

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
INTEROFFICE COMMUNICATION

TO: Dan Wyant, Director
Jim Sygo, Deputy Director

FROM: Michael Depa, Toxics Steering Group Chair for 2013, Air Quality Division

DATE: October 3, 2014

SUBJECT: Toxics Steering Group (TSG) — 2013 Annual Report

Attached please find the 2013 Annual TSG Report. This fulfills the requirement of the Department of Environmental Quality Policy and Procedure Number 09-006 for the TSG to prepare an annual report of accomplishments and recommendations to ensure adequate protection of children's health.

The purpose of the TSG is to provide a forum for discussion of human health risk assessment issues related to exposure to chemical contaminants in environmental media. The TSG facilitates development of consensus recommendations based on sound science to relevant state department managers, fosters consistency of risk assessment applications within the Michigan Department of Environmental Quality and between state agencies, and ensures that duplication of effort on risk assessment efforts is minimized.

The 2013 annual report will be available on the TSG Web site.

Attachment
cc: TSG Members



**Michigan Department of Environmental Quality
Toxics Steering Group
2013 Annual Report**

I. INTRODUCTION

The Toxics Steering Group (TSG) provides a forum for the discussion of issues related to the assessment of human health risks associated with exposures to contaminants in the environment. The TSG also facilitates the development of scientifically defensible recommendations to relevant State of Michigan (State) department managers, fosters consistency of risk assessment methodologies within the Michigan Department of Environmental Quality (MDEQ) and between State agencies, and helps to minimize the duplication of effort. TSG subcommittees are formed when particularly complex risk assessment issues need to be resolved. All toxicologists within the MDEQ, Michigan Department of Community Health (MDCH), and Michigan Department of Agriculture and Rural Development (MDARD) are TSG members. This report describes the activities of subcommittees and individual members that have furthered the goals of the TSG.

II. 2013 TSG MEMBERSHIP

MDEQ

Amy Babcock, Water Resources Division (WRD)
Shannon Briggs, WRD
Dennis Bush, WRD
Mike Depa, TSG Chair, Air Quality Division (AQD)
Christine Flaga, Remediation and Redevelopment
Division (RRD)
Doreen Lehner, AQD
Deb Mackenzie-Taylor, Office of Waste Management
and Radiological Protection (OWMRP)
Divinia Ries, RRD
Robert Sills, AQD
Joy Taylor Morgan, AQD
Emily Weingartz, Librarian, RRD
Eric Wildfang, RRD
Vijayavel Kannappan, RRD

MDCH

Christina Bush
Linda Dykema
Jennifer Gray
Kory Groetsch
Lisa Quiggle

MDARD

Kay Fritz

III. SUMMARY OF ACTIVITIES IN 2013

The TSG participated in Earth Day activities in Constitution Hall and supported “The Fishing Hole” (demonstrating use of the Michigan “Eat Safe Fish” guidelines).

TSG subcommittees active during 2013:

1. Perfluorinated Chemicals (PFC) Workgroup
Members: Joy Taylor Morgan, Amy Babcock, Bob Delaney (RRD), Christina Bush, Eric Wildfang, and Deb MacKenzie-Taylor.
2. 1,4-Dioxane Subcommittee
Members: Chris Flaga, Divinia Reis, Amy Babcock, Deb MacKenzie-Taylor, and Jennifer Gray.

Perfluorinated Chemicals (PFC) Workgroup Activities

The Perfluorinated Chemicals (PFC) Workgroup was formed in 2010 and their report, titled “Perfluorinated Compounds in Michigan Current State of Knowledge and Recommendations for Future Actions” (PFC White Paper), was sent to the MDEQ’s front office on August 25, 2011.

The PFC White Paper was prepared in response to a charge to the TSG by MDEQ management to provide recommendation(s) for establishing an environmental monitoring plan for PFCs in the state of Michigan. The PFC Workgroup continues to meet quarterly to discuss research, data collected, policies and regulations that pertain to PFCs.

In Michigan, a significant amount of PFC contamination was found at the former Wurtsmith Air Force Base (WAFB) in Oscoda. Soil, sediment, groundwater, surface water, and fish tissue data indicated widespread contamination on and near the base, with the heaviest contamination at the former fire-training area. In 2012, MDCH issued a “do not eat” advisory for fish caught from Clark’s Marsh (between the base and the Au Sable River) and for non-migratory fish caught from the lower Au Sable River, based on levels of perfluorooctane sulfonate (PFOS) in fish sampled from the marsh (which drains to the river) exceeding provisional screening values. (MDCH expects to finalize fish consumption screening values for PFOS in FY2015.) The primary PFC of concern at WAFB is PFOS, which is bioaccumulative; however, there are other PFCs present. MDCH continues to evaluate public health implications at the site and conduct outreach to the community.

The MDCH was awarded a United States Environmental Protection Agency (USEPA) Great Lakes Restoration Initiative (GLRI) grant to measure the concentrations of PFCs in fish and water samples collected at several sites in Michigan. The relationship between fish and water concentrations of PFCs will also be determined.

1,4-Dioxane Subcommittee Activities

In August 2013, Jeffrey Crum of Hamp Mathews & Assoc. on behalf of Pall Corporation made a request to the RRD to bring in Dr. Michael Dourson of Toxicology Excellence for Risk Assessment (TERA) to present a toxicity assessment for 1,4-dioxane. Dr. Dourson specifically wanted to present his conclusions on 1,4-dioxane’s mode of action for carcinogenic effects.

The RRD agreed to the presentation and RRD Chief Bob Wagner requested formation of a TSG 1,4-Dioxane Subcommittee to evaluate the information presented by Dr. Dourson. Jim Sygo supported formation of the TSG subcommittee.

Dr. Dourson made his presentation on October 8, 2013. The TSG subcommittee met on October 10 to make assignments for a review of the presentation and related documents. Comments on the presentation were drafted. During the presentation, several comments and questions were raised by toxicologists in the audience. On December 9, 2013, Jeff Crum and Dr. Dourson submitted a document containing responses to the comments and questions raised by department staff. The subcommittee is preparing recommendations for department consideration.

IV. TRAINING

Brown Bag Seminar Series

The TSG Brown Bag seminar series provides an informal, open forum for TSG members (and others) to review and discuss new and innovative issues and advances in the science of toxicology, risk assessment, and other relevant environmental themes. These discussions have

allowed a more detailed level of discussion than time constraints permit during the formal TSG meetings. The Brown Bag seminar organizers, Ms. Babcock and Dr. Wildfang, continue to seek out relevant topics and speakers proposed by TSG members. Topics discussed during the 2013 Brown Bag seminar series included the following:

TSG Presenter	Subject
Lisa Quiggle	Carbon Monoxide Poisoning
Vijayavel Kannappan	Agricultural Phosphorus

Webinars

The Children's Environmental Health Center (CEHS) did not hold formal meetings in 2013; however, several webinars sponsored by the USEPA's National Institute of Environmental Health Science, CEHS were scheduled for viewing by all TSG members. These webinars included:

- Maternal and Fetal Exposures to BPA During Mid-Gestation; and
- Early Exposure to Bisphenol A and Lead: Effects on Metabolic Homeostasis and the Epigenome.