MEETING MINUTES

Cross-Functional Team (CFT)
NIH Baltimore Environmental Management System (EMS)
Thursday, June 5, 2008
10:00 am – noon

Meeting Objective(s):

- Determine status of action items from previous meetings
- Finalize 2008 objectives
- Identify strategy for implementing objectives that are applicable to large groups at NIH Baltimore
- Expand participation in the CFT to include scientific/lab staff

Attendees:

Jane Clarke (NIA)
Ignacina Francis (NIA)
Robin Hirschhorn (Booz Allen)
Terry Leland (ORF/DEP)
James Pitt (ORF/DEP)
Kristen Peters (Booz Allen)
Ed Spangler (NIA)
Carrie Wertheim (NIDA)

Minutes:

Review of Action Items

The action items resulting from the April 3rd meeting were reviewed. The table below provides a status update of these action items.

Action Item	Status	Notes
1. Contact DEP Waste Recovery Branch contacts to determine procedure/protocol for chemical shipments between NIH Baltimore and Bethesda and Gaithersburg Warehouse	Ongoing	Terry Leland spoke with Charlyn Lee and was told that this would be the responsibility of the GDC warehouse contractor. Ms. Peters contacted John Barnhart to determine if there is a policy and will follow-up with him inquire about who oversees the warehouse contractor.
2. Contact Richard Williams to determine if NIA has a policy on fleet management	Ongoing	Richard Williams is no longer working for NIH. The new point of contact is Tom Judy, Jr. Kristen Peters will contact Mr. Judy to determine if there is a policy and the relationship with NIH Bethesda's fleet management.

Action Item	Status	Notes
3. Contact Scott Koehler to determine responsibility for water consumption objectives	COMPLETE	GSH is the facilities management contractor and may be the responsibility. A meeting with Scott Koehler will be arranged by Terry Leland to discuss GSH role and responsibilities. A meeting with GSH is needed to brief them on the EMS and determine how they will participate in the EMS.
4. Prepare update for CFT on meeting with Johns Hopkins representative	Ongoing	A meeting between James Pitt and John Schaefer of Johns Hopkins was postponed and will be rescheduled in the upcoming weeks.
5. Update activity list	COMPLETE	Ms. Peters updated the activity list with the comments provided during the April meeting.
6. Identify outreach materials to be distributed during the Bayview Earth Day event	COMPLETE	The NIH Baltimore Goes Greener event was held on May 7th and was a great success. Over 150 people attended the event.
7. Email ideas for the Earth Day event activities or handouts to James Pitt	COMPLETE	
8. Review the NEMS awareness training and provide information to the safety representatives	Ongoing	Ms. Peters will provide Jane Clarke content from the NEMS awareness training that may be incorporated into the safety trainings.

Finalization of 2008 Objectives

The 2008 objectives were reviewed ensure that they are accurate and complete. Attachment 1 provides a list of the reviewed objectives, and comments collected during the CFT's review are tracked in red font. Since a facilities representative did not attend this meeting, these objectives were omitted. The facilities related objectives will be finalized during the future meeting with Scott Koehler.

Institute Green Teams

To help implement the NEMS at Bethesda, Institute specific teams have been established to encourage participation of Institute staff in the EMS and greening initiatives. Green Teams have been established at three Institutes: NIDDK, NIDCD, and NEI. The hope is that the Green Teams will encourage participation and be an easier way to deploy information on the EMS and how to green Institute activities.

Since the Institutes located at NIH Baltimore have different cultures and conduct different research, establishing Green Teams for NIDA and NIA may be effective means in implementing the EMS. Ms. Hirschhorn suggested that a Green Team first be established for NIDA due to the senior management support for the EMS. Ms. Clarke stated that establishing a NIDA Green Team first would be beneficial since NIDA employees have already moved in the BRC. The next steps would be to brief NIDA senior managers and determine a strategy for establishing a Green Team. CFT members suggested the following NIDA managers be briefed: Tom Haines, Diane French and Janice Carico. Scientific staff will need to be identified to integrate into a Green Team.

Expansion of Scientific Community Participation

The NEMS Lab Practices Working Group at Bethesda is working to green lab activities. The group is targeting and prioritizing specific NIH laboratory chemical waste streams for reduction. To complete this effort, the group used a set of risk-based criteria to rank the chemicals, including (1) quantity of waste generation; (2) direct risk to human health and safety during research, facility support, and on-site waste management activities: generation, handling, storage, transportation, recycling, treatment, and disposal; (3) waste subject to specific reduction mandates in statutes, regulations, executive orders, and agency plans; and (4) availability and feasibility of reduction methods. From this ranking, an abbreviated list of the top-ranking target chemicals was created, and potential green alternatives were identified (see Attachment 2). It was suggested that NIH Baltimore could initiate a similar effort to engage the scientific community in greening efforts on campus. Ms. Peters has contacted Charlyn Lee and John Prom at Bethesda for a list of waste generated at NIH Bethesda. Ms. Clarke stated that scientific proof is needed to convince investigators to use a greener alternative. She also stated that there are substitutes for m-Xylene and picric acid (for staining). Also, Ms. Clarke stated that formaldehyde can be recycled.

Action Items:

Action Item	Responsible Person(s)	Due Date
1. Follow-up on the chemical shipments between NIH Baltimore and Bethesda and GDC Warehouse	Kristen Peters	Friday, June 20
2. Contact Tom Judy, Jr. to determine if NIA has a policy on fleet management and relationship with NIH Bethesda	Kristen Peters	Friday, June 20
3. Contact Scott Koehler to arrange meeting for week of June 16.	Terry Leland	Wednesday, June 18
4. Arrange meeting with Johns Hopkins representative (John Schaefer)	James Pitt	Wednesday, June 18
5. Review the NEMS awareness training and provide information to the safety representatives	Kristen Peters	Friday, June 20
6. Arrange a meeting with NIDA senior managers Tom Haines, Diane French and Janice Carico	Terry Leland/ Robin Hirschhorn	Wednesday, June 18

Next Meeting:

The next meeting is scheduled for Thursday, July 10th at 10:00 AM in the BRC. **PLEASE NOTE THE CHANGE IN DATE.**

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ATTACHMENT 1

NIH BALTIMORE ENVIRONMENTAL MANAGEMENT SYSTEM
2008 DRAFT OBJECTIVES

* Comments collected during the June 5th meeting are provided in red.

ENVIRONMENTAL ASPECT	OBJECTIVE	RESPONSIBILITY	NOTES
Air Emissions	**1.** Replace existing boilers in the GRC with low-NOx burning boilers when current boilers reach end of life cycle	Scott Koehler	---
	2. Pursue the development of a telecommuting option policy justified, in part, on ozone alert days (NIA only).	Jane Clarke	Objective met. Archive with 2007 objectives.
Cultural Resource Disturbance	**1.** Maintain compliance with requirements	James Pitt	---
Chemical Spills and Leaks to the ground	**1.** Investigate development of a more secure protocol for chemical transfers between NIH Baltimore and GDC warehouse	Jane Clarke/ Deborah Gomke	---
	2. Work with Hopkins and building owners to establish clear determination of UST ownership and liabilities	James Pitt	---
	3. Establish SPCC plan, if needed	James Pitt	---
Chemical Waste	**1.** Develop a Chemical Inventory System (NIDA only)	Trena Francis	---
Ecological Disturbance	**1.** Maintain compliance with requirements	James Pitt	---
Energy Consumption	**1.** Determine opportunity to upgrade to more energy efficient chillers and towers during the GRC renovation	Scott Koehler	---
	2. Conduct baseline assessment for energy use	TBD	---
	3. Develop an energy awareness campaign	Phyllis Melvin (NIDA), Chuck Weber (NIA)	---

NIH BALTIMORE ENVIRONMENTAL MANAGEMENT SYSTEM
2008 DRAFT OBJECTIVES

ENVIRONMENTAL ASPECT	OBJECTIVE	RESPONSIBILITY	NOTES
	4. Develop policy on electronics use and shutdown	Phyllis Melvin (NIDA), Chuck Weber (NIA)	---
Fuel Consumption	**1.** Maintain compliance with requirements	Scott Koehler	---
	2. Conduct baseline assessment on fossil fuel consumption	Tom Judy (NIA)	---
General Waste	**1.** Raise awareness among staff of existing recycling program	Jane Clarke/ Deborah Gomke	---
	2. Evaluate current green purchasing procedures and determine need for green purchasing program	Ignacina Francis, Sheila Zichos (NIDA)	---
	3. Develop a recycling program for the BRC	James Pitt	---
	4. Install compactor at BRC to allow cardboard to be recycled	James Pitt	---
	5. Investigate options for recycling pallets	James Pitt	---
	6. Determine process for the procurement, use and disposal of electronics	Sheila Zichos, Phyllis Exum	---
Generation of noise, heat or nuisances (vibration, visual impairment)	**1.** Maintain compliance with requirements	James Pitt	---
Medical Pathological Waste	**1.** Investigate options for medpath waste container recycling for using SteriCycle system	Jane Clarke	Objective met. Archive with 2007 objectives.
Multi-hazardous Waste	**1.** Maintain compliance with requirements	James Pitt	---
	2. Determine multi-hazardous training needs	James Pitt	---

NIH BALTIMORE ENVIRONMENTAL MANAGEMENT SYSTEM
2008 DRAFT OBJECTIVES

ENVIRONMENTAL ASPECT	OBJECTIVE	RESPONSIBILITY	NOTES
Natural resource and raw material consumption - Water	**1.** Investigate feasibility of using wastewater for tempering cage water discharge	Scott Koehler	---
	2. Conduct a baseline assessment of water use	TBD	---
Natural resource and raw material consumption - Paper	**1.** Determine policy for duplex printing capability	Phyllis Melvin	---
	2. Develop procedure for duplex printing	Phyllis Melvin	---
	3. Develop a paper use awareness campaign	James Pitt	---
Radioactive Waste	**1.** Maintain compliance with requirements.	Larry Koenig (NIDA)	---
Toxic Releases	**1.** Maintain compliance with requirements	Jane Clarke (NIA) /Deborah Gomke (NIDA)	---
Wastewater Discharge	**1.** Maintain compliance with permits	James Pitt	---
	2. Develop a wastewater discharge awareness campaign	Trena Francis	---
Water Consumption	**1.** Maintain compliance with requirements	TBD	---
	2. Conduct an assessment of water use	TBD	---
Wellbeing of building occupants	**1.** Maintain compliance with requirements	TBD	---

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ATTACHMENT 2

NIH Target Chemicals Ranking – Abbreviated Matrix

Chemical	Quantity Waste Gen. CY07	Mandated Regulatory Reduction	Reduction Feasibility Methods	Total Points	Use	Alternatives
Ethidium Bromide	10 (201.1 Kg)	0	15	66	• Nucleic acid gel stain • *Not used by chemists*	• GelRed™, SYBR Red, EnVISION™ DNA Dye
CFC-11 and 12	1 (0.4, 15.9 Kg)	12	15	66	• Refrigerant • *Not used by chemists*	*Not directly a laboratory issue; will be handled by other NIH Offices.*
CFC-113	1 (10.2 Kg)	6	15	60	• Cleaning • *Not used by chemists*	*Not directly a laboratory issue; will be handled by other NIH Offices.*
Dioxins/furans and dioxin compounds	1 (.0002 Kg)	9	15	73	• *Minimally used by chemists*	•
PCBs	1 (0.15 Kg)	9	15	65	• Coolants, lubricants • Old fluorescent lighting fixtures and electrical devices containing PCB capacitors • *Not used by chemists*	*Not directly a laboratory issue; will be handled by other NIH Offices.*
Methoxychlor	1 (0 Kg)	9	15	61	• Mite control in animal labs • *Not used by chemists*	•
Chromium and compounds	1 (0.02 – 8.4 Kg)	9	15	58	• Chromic acid baths • *Minimally used by chemists*	• Alconox • Base baths • Disposable labware

Chemical	Quantity Waste Gen. CY07	Mandated Regulatory Reduction	Reduction Feasibility Methods	Total Points	Use	Alternatives
Picric acid	1 (7 Kg)	6	15	74	• Staining agent • *Not used by chemists*	• Ferric ammonium sulfate • Fluorescent based cells
Acetonitrile	15 (3532.7 Kg)	9		50	• HPLC	• Reduce flow rates • Use capillary columns
					• Solvent	• Polyethylene glycol
					• Organic synthesis • *Routinely used by chemists*	• Water
m-Xylene	15 (2548.6 Kg)	9		50	• Radioactive tracer studies (liquid scintillation cocktails) • *Minimally used by chemists*	• Non-hazardous proprietary liquid scintillation cocktails (National Diagnostics) • Solvent recycling systems
					• Clearing agents in histology	• Histo-Clear (National Diagnostics) • Clear-Rite 3™ • Americlear™ • Histosolv X™/ Shandon Xylene Substitute • Mediclear II™ • Pro-Par Clearant
Methanol	15 (5656.3 Kg)	9		57	• Washing gels • *Routinely used by chemists*	• Ethanol • Water

Chemical	Quantity Waste Gen. CY07	Mandated Regulatory Reduction	Reduction Feasibility Methods	Total Points	Use	Alternatives
Chloroform	15 (986.5 Kg)	9		62	• Parts washers	• Lactate esters
					• General, reaction solvent	• Dimethoxyethane polyethylene glycol
					• Traditional DNA extraction • *Routinely used by chemists*	• New DNA extraction kits using polycarbonate filters, PEG, and simple salts
Dichloromethane	15 (1095.5 Kg)	9		55	• Cleaning agent	• d-Limonene
					• General, reaction solvent • *Routinely used by chemists*	• Benzotrifluoride (trifluorotoluene) • Diethoxymethane • Ionic liquids • Water
					• Chromatography and extractions	•