

• A novel cumulative risk assessment method, Cumulative Relative Potency Factors, is advanced that integrates the principles of dose addition and response addition to produce multiple-route, chemical mixture risk estimates using total absorbed doses.

The report acknowledges the need for additional research, such as, to conduct a more complete uncertainty and sensitivity analysis on the exposure estimates, and to conduct a more comprehensive analysis of toxic mode of action for the DBPs. This report makes two significant contributions to the science. First, external exposure modeling is conducted and linked with physiologically-based pharmacokinetic modeling to produce internal dose measures of drinking water disinfection by-products (DBPs) for multiple route exposures to be used in mixture risk assessments. Thus, a comprehensive exposure estimate is made for 13 of the major DBPs of concern, including the four trihalomethanes and five haloacetic acids that are currently regulated. Second, a mixtures risk assessment method, based on additivity concepts is proposed to logically evaluate human health risks using total internal doses and oral toxicology dose-response data based on knowledge or assumptions regarding toxic mode of action. This new method is a novel approach to evaluating multiple route exposures that can be generalized for the evaluation of other environmental mixtures.

Dated: December 23, 2003.

**Peter W. Preuss,**

*Director, National Center for Environmental Assessment.*

[FR Doc. 04-322 Filed 1-6-04; 8:45 am]

BILLING CODE 6560-50-P

## ENVIRONMENTAL PROTECTION AGENCY

[FRL-7607-8]

### Developing Relative Potency Factors for Pesticide Mixtures: Biostatistical Analyses of Joint Dose-Response

**AGENCY:** Environmental Protection Agency.

**ACTION:** Notice of availability.

**SUMMARY:** This notice announces the availability of a final report titled, "Developing Relative Potency Factors for Pesticide Mixtures: Biostatistical Analyses of Joint Dose-Response (EPA/600/R-03-052F)," which was prepared by the U.S. Environmental Protection Agency's (EPA) National Center for Environmental Assessment (NCEA) of

the Office of Research and Development (ORD).

**DATES:** This document will be available on or about January 7, 2004.

**ADDRESSES:** The document will be made available electronically through the NCEA Web site ([www.epa.gov/ncea](http://www.epa.gov/ncea)). A limited number of paper copies will be available from the EPA's National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, OH 45242; telephone: 1-800-490-9198 or 513-489-8190; facsimile: 513-489-8695. Please provide your name, your mailing address, the title and the EPA number of the requested publication.

**FOR FURTHER INFORMATION CONTACT:** The Technical Information Staff, National Center for Environmental Assessment/Cincinnati Office (MS-117), U.S. Environmental Protection Agency, 26 W. Martin Luther King Drive, Cincinnati, OH 45268. Telephone: 513-569-7257; fax: 513-569-7475; e-mail: [nceadc.comment@epa.gov](mailto:nceadc.comment@epa.gov).

**SUPPLEMENTARY INFORMATION:** In 1996, the Food Quality Protection Act and the Safe Drinking Water Act Amendments were passed, each requiring the EPA to consider the risk assessment of chemical mixtures. This report responds to the need for risk assessment research on pesticide mixtures and on chemicals of concern in drinking water. The Relative Potency Factor (RPF) approach is a general methodology for applying dose addition to mixtures of chemicals that produce toxicity by the same toxic mode of action. The current report develops biological concepts and statistical procedures for improving applications of the RPF approach, advancing the theoretical basis for RPF-based risk assessments. New quantitative methods that extend the application of RPFs are shown, addressing the important question of how to assess a mixture containing some chemicals that share a common toxic mode of action and other chemicals that do not. This research was undertaken to continue exploring and developing mixture risk assessment strategies beyond current applications and is intended to enrich the available library of mixture risk assessment methods for future applications of RPF-based risk assessments. This report provides a new set of methods to handle groups of chemicals with more than one toxic mode of action represented. Dose-response modeling techniques are shown, and two algorithms are provided for grouping chemicals into mode of action subclasses that can be modeled with a common slope parameter. The report details approaches to estimate health risks based on the mode of action

subclasses and shows a conceptual approach for estimating a Reference Dose for a mixture using these methods.

Dated: December 23, 2003.

**Peter W. Preuss,**

*Director, National Center for Environmental Assessment.*

[FR Doc. 04-321 Filed 1-6-04; 8:45 am]

BILLING CODE 6560-50-P

## ENVIRONMENTAL PROTECTION AGENCY

[FRL-7608-1]

### Analysis of Laboratory and Field Studies of Reproductive Toxicity in Birds Exposed to Dioxin-Like Compounds for Use in Ecological Risk Assessment

**AGENCY:** Environmental Protection Agency.

**ACTION:** Notice of availability.

**SUMMARY:** This notice announces the availability of a final report titled, Analysis of Laboratory and Field Studies of Reproductive Toxicity in Birds Exposed to Dioxin-Like Compounds for Use in Ecological Risk Assessment (EPA/600/R-03/114F), which was prepared by the U.S. Environmental Protection Agency's (EPA) National Center for Environmental Assessment (NCEA) of the Office of Research and Development (ORD).

**DATES:** This document will be available on or about January 7, 2004.

**ADDRESSES:** The document will be made available electronically through the NCEA Web site (<http://www.epa.gov/ncea>). A limited number of paper copies will be available from the EPA's National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, OH 45242; telephone: 1-800-490-9198 or 513-489-8190; facsimile: 513-489-8695. Please provide your name, your mailing address, the title and the EPA number of the requested publication.

**FOR FURTHER INFORMATION CONTACT:** The Technical Information Staff, National Center for Environmental Assessment/Cincinnati Office (MS-117), U.S. Environmental Protection Agency, 26 W. Martin Luther King Drive, Cincinnati, OH 45268. Telephone: 513-569-7257; fax: 513-569-7475; e-mail: [nceadc.comment@epa.gov](mailto:nceadc.comment@epa.gov).

**SUPPLEMENTARY INFORMATION:** Coplanar PCBs and other dioxin-like chemicals are common environmental contaminants and risks to wildlife are a significant issue as demonstrated by

observed reproductive effects on birds and other wildlife. However, a number of scientific and technical issues are involved in performing the needed assessments such as the proper treatment of mixtures, identification of the critical effects, and proper exposure metrics. This report explains the proper use of data for individual congeners and identifies developmental effects from *in ovo* exposures as the proper endpoint. It also deals with the problem of evaluating a large and heterogeneous literature by identifying a set of appropriate avian toxicity data. Another assessment issue is the lack of a standard or generally accepted method for modeling effects on wildlife or calculating screening benchmarks. This problem is exacerbated by the fact that wildlife test methods are not well standardized, except in pesticide registration. Hence, although there is a plethora of test data for dioxin-like chemicals and wildlife, relatively little of it was suitable for assessment. Finally, the chronic data were not as useful as they could have been, because test results in the literature were nearly always expressed as statistically significant concentrations rather than biological effects levels. The report presents alternative ways to deal with these issues.

Dated: December 23, 2003.

**Peter W. Preuss, Director,**  
National Center for Environmental  
Assessment.

[FR Doc. 04-323 Filed 1-6-04; 8:45 am]

BILLING CODE 6560-50-P

## FEDERAL MARITIME COMMISSION

### Notice of Agreements Filed

The Commission hereby gives notice of the filing of the following agreements under the Shipping Act of 1984. Interested parties can review or obtain copies of agreements at the Washington, DC offices of the Commission, 800 North Capitol Street, NW., Room 940. Interested parties may submit comments on an agreement to the Secretary, Federal Maritime Commission, Washington, DC 20573, within 10 days of the date this notice appears in the **Federal Register**.

*Agreement No.:* 011284-054.

*Title:* Ocean Carrier Equipment Management Association Agreement ("OCEMA").

*Parties:* APL Co. Pte. Ltd.; American President Lines, Ltd.; A.P. Moller-Maersk A/S, trading under the name of Maersk Sealand; CMA CGM, S.A.; Compania

Sudamericana de Vapores, S.A.; Evergreen Marine Corp. (Taiwan) Ltd.; Hanjin Shipping Co., Ltd.; Hamburg-Südamerikanische Dampfschiffahrts-Gesellschaft KG; Hapag-Lloyd Container Linie GmbH; Hyundai Merchant Marine Co. Ltd.; Mitsui O.S.K. Lines Ltd.; Lykes Lines Limited, LLC; TMM Lines Limited, LLC; Contship Containerlines, a division of CP Ships (UK) Limited; Australia-New Zealand Direct Line, a division of CP Ships (UK) Limited; Orient Overseas Container Line Limited; P&O Nedlloyd Limited; P&O Nedlloyd B.V.; Nippon Yusen Kaisha Line; Yangming Marine Transport Corp.; COSCO Containerlines Company Limited; Kawasaki Kisen Kaisha, Ltd.; and Crowley Maritime Corporation.

*Synopsis:* The proposed agreement amendment would delete provisions allowing for associate membership and add language that describes more specifically the agreement authority regarding charges relating to the interchange of ocean carrier equipment.

*Agreement No.:* 011517-009.

*Title:* APL/HSDG/Lykes/Evergreen Vessel Sharing Agreement.

*Parties:* American President Lines Ltd./APL Co, PTE LTD, Hamburg-Südamerikanische Dampfschiffahrts-Gesellschaft KG, Lykes Lines Limited, LLC, and Evergreen Marine Corp (Taiwan) Ltd.

*Synopsis:* The amendment amends the trade names and addresses of certain of the parties, changes the name of the agreement and restates the agreement.

*Agreement No.:* 011741-006.

*Title:* U.S. Pacific Coast-Oceania Agreement.

*Parties:* A.P. Moller-Maersk A/S, trading under the name of Maersk Sealand; Australia-New Zealand Direct Line, a division of CP Ships (UK) Limited/Lykes Lines Limited LLC; FESCO Ocean Management Limited; Hamburg-Südamerikanische Dampfschiffahrts-Gesellschaft KG; P&O Nedlloyd Limited/P&O Nedlloyd B.V.

*Synopsis:* The proposed agreement amendment would add provisions allowing the parties to alter the number of vessels they deploy, within a limited range, without amending their agreement.

Dated: December 31, 2003.

By Order of the Federal Maritime Commission.

*Bryant L. VanBrakle, Secretary.*

[FR Doc. 04-250 Filed 1-6-04; 8:45 am]

BILLING CODE 6730-01-P

## FEDERAL RESERVE SYSTEM

### Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR Part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States. Additional information on all bank holding companies may be obtained from the National Information Center website at [www.ffiec.gov/nic/](http://www.ffiec.gov/nic/).

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than January 30, 2004.

**A. Federal Reserve Bank of St. Louis** (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166-2034:

1. *City Bancorp*, Springfield, Missouri; to merge with Signature Bancshares, Inc., Springfield, Missouri, and thereby indirectly acquire Signature Bank, Springfield, Missouri.

Board of Governors of the Federal Reserve System, December 31, 2003.

**Robert deV. Frierson,**  
*Deputy Secretary of the Board.*

[FR Doc. 04-248 Filed 1-6-04; 8:45 am]

BILLING CODE 6210-01-S