH-certified negative pressure (demand) self-contained breathing apparatus (SCBA) equipped with a hood or helmet or a full facepiece.</p>

(b) De Minimis Concentrations. The requirements of this section do not apply to quantities of the PMN substance that are (1) present in the work area only as a mixture and (2) at a concentration not to exceed 1.0 percent by weight or volume (0.1 percent by weight or volume if the PMN substance is identified as a potential carcinogen in paragraph (f) of the Hazard Communication Program section of this Consent Order). This exemption is not available if the Company has reason to believe that, during intended activities, the PMN substance in the mixture may be reconcentrated above the 1.0 or 0.1 percent level, whichever applies. If this Consent Order contains New Chemical Exposure Limits provisions or Release to Water provisions that, respectively, specify a NCEL concentration ("TWA") or in-stream concentration ("N") less than the *de minimis* concentration specified here, then this *de minimis* exemption does not apply.

HAZARD COMMUNICATION PROGRAM

(a) Written Hazard Communication Program. The Company must develop and implement a written hazard communication program for the PMN substance in each workplace. The written program will, at a minimum, describe how the requirements of this section for labels, SDSs or MSDSs, and other forms of warning material will be satisfied. The Company must make the written hazard communication program available, upon request, to all employees, contractor employees, and their designated representatives. The Company may rely on an existing hazard communication program, including an existing program established under the OSHA Hazard Communication Standard (29 C.F.R. § 1910.1200), to comply with this paragraph provided that the existing hazard communication program satisfies the requirements of this section. The written program must include the following:

(1) A list of chemical substances known to be present in the work area which are subject to a consent order or order issued under § 5 of TSCA to the Company, or to a significant new use rule ("SNUR") issued under § 5(a)(2) of TSCA and 40 C.F.R. pt. 721, subpt. E. The list must be maintained in each work area where the PMN substance is known to be present and must use the identity provided on the SDS or MSDS for the PMN substance required under paragraph (c) of this section. The list may be compiled for the workplace or for individual work areas. If the Company is required either by another consent order or order issued under § 5 of TSCA, or by a SNUR issued under TSCA § 5(a)(2) and 40 C.F.R. pt. 721, subpt. E, to maintain a list of substances, the lists must be combined with the list under this subparagraph.

(2) The methods the Company will use to inform employees of the hazards of non-routine tasks involving the PMN substance (e.g., cleaning of reactor vessels), and the hazards associated with the PMN substance contained in unlabeled pipes in their work area.

(3) The methods the Company will use to inform contractors of the presence of the PMN substance in the Company's workplace and of the provisions of this Consent Order if employees of the contractor work in the Company's workplace and are reasonably likely to be exposed to the PMN substance while in the Company's workplace.

(b) Labeling.

(1) The Company must ensure that each container of the PMN substance in the workplace is labeled in accordance with this subparagraph (b)(1).

(i) The label must, at a minimum, contain the following information:

(A) A statement of the health hazards(s) and precautionary measure(s), if any, identified either in paragraph (f) of this section or by the Company, for the PMN substance.

(B) The identity by which the PMN substance may be commonly recognized.

(C) A statement of the environmental hazard(s) and precautionary measure(s), if any, identified either in paragraph (f) of this section, or by the Company, for the PMN substance.

(D) A statement of exposure and precautionary measure(s), if any, identified either in paragraph (f) of this section, or by the Company, for the PMN substance.

(ii) The Company may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process

containers, as long as the alternative method identifies the containers to which it is applicable and conveys information specified by subparagraph (b)(1)(i) of this section. Any written materials must be readily accessible to the employees in their work areas throughout each work shift.

(iii) The Company need not label portable containers into which the PMN substance is transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

(iv) The Company must not remove or deface an existing label on containers of the PMN substance obtained from persons outside the Company unless the container is immediately re-labeled with the information specified in subparagraph (b)(1)(i) of this section.

(2) The Company must ensure that each container of the PMN substance leaving its workplace for distribution in commerce is labeled in accordance with this subparagraph (b)(2).

(i) The label must, at a minimum, contain the following information:

(A) The information prescribed in subparagraph (b)(1)(i) of this section.

(B) The name and address of the manufacturer or a responsible party who can provide additional information on the PMN substance for hazard evaluation and any appropriate emergency procedures.

(ii) The label must not conflict with the requirements of the Hazardous Materials Transportation Act (18 U.S.C. 1801 et. seq.) and regulations issued under that Act by the Department of Transportation.

(3) The label, or alternative forms of warning, must be legible and prominently displayed.

(4) The label, or alternative forms of warning, must be printed in English; however, the information may be repeated in other languages.

(5) If the label or alternative form of warning is to be applied to a mixture containing the PMN substance in combination with any other substance that is either subject to another consent order or order issued under § 5 of TSCA to the Company, SNUR issued under § 5(a)(2) of TSCA and 40 C.F.R. pt. 721, subpt. E, or defined as a “hazardous chemical” under the OSHA Hazard Communication Standard (29 C.F.R. § 1910.1200), the Company may prescribe on the label, SDS or MSDS, or alternative form of warning, the measures to control worker exposure or environmental release which the Company determines provide the greatest degree of protection. However, should these control measures differ from the applicable measures required under this Consent Order, the Company must seek a determination of equivalency for such alternative control measures pursuant to 40 C.F.R. § 721.30 before prescribing them under this subparagraph (b)(5).

(6) If the Company becomes aware of any significant new information regarding the hazards of the PMN substance or ways to protect against the hazards, this new information must be added to the label within 3 months from the time the Company becomes aware of the new information. If the PMN substance is not being manufactured (defined by statute to include import), processed, or used in the Company’s workplace, the Company must add the new information to the label before the PMN substance is reintroduced into the workplace.

(c) Safety Data Sheets or Material Safety Data Sheets.

(1) The Company must obtain or develop an SDS or MSDS for the PMN substance.

(2) The SDS or MSDS must contain, at a minimum, the following information:

(i) The identity used on the container label of the PMN substance under this section, and, if not claimed confidential, the chemical and common name of the PMN substance.

If the chemical and common names are claimed confidential, a generic chemical name must be used.

(ii) Physical and chemical characteristics of the PMN substance known to the Company, (e.g., vapor pressure, flash point).

(iii) The physical hazards of the PMN substance known to the Company, including the potential for fire, explosion, and reactivity.

(iv) The potential human and environmental hazards as specified in paragraph (f) of this section.

(v) Signs and symptoms of exposure, and any medical conditions which are expected to be aggravated by exposure to the PMN substance known to the Company.

(vi) The primary routes of exposure to the PMN substance.

(vii) Precautionary measures to control worker exposure and/or environmental release required by this Consent Order, or alternative control measures which EPA has determined under 40 C.F.R. § 721.30 provide substantially the same degree of protection as the identified control measures.

(viii) Any generally applicable precautions for safe handling and use of the PMN substance which are known to the Company, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for response to spills and leaks.

(ix) Any generally applicable control measures which are known to the Company, such as appropriate engineering controls, work practices, or personal protective equipment.

(x) Emergency first aid procedures known to the Company.

(xi) The date of preparation of the SDS or MSDS or of its last revision.

(xii) The name, address, and telephone number of the Company or another responsible party who can provide additional information on the PMN substance and any appropriate emergency procedures.

(3) If no relevant information is found or known for any given category on the SDS or MSDS, the Company must mark the SDS or MSDS to indicate that no applicable information was found.

(4) Where multiple mixtures containing the PMN substance have similar compositions (i.e., the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture) and similar hazards, the Company may prepare one SDS or MSDS to apply to all of these multiple mixtures.

(5) If the Company becomes aware of any significant new information regarding the hazards of the PMN substance or ways to protect against the hazards, this new information must be added to the SDS or MSDS within 3 months from the time the Company becomes aware of the new information. If the PMN substance is not being manufactured (defined by statute to include import), processed, or used in the Company's workplace, the Company must add the new information to the SDS or MSDS before the PMN substance is reintroduced into the workplace.

(6) The Company must ensure that persons receiving the PMN substance from the Company are provided an appropriate SDS or MSDS with their initial shipment and with the first shipment after an SDS or MSDS is revised. The Company may either provide the SDS or MSDS with the shipped containers or send it to the person prior to or at the time of shipment.

(7) The Company must maintain a copy of the SDS or MSDS in its workplace, and must ensure that it is readily accessible during each work shift to employees when they are in their work areas.

(8) The SDS or MSDS may be kept in any form, including as operating procedures, and may be designed to cover groups of substances in a work area where it may be more appropriate to address the potential hazards of a process rather than individual substances. However, in all cases, the required information must be provided for the PMN substance and must be readily accessible during each work shift to employees when they are in their work areas.

(9) The SDS or MSDS must be printed in English; however, the information may be repeated in other languages.

(d) Employee Information and Training. The Company must ensure that employees are provided with information and training on the PMN substance. This information and training must be provided at the time of each employee's initial assignment to a work area containing the PMN substance and whenever the PMN substance is introduced into the employee's work area for the first time.

(1) The information provided to employees under this paragraph must include:

- (i) The requirements of this section.
- (ii) Any operations in the work area where the PMN substance is present.
- (iii) The location and availability of the written hazard communication program required under paragraph (a) of this section, including the list of substances required by subparagraph (a)(1) of this section and SDSs or MSDSs required by paragraph (c) of this section.

(2) The training provided to employees must include:

- (i) Methods and observations that may be used to detect the presence or release of the PMN substance in or from an employee's work area (such as exposure monitoring conducted

by the Company, continuous monitoring devices, visual appearance, or odor of the PMN substance when being released).

(ii) The potential human health and environmental hazards of the PMN substance as specified in paragraph (f) of this section.

(iii) The measures employees can take to protect themselves and the environment from the PMN substance, including specific procedures the Company has implemented to protect employees and the environment from exposure to the PMN substance, including appropriate work practices, emergency procedures, personal protective equipment, engineering controls, and other measures to control worker exposure and/or environmental release required under this Consent Order, or alternative control measures which EPA has determined under 40 C.F.R. § 721.30 provide the same degree of protection as the specified control measures.

(iv) The requirements of the hazard communication program developed by the Company under this section, including an explanation of the labeling system and the SDS or MSDS required by this section and guidance on obtaining and using appropriate hazard information.

(e) De Minimis Concentrations. The requirements of this section do not apply to quantities of the PMN substance that are (1) present in the work area only as a mixture and (2) at a concentration not to exceed 1.0 percent by weight or volume (0.1 percent by weight or volume if the PMN substance is identified as a potential carcinogen in paragraph (f) of the Hazard Communication Program section of this Consent Order). This exemption is not available if the Company has reason to believe that, during intended activities, the PMN substance in the mixture may be reconcentrated above the 1.0 or 0.1 percent level, whichever applies. If this Consent Order

contains Release to Water provisions that specify an in-stream concentration ("N") less than the *de minimis* concentration specified here, then this *de minimis* exemption does not apply.

(f) Human Health, Environmental Hazard, Exposure, and Precautionary Statements. The following human health and environmental hazard and precautionary statements must appear on each label as specified in paragraph (b) and the SDS or MSDS as specified in paragraph (c) of this section:

- (1) Human health hazard statements. This substance may cause:
 - (i) central nervous system effects.
 - (ii) internal organ effects.
 - (iii) reproductive effects.
 - (iv) immune system effects.
 - (v) developmental effects.
 - (vi) blood effects.
- (2) Human hazard precautionary statements. When using this substance:
 - (i) avoid skin contact.
 - (ii) avoid breathing the substance.
 - (iii) use respiratory protection.
 - (iv) use skin protection.
- (3) Environmental hazard statements. This substance may be:
 - (i) toxic to fish.
 - (ii) toxic to aquatic organisms.
- (4) Environmental hazard precautionary statements. Notice to users:

(i) restrictions apply to releases to water.

(5) The human and environmental hazard and precautionary statement on the label prepared pursuant to paragraph (b) of this section must be followed by the statement: "See the SDS or MSDS for details."

(6) The Company may use alternative hazard and warning statements that meet the criteria of the Globally Harmonized System (GHS) and OSHA Hazard Communication Standard.

(g) Existing Hazard Communication Program. The Company need not take additional actions if existing programs and procedures satisfy the requirements of this section.

MANUFACTURING

(a)(1) Prohibition. The Company must not cause, encourage, or suggest the manufacture (which includes import) of the PMN substance by any other person.

(2) Sunset Following SNUR. Subparagraph (a)(1) will expire 75 days after promulgation of a final SNUR governing the PMN substance under § 5(a)(2) of TSCA unless the Company is notified on or before that day of an action in a Federal Court seeking judicial review of the SNUR. If the Company is so notified, subparagraph (a)(1) will not expire until EPA notifies the Company in writing that all Federal Court actions involving the SNUR have been resolved and the validity of the SNUR affirmed.

(3) Notice of SNUR. If and when EPA promulgates a final SNUR for the PMN substance and subparagraph (a)(1) expires in accordance with subparagraph (a)(2), the Company must notify each person whom it causes, encourages or suggests to manufacture the PMN substance of the existence of the SNUR.

(b) The Company may not manufacture (excluding import) the PMN substance in the United States.

PROCESSING

(a) The Company may not process the PMN substance other than for use as a phlegmatizer (stabilizer for compounds susceptible to detonation) for peroxides for use with polyester and vinyl ester resins as well as with curable unsaturated polyester and methacrylic resins.

DISTRIBUTION

(a) Export Notice Requirement. No later than the date of distribution, the Company must notify in writing any person to whom it distributes the PMN substance that, due to the issuance of this Consent Order, the PMN substance is subject to the export notification requirements of TSCA § 12(b) and 40 C.F.R. Part 707, Subpart D. Such notice must contain, in the form in which it appears in this Consent Order, the following information: (1) the PMN number, and (2) either (A) the specific chemical identity of the PMN substance, or (B) if the specific chemical identity is confidential, the generic chemical identity.

(b) Distribution Requirements. Except after the PMN has been completely entrained in cured resin, and except as provided in paragraph (c), the Company is permitted to distribute the PMN substance outside the Company, other than for disposal, only to a person who has agreed in writing prior to the date of distribution, to:

(1) Notify in writing any person to whom it distributes the PMN substance that, due to the

issuance of this Consent Order under § 5(e) of TSCA, the PMN substance is subject to the export notification requirements of TSCA § 12(b) and 40 C.F.R. Part 707, Subpart D. Such notice must contain, in the form in which it appears in this Consent Order, the following information: (1) the PMN number, and (2) either (A) the specific chemical identity of the PMN substance, or (B) if the specific chemical identity is confidential, the generic chemical identity.

(2) Not further distribute the PMN substance to any other person, other than for disposal, until after the PMN substance has been completely entrained in cured resin. *

(3) Comply with the same requirements and restrictions required of the Company in the Protection in the Workplace section of this Consent Order.

(4) Comply with the same requirements and restrictions required of the Company in the Hazard Communication Program section of this Consent Order.

(5) Comply with the same environmental release restrictions required of the Company in the Release to Water section of this Consent Order.

(6) Not process the PMN substance:

(i) Other than for use as described in the PMN (i.e., other than as a phlegmatizer (stabilizer for compounds susceptible to detonation) for peroxides for use with polyester and vinyl ester resins as well as with curable unsaturated polyester and methacrylic resins);

(ii) Without providing dermal protection including impervious gloves to its workers to prevent dermal exposure;

(iii) Without providing NIOSH-certified respirators with APF of at least 25 to its workers to mitigate inhalation exposure.

(7) Not use the PMN substance:


* Please note the EPA provided a Consent Order Modification for this paragraph found on the next page.

CONSENT ORDER MODIFICATION

Page 22 of the Consent Order is hereby modified to revise paragraph (b)(2) of the Distribution section. The modification is reflected in the attached page. The modification allows the Company to distribute the PMN substance to a person who may further distribute the PMN substance under certain conditions.

All other terms and conditions of the original Consent Order remain unchanged. This modification is effective on the signature date below.

September 20, 2018
Date



Jeffery T. Morris
Director
Office of Pollution Prevention and Toxics

Attachment: page 22

(2) Not further distribute the PMN substance to any other person, other than for disposal, until after the PMN substance has been completely entrained in cured resin, unless the person to whom the Company distributes the PMN substance has agreed in writing to:

(i) Notify in writing any person to whom it further distributes the PMN substance of the requirements of this Consent Order;

(ii) Not process, use, repackage, or re-label the PMN substance prior to further distributing the substance; and,

(iii) Notify in writing any person to whom it distributes the PMN substance that, due to the issuance of this Consent Order under § 5(e) of TSCA, the PMN substance is subject to the export notification requirements of TSCA § 12(b) and 40 C.F.R. Part 707, Subpart D. Such notice must contain, in the form in which it appears in this Consent Order, the following information: (1) the PMN number, and (2) either (A) the specific chemical identity of the PMN substance, or (B) if the specific chemical identity is confidential, the generic chemical identity.

(i) Other than as described in the PMN (i.e., other than as a phlegmatizer (stabilizer for compounds susceptible to detonation) for peroxides for use with polyester and vinyl ester resins as well as with curable unsaturated polyester and methacrylic resins);

(ii) Without providing dermal protection including impervious gloves to its workers to prevent dermal exposure.

(c) Temporary Transport and Storage. Notwithstanding paragraph (b), the Company may distribute the PMN substance outside the Company for temporary transport and storage in sealed containers provided the following three conditions are met:

(1) Subsequent to any such exempt temporary transport or storage of sealed containers, the PMN substance may be distributed only to the Company or a person who has given the Company the written agreement required by paragraph (b).

(2) Any human exposure or environmental release resulting from opening the sealed containers and removing or washing out the PMN substance may occur only while the PMN substance is in the possession and control of the Company or a person who has given the Company the written agreement required by paragraph (b).

(3) The sealed containers must be labeled in accordance with paragraph (b)(2) of the Hazard Communication Program section of this Consent Order.

(d) Recipient Non-Compliance. If, at any time after commencing distribution in commerce of the PMN substance, the Company obtains knowledge that a recipient of the PMN substance has failed to comply with any of the conditions specified in paragraph (b) of this Distribution section or, after paragraph (b) expires in accordance with subparagraph (e)(1), has engaged in a significant new use

of the PMN substance (as defined in 40 C.F.R. Part 721, Subpart E) without submitting a significant new use notice to EPA, the Company must cease supplying the PMN substance to that recipient, unless the Company is able to document each of the following:

(1) That the Company has, within 5 working days, notified the recipient in writing that the recipient has failed to comply with any of the conditions specified in paragraph (b) of this Distribution section, or has engaged in a significant new use of the PMN substance without submitting a significant new use notice to EPA.

(2) That, within 15 working days of notifying the recipient of the noncompliance, the Company received from the recipient, in writing, a statement of assurance that the recipient is aware of the terms of paragraph (b) of this Distribution section and will comply with those terms, or is aware of the terms of the significant new use rule for the PMN substance and will not engage in a significant new use without submitting a significant new use notice to EPA.

(3) If, after receiving a statement of assurance from a recipient under subparagraph (d)(2) of this Distribution section, the Company obtains knowledge that the recipient has failed to comply with any of the conditions specified in paragraph (b) of this Distribution section, or has engaged in a significant new use of the PMN substance without submitting a significant new use notice to EPA, the Company must cease supplying the PMN substance to that recipient, must notify EPA of the failure to comply, and is permitted to resume supplying the PMN substance to that recipient only upon written notification from the Agency.

(e) Sunset Following SNUR and Notification of SNUR. (1) Paragraphs (b) and (c) of this Distribution section will expire 75 days after promulgation of a final SNUR for the PMN substance under § 5(a)(2) of TSCA, unless the Company is notified on or before that day of an action in a

Federal Court seeking judicial review of the SNUR. If the Company is so notified, paragraphs (b) and (c) of this Distribution section will not expire until EPA notifies the Company in writing that all Federal Court actions involving the SNUR have been resolved and the validity of the SNUR affirmed.

(2) When EPA promulgates a final SNUR for the PMN substance and paragraph (b) of this Distribution section expires in accordance with subparagraph (e)(1), the Company must notify each person to whom it distributes the PMN substance of the existence of the SNUR. Such notification must be in writing and must specifically include all limitations contained in the SNUR which are defined as significant new uses, and which would require significant new use notification to EPA for the PMN substance. Such notice must also reference the publication of the SNUR for this PMN substance in either the Federal Register or the Code of Federal Regulations.

RELEASE TO WATER

(a) This provision does not supersede or preempt any applicable federal, state, and local laws and regulations. (Those other laws may be more stringent than the requirements below.) The Company is prohibited from any predictable or purposeful release of the PMN substance, or any waste stream from processing or use containing the PMN substance:

(1)(a) Into the waters of the United States if the quotient from the formula:

$$\frac{\text{number of kilograms/day/site released}}{\text{receiving stream flow (million liters/day)}} \times 1000$$

exceeds 10 parts per billion, when calculated using the methods described in 40 C.F.R. § 721.91.

(b) In lieu of calculating the quotient in subparagraph (1)(a), monitoring or alternative calculations may be used to predict the surface water concentration expected to result from the intended release of the PMN substance, if the monitoring procedures or calculations have been approved for such purpose by EPA. EPA will review and act on a written request to approve monitoring procedures or alternative calculations within 90 days after such a request is received. The Agency will inform the Company of the disposition of such requests in writing and, where a request is denied, will explain the reasons therefore.

(c) Predictable or Purposeful Releases. (1) If for any reason the Company fails to comply with the strict release limitations applicable to the PMN substance under this "Release to Water" section, the Company shall notify EPA within 5 days of the release. If the Company believes that a given release was not predictable or purposeful it shall provide in writing to EPA an explanation and description of the reasons for the release; the amount of the release; all actions taken or to be taken to prevent or minimize the release or future releases; a schedule for implementation of any measures to be taken to prevent or mitigate effects of the release; the Company's rationale for attributing such release to non-predictable or non-purposeful causes; and a statement as to whether, in the opinion of the Company, such release may cause or contribute to an endangerment to public health or welfare, or the environment. The Company shall include with any notice all available documentation supporting their claim that the release was not predictable or purposeful. If EPA agrees that the release to water was not predictable or purposeful, it may excuse the release.

(2) Routine or repeated activity that results in releases to water or non-routine releases to water that are not due to emergency conditions are predictable or purposeful. EPA does not intend the phrase "predictable or purposeful" to limit EPA's strict liability authority under TSCA.

III. RECORDKEEPING

(a) Records. The Company must maintain the following records until 5 years after the date they are created and must make them available for inspection and copying by EPA in accordance with § 11 of TSCA:

(1) Exemptions. Records documenting that the PMN substance did in fact qualify for any one or more of the exemptions described in Section I, Paragraph (b) of this Consent Order. Such records must satisfy all the statutory and regulatory recordkeeping requirements applicable to the exemption being claimed by the Company. Any amounts or batches of the PMN substance eligible for the export only exemption in Section I, Paragraph (b)(1) of this Consent Order are exempt from all the requirements in this Recordkeeping section, if the Company maintains, for 5 years from the date of their creation, copies of the export label and export notice to EPA, required by TSCA §§ 12(a)(1)(B) and 12(b), respectively. Any amounts or batches of the PMN substance eligible for the research and development exemption in Section I, Paragraph (b)(2) of this Consent Order are exempt from all the requirements in this Recordkeeping section, if the Company maintains, for 5 years from the date of their creation, the records required by 40 C.F.R. § 720.78(b). For any amounts or batches of the PMN substance claimed to be eligible for any other exemption described in Section I, Paragraph (b) of this Consent Order, the Company must keep records demonstrating qualification for that exemption as well as the records specified in paragraphs (2) and (3) below, but is exempt from the other recordkeeping requirements in this Recordkeeping section;

(2) Records documenting the manufacture (which includes import) volume of the PMN substance and the corresponding dates of manufacture;

(3) Records documenting the names and addresses (including shipment destination address, if different) of all processors outside the site of manufacture (which includes import) to whom the Company directly sells or transfers the PMN substance, the date of each sale or transfer, and the quantity of the PMN substance sold or transferred on such date;

(4) Records documenting the address of all sites of manufacture (which includes import), processing, and use;

(5) Records documenting establishment and implementation of a program for the use of any applicable personal protective equipment required pursuant to the Protection in the Workplace section of this Consent Order;

(6) Records documenting the determinations required by the Protection in the Workplace section of this Consent Order that chemical protective clothing is impervious to the PMN substance;

(7) Records documenting establishment and implementation of the hazard communication program required by the Hazard Communication Program section of this Consent Order;

(8) Copies of labels required under the Hazard Communication Program section of this Consent Order;

(9) Copies of Material Safety Data Sheets required by the Hazard Communication Program section of this Consent Order;

(10) Records documenting compliance with any applicable manufacturing, processing, use, and distribution restrictions in the Manufacturing, Processing, Use, and Distribution sections of this Consent Order, including distributees' written agreement to comply with the Distribution section of this Consent Order;

(11) Records documenting establishment and implementation of procedures that ensure compliance with any applicable water discharge limitation in the Release to Water section of this Consent Order;

(12) Copies of any Transfer Documents and notices required by the Successor Liability section of this Consent Order, if applicable; and,

(13) The Company must keep a copy of this Consent Order at each of its sites where the PMN substance is manufactured (which includes import).

(b) Applicability. The provisions of this Recordkeeping Section are applicable only to activities of the Company and its Contract Manufacturer, if applicable, and not to activities of the Company's customers.

(c) OMB Control Number. Under the Paperwork Reduction Act and its regulations at 5 C.F.R. Part 1320, particularly 5 C.F.R. § 1320.5(b), the Company is not required to respond to this "collection of information" unless this Consent Order displays a currently valid control number from the Office of Management and Budget ("OMB"), and EPA so informs the Company. The "collection of information" required in this TSCA § 5(e) Consent Order has been approved under currently valid **OMB Control Number 2070-0012.**

IV. REQUESTS FOR PRE-INSPECTION INFORMATION

(a) EPA's Request for Information. Pursuant to § 11 of TSCA and 40 C.F.R. § 720.122, EPA may occasionally conduct on-site compliance inspections of Company facilities and conveyances associated with the PMN substance. To facilitate such inspections, EPA personnel may contact the

Company in advance to request information pertinent to the scheduling and conduct of such inspections. Such requests may be written or oral. The types of information that EPA may request include, but are not limited to, the following:

- (1) Expected dates and times when the PMN substance will be in production within the subsequent 12 months;
- (2) Current workshift schedules for workers who are involved in activities associated with the PMN substance and may reasonably be exposed to the PMN substance;
- (3) Current job titles or categories for workers who are involved in activities associated with the PMN substance and may reasonably be exposed to the PMN substance;
- (4) Existing exposure monitoring data for workers who are involved in activities associated with the PMN substance and may reasonably be exposed to the PMN substance;
- (5) Records required by the Recordkeeping section of this Consent Order; and/or,
- (6) Any other information reasonably related to determining compliance with this Consent Order or conducting an inspection for that purpose.

(b) Company's Response. The Company must respond to such requests within a reasonable period of time, but in no event later than 30 days after receiving EPA's request. When requested in writing by EPA, the Company's response must be in writing. To the extent the information is known to or reasonably ascertainable by the Company at the time of the request, the Company's response must demonstrate a good faith effort to provide reasonably accurate and detailed answers to all of EPA's requests.

(c) Confidential Business Information. Any Confidential Business Information ("CBI") that the

Company submits to EPA pursuant to paragraph (b) will be protected in accordance with §14 of TSCA and 40 C.F.R. Part 2, Subpart B. In order to make a confidentiality claim for information submitted to EPA, an authorized official of the Company must certify that it is true and accurate that the Company has:

- (1) Taken reasonable measures to protect the confidentiality of the information;
- (2) Determined that the information is not required to be disclosed or otherwise made available to the public under any other Federal law;
- (3) A reasonable basis to conclude that the disclosure of the information is likely to cause substantial harm to the competitive position of the Company; and
- (4) A reasonable basis to believe that the information is not readily discoverable through reverse engineering.

CBI claims for chemical identity must be accompanied by a generic chemical identity, which may be that used for the PMN. CBI claims must be accompanied by substantiations in accordance with TSCA § 14(c)(5). Guidance on substantiating CBI claims may be found at <https://www.epa.gov/tsca-cbi/substantiating-cbi-claims-under-tsca-time-initial-submission>.

V. SUCCESSOR LIABILITY UPON TRANSFER OF CONSENT ORDER

(a) Scope. This section sets forth the procedures by which the Company's rights and obligations under this Consent Order may be transferred when the Company transfers its interests in the PMN substance, including the right to manufacture the PMN substance, to another person outside the Company (the "Successor in Interest").

(b) Relation of Transfer Date to Notice of Commencement ("NOC").

(1) Before NOC. If the transfer from the Company to the Successor in Interest is effective before EPA receives a notice of commencement of manufacture or import ("NOC") for the PMN substance from the Company pursuant to 40 C.F.R. § 720.102, the Successor in Interest must submit a new PMN to EPA and comply fully with § 5(a)(1)(B) of TSCA and 40 C.F.R. Part 720 before commencing manufacture (which includes import) of the PMN substance.

(2) After NOC. If the transfer from the Company to the Successor in Interest is effective after EPA receives a NOC, the Successor in Interest must comply with the terms of this Consent Order and will not be required to submit a new PMN to EPA.

(c) Definitions. The following definitions apply to this Successor Liability section of the Consent Order:

(1) "Successor in Interest" means a person outside the Company who has acquired the Company's full interest in the rights to manufacture the PMN substance, including all ownership rights and legal liabilities, through a transfer document signed by the Company, as transferor, and the Successor in Interest, as transferee. The term excludes persons who acquire less than the full interest of the Company in the PMN substance, such as a licensee who has acquired a limited license to the patent or manufacturing rights associated with the PMN substance. A Successor in Interest must be incorporated, licensed, or doing business in the United States in accordance with 40 C.F.R. § 720.22(a)(3) and 40 C.F.R. § 720.3(z).

(2) "Transfer Document" means the legal instrument(s) used to convey the interests in the PMN substance, including the right to manufacture the PMN substance, from the Company to the Successor in Interest.

(d) Notices.

(1) Notice to Successor in Interest. On or before the effective date of the transfer, the Company must provide to the Successor in Interest, by registered mail, a copy of the Consent Order and the "Notice of Transfer" document which is incorporated by reference as Attachment B to this Consent Order.

(2) Notice to EPA. Within 10 business days of the effective date of the transfer, the Company must submit the fully executed Notice of Transfer document to EPA as a support document for the PMN, using the procedures set out in 40 C.F.R. § 720.40.

(3) Transfer Document. Copies of the Transfer Document must be maintained by the Successor in Interest at its principal place of business, and at all sites where the PMN substance is manufactured. Copies of the Transfer Document must also be made available for inspection pursuant to § 11 of TSCA, must state the effective date of transfer, and must contain provisions which expressly transfer liability for the PMN substance under the terms of this Consent Order from the Company to the Successor in Interest.

(e) Liability.

(1) The Company will be liable for compliance with the requirements of this Consent Order until the effective date of the transfer described above.

(2) The Successor in Interest will be liable for compliance with the requirements of this Consent Order effective as of the date of transfer.

(3) Nothing in this section may be construed to prohibit the Agency from taking enforcement action against the Company after the effective date of the transfer for actions taken, or

omissions made, during the time in which the Company manufactured, processed, used, distributed in commerce, or disposed of the PMN substance pursuant to the terms of this Consent Order.

VI. MODIFICATION AND REVOCATION OF CONSENT ORDER

The Consent Order may be modified only via the procedures in this Section. The Company may request in writing at any time, based upon new information on the human health or environmental effects of, or human exposure to or environmental release of, the PMN substance, that EPA agree to modify or revoke substantive provisions of this Consent Order, including, but not limited to, testing requirements, workplace protections, disposal requirements, or discharge limits. The exposures and risks identified by EPA during its review of the PMN substance and the information EPA determined to be necessary to evaluate those exposures and risks are described in the preamble to this Consent Order. However, in determining whether to amend or revoke the substantive provisions of this Consent Order, EPA will consider all relevant information available at the time the Agency makes that determination, including, where appropriate, any reassessment of the test data or other information that supports the findings in this Consent Order, an examination of new test data or other information or analysis, and any other relevant information.

EPA will issue a modification or revocation if EPA determines that the activities described therein are no longer necessary to protect against an unreasonable risk of injury to health or the environment and will not result in significant or substantial human exposure or substantial environmental release in the absence of data sufficient to permit a reasoned evaluation of the health or environmental effects of the PMN substance.

In addition, the Company may request in writing at any time that EPA make other modifications to the language of this Consent Order. EPA will issue such a modification if EPA

determines that the modification is useful, appropriate, and consistent with the structure and intent of this Consent Order as issued.

VII. EFFECT OF CONSENT ORDER

(a) Waiver. By consenting to the entry of this Consent Order, the Company waives its rights to receive service of this Consent Order no later than 45 days before the end of the applicable review period pursuant to § 5(e)(1)(B) of TSCA and to challenge the validity of this Consent Order in any subsequent action. Consenting to the entry of this Consent Order, and agreeing to be bound by its terms, do not constitute an admission by the Company as to the facts or conclusions underlying the Agency's determinations in this proceeding. This waiver does not affect any other rights that the Company may have under TSCA.

(b) Effective Date. This Consent Order shall be effective upon the expiration of the PMN review period after the EPA's receipt of a fully executed copy of the Consent Order. The EPA will notify the Company of its receipt of the fully executed copy of the Consent Order.

7.3.2018
Date

Charlotte Bertrand
Charlotte Bertrand
Acting Principal Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention

Date

Name:
Title:
Company:

DEFINITIONS

“Identity” means any chemical or common name used to identify a chemical substance or a mixture containing that substance.

"Immediate use." A chemical substance is for the "immediate use" of a person if it is under the control of, and used only by, the person who transferred it from a labeled container and will only be used by that person within the work shift in which it is transferred from the labeled container.

"Impervious." Chemical protective clothing is "impervious" to a chemical substance if the substance causes no chemical or mechanical degradation, permeation, or penetration of the chemical protective clothing under the conditions of, and the duration of, exposure.

"Intermediate" means any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of another chemical substance(s) or mixture(s), or that is intentionally present for the purpose of altering the rates of such chemical reactions.

"Manufacture" means to produce or manufacture in the United States or import into the customs territory of the United States.

"Manufacturing stream" means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of manufacture, including the cleaning of equipment.

"MSDS" means material safety data sheet, the written listing of data for the chemical substance.

"NIOSH" means the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services.

"Non-enclosed process" means any equipment system (such as an open-top reactor, storage tank, or mixing vessel) in which a chemical substance is manufactured, processed, or otherwise used where significant direct contact of the bulk chemical substance and the workplace air may occur.

"Non-industrial use" means use other than at a facility where chemical substances or mixtures are manufactured or processed.

"PMN substance" means the chemical substance described in the Premanufacture notice submitted by the Company relevant to this Consent Order.

"Personal protective equipment" means any chemical protective clothing or device placed on the body to prevent contact with, and exposure to, an identified chemical substance or substances in the work area. Examples include, but are not limited to, chemical protective clothing, aprons, hoods, chemical goggles, face splash shields, or equivalent eye protection, and various types of respirators. Barrier creams are not included in this definition.

"Predictable or Purposeful Releases" means the routine or repeated activity that results in non-routine releases to water or non-routine releases to water that are not due to emergency conditions. EPA does not intend the "predictable or purposeful to limit the agency's strict liability authority under TSCA.

"Process stream" means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of processing, including the cleaning of equipment.

"Scientifically invalid" means any significant departure from the EPA-reviewed protocol or the Good Laboratory Practice Standards at 40 C.F.R. Part 792 without prior or subsequent Agency review that prevents a reasoned evaluation of the health or environmental effects of the PMN substance.

"Scientifically equivocal data" means data which, although developed in apparent conformity with the Good Laboratory Practice Standards and EPA-reviewed protocols, are inconclusive, internally inconsistent, or otherwise insufficient to permit a reasoned evaluation of the potential risk of injury to human health or the environment of the PMN substance.

"SDS" means safety data sheet, the written listing of data for the chemical substance.

"Sealed container" means a closed container that is physically and chemically suitable for long-term containment of the PMN substance, and from which there will be no human exposure to, nor environmental release of, the PMN substance during transport and storage.

"Site-limited intermediate" means an intermediate manufactured, processed, and used only within a site and not distributed in commerce other than as an impurity or for disposal. Imported intermediates cannot be "site-limited."

"Use stream" means all reasonably anticipated transfer, flow, or disposal of a chemical substance, regardless of physical state or concentration, through all intended operations of industrial, commercial, or consumer use.

"Waters of the United States" has the meaning set forth in 40 C.F.R. § 122.2.

"Work area" means a room or defined space in a workplace where the PMN substance is manufactured, processed, or used and where employees are present.

"Workplace" means an establishment at one geographic location containing one or more work areas.

ATTACHMENT B
NOTICE OF TRANSFER
OF
TOXIC SUBSTANCES CONTROL ACT
SECTION 5(e) CONSENT ORDER

Company (Transferor)

PMN Number

1. Transfer of Manufacture Rights. Effective on _____, the Company did sell or otherwise transfer to _____, ("Successor in Interest") the rights and liabilities associated with manufacture of the above-referenced chemical substance, which was the subject of a premanufacture notice ("PMN") and is governed by a Consent Order issued by the U.S. Environmental Protection Agency ("EPA") under the authority of §5(e) of the Toxic Substances Control Act ("TSCA," 15 U.S.C. §2604(e)).

2. Assumption of Liability. The Successor in Interest hereby certifies that, as of the effective date of transfer, all actions or omissions governed by the applicable Consent Order limiting manufacture, processing, use, distribution in commerce and disposal of the PMN substance, will be the responsibility of the Successor in Interest. Successor in Interest also certifies that it is incorporated, licensed, or doing business in the United States in accordance with 40 C.F.R. § 720.22(a)(3).

3. Confidential Business Information. The Successor in Interest hereby:

___ reasserts,

___ relinquishes, or

___ modifies

all Confidential Business Information ("CBI") claims made by the Company, pursuant to Section 14 of TSCA and 40 C.F.R. Part 2, for the PMN substance(s). Where "reasserts" or "relinquishes" is indicated, that designation will be deemed to apply to all such claims. Where "modifies" is indicated, such modification will be explained in detail in an attachment to this Notice of Transfer. Information which has been previously disclosed to the public (e.g., a chemical identity that was not claimed as CBI by the original submitter) would not subsequently be eligible for confidential treatment under this Notice of Transfer.

In order to make a confidentiality claim for information submitted to EPA, an authorized official of the Successor in Interest must certify that it is true and accurate that the Successor in Interest has:

- (1) Taken reasonable measures to protect the confidentiality of the information;
- (2) Determined that the information is not required to be disclosed or otherwise made available to the public under any other Federal law;
- (3) A reasonable basis to conclude that the disclosure of the information is likely to cause substantial harm to the competitive position of the Successor in Interest; and
- (4) A reasonable basis to believe that the information is not readily discoverable through reverse engineering.

CBI claims for chemical identity must be accompanied by a generic chemical identity, which may be that used for the PMN.

**NOTICE OF TRANSFER OF
TOXIC SUBSTANCES CONTROL ACT
SECTION 5(e) CONSENT ORDER**

(continued)

Company (Transferor)

PMN Number

Signature of Authorized Official

Date

Printed Name of Authorized Official

Title of Authorized Official

Successor in Interest

Signature of Authorized Official

Date

Printed Name of Authorized Official

Title of Authorized Official

Address

City, State, Zip Code

**NOTICE OF TRANSFER OF
TOXIC SUBSTANCES CONTROL ACT
SECTION 5(e) CONSENT ORDER
(continued)**

Successor's Technical Contact

Address

City, State, Zip Code

Phone

TOXIC SUBSTANCES CONTROL ACT
SECTION 5(e) CONSENT ORDER
APPROVED BY THE COURT FOR THE
RECORD OF THE COURT AND THE
RECORD OF THE COURT AND THE