Indiana Department of Environmental Management (IDEM) Compliance and Technical Assistance Program (CTAP)
National Association for Surface Finishing (NASF)

Indiana Chapter meeting

Tuesday, September 15, 2015

Brenntag – Indianapolis, IN
Acronyms

• ESP: Environmental Stewardship Program
• NESHAP: National Emission Standards for Hazardous Air Pollutants
• P2: pollution prevention
• PFOS: Perfluorooctane Sulfonate
• SGP: Strategic Goals Program
• SCW: Solvent-contaminated wipes
Overview of the overview

- NESHAP outreach – 1995
- SGP, Indiana 5-Star and ESP
- Sept 21, 2015 – discontinue adding PFOS
- SCW
- Hazardous waste
- Storm water – no exposure certification
- CTAP assessment
Chrome NESHAP Outreach - 1995

- Initial notification
- Achieving compliance
- Pollution prevention
National Metal Finishing SGP
1999 – 2005+

1. Improved resource use
2. Reduced hazardous emissions and employee/community exposure
3. Improved economic performance
SGP Participants, 2000

Cities:
Fort Wayne, Goshen, Indianapolis, LaPorte, Michigan City, Muncie, South Bend, Terre Haute
SGP Participants, 2000

Metal finishers:
Ampcor, Baycote, Best Access, C&R, Certified Metal Finishers, Commercial Plating, Electrochemical Coatings, Franke, HH Sumco, Imagineering, IAF, McDowell, Metal Plate Polishing, Seleco, Triplex, Wayne Metal
5-Star Environmental Recognition for Metal Finishing - 2005

1. Triplex Plating - Michigan City
2. Commercial Plating - Indianapolis
3. H.H. Sumco - Indianapolis
4. Imagineering Finishing Technologies - South Bend
5. Metal Plate Polishing - Fort Wayne (2002)
ESP

Members include:

1. Allegion (Von Duprin LLC)
2. Electro-Spec Inc.
3. SAMTec Inc.
4. SRG Global
Environmental Rules Board
July 8, 2015

Titles 326, 327 and 329
Voluntary performance based leadership programs
ESP

1. Term of membership increased to 4 years
2. Added benefit: A member may request 24-hour advance notification prior to an IDEM routine inspection
Partners for P2
June 3, 2015 quarterly meeting
Electro-Spec Inc.

Topic: ISO 14001

Goals and Objectives: Eliminate Landfill/Precious Metal Hazardous Waste, Ben McKnight, EHS Manager
NESHAP: Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
40 CFR 63, Subpart N
September 21, 2015

• Discontinue adding a wetting agent containing one percent or greater PFOS by weight
• Open surface or enclosed hard chromium electroplating tank
• Decorative chromium electroplating tank
• Chromium anodizing tank
PFOS alternatives

- Fumetrol® 21 – Atotech
- Macuplex STR NPFX – MacDermid
- Ankor – Enthone Inc.
- Suract CR-H – TIB Chemicals
- FS-600 high and low foam – Plating Resources Inc.
PFOS alternatives – demonstrating compliance

• Fume suppressant manufacturer
• Product name
• Safety Data Sheet or written statement from the manufacturer
SCW – Launderer/drycleaner exclusion

Per 40 CFR 261.4(a)(26), SCW are not solid wastes from the point of generation, provided certain conditions are met.
SCW - disposal

Per 40 CFR 261.4(b)(18), SCW are not hazardous waste provided certain conditions are met. The exclusion does not include wipes contaminated with Trichloroethylene (TCE)
SCW - Storage

• Non-leaking and closed containers
• Bags can be used if the neck of the bag is tightly bound
F001-F005 solvents only

• Containers must be labeled “excluded solvent-contaminated wipes” or other words indicating the contents

• Up to 180 days from the start date of accumulation
  – Establish schedule for pickups or
  – Container date log
Ineligible for the exclusion

• Contaminants other than F001-F005 solvents
• Exhibits hazardous waste characteristics due to contaminants other than solvents
• Other items, i.e., contaminated gloves
No free liquids at time of transport

- Document process to separate wipes and free liquids
- Free liquids are subject to hazardous waste regulations
Recordkeeping

• Name and address of the destination facility
• Document 180-day accumulation time limit
• Document “no free liquids” condition
Top ten hazardous waste violations
1. Hazardous waste determination

40 CFR 262.11

- Failure to make a determination

- Inadequate determination

- Lack of supporting documentation
2. Satellite containers of hazardous waste not properly managed

40 CFR 262.34(c)(1)

- Containers not at or near the point of generation

- Open containers
3. Containers not marked with the words “Used Oil”

40 CFR 279.22(c) and 329 IAC 13-4-3
4. Hazardous waste containers not marked with the start of accumulation date
40 CFR 262.34(a)(2)

- Storage over allowable time limits
5. Lack of training or training documents
40 CFR 262.34
264.16 and
265.16
6. Containers not marked with the words “Hazardous Waste”

40 CFR 262.34(a)(3)

- While being accumulated

- Labeled or marked
7. Lack of a proper contingency plan
40 CFR 262.34
264.52 and
265.52
8. Satellite containers not marked with the words “Hazardous Waste” or with other words that identify the contents

40 CFR 262.34(c)(1)(ii)
9. Release of contaminants
IC 13-30-2-1
327 IAC 2-6.1-5(5) Any spill (release) for which a spill response has not been done must be reported
Preparedness and Prevention:

- Fire

- Explosion

  - Unplanned sudden/not-sudden release

40 CFR 265, Subpart C
10. Hazardous waste containers not closed
40 CFR 262.34, 264.173(a) and 265.173(a)
Unknown waste material stored near plating line and several 10-15 gallon containers

Two example photos follow
Unlabeled hazardous waste container and debris surrounding container

Two example photos follow
Open and unlabeled universal waste [fluorescent] lamps
Satellite accumulation containment debris

One example photo follows
Satellite accumulation containers
good practices

- Aerosol container puncturing

- What good practices do you see in the following two slides?
SATELITE ACCUMULATION AREA
Hazardous material management
- Organized
- Labeled
- Compatibility

Two example photos follow
Incompatible Storage

Caustic Flakes

NH₄OH

F007

Nickel Chloride

F006

Nitric Acid

Sodium Cyanide

Nickel Strip

Muriatic Acid
Inside containment
floor slopes away from the wall

One example photo follows
Managing oil laden scrap metal

Lower compartment allows oil to be separated and removed

Two example photos follow
Storm Water Discharges Exposed to Industrial Activity – 327 IAC 15-6

• Regulated industrial activity includes SIC code 3471 – Electroplating, plating, polishing, anodizing and coloring

• It is rainwater making contact with
  – Manufacturing and processing activities
  – Raw and waste material storage
  – Intermediate products
Discernible, confined and discrete conveyance

• Does a pathway exist between your site and Waters of the State?
  – Point source examples: pipes, ditches, channels, etc.
  – Waters of the State: the accumulation and flow of water throughout

• If no, a storm water permit is not required.

• If yes, does an exposure exist?
Point source example
No exposure certification – storm water permitting

• Exposure checklist
  1. Using, storing or cleaning industrial machinery or equipment and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water
Unlabeled used oil containers near storm drain
Exposure checklist

2. Materials or residuals on the ground or in storm water inlets from spills/leaks

One example photo follows
Exposure checklist

3. Materials or products from past industrial activity
Exposure checklist

4. Material handling equipment (except adequately maintained vehicles)
Exposure checklist

5. Materials or products during loading/unloading or transportation activities

Two example photos follow
Be aware of potential for a release
Exposure checklist

6. Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)

One example photo follows
Be aware of potential for a release – adjacent storm water inlet
Exposure checklist

7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks and similar containers

Two example photos follow
Exposure checklist

8. Materials or products handled/stored on roads or railways owned or maintained by the discharger

It probably does not apply to many of you.
Exposure checklist

9. Waste material (except waste in covered, non leaking containers [e.g., dumpsters])
Exposure checklist

10. Application or disposal of process wastewater (unless otherwise permitted)

It probably does not apply to many of you.
Exposure checklist

11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow
No exposure means...

all industrial materials and activities are protected by a storm resistant shelter

Two example photos follow
Storm resistant shelter

• Is not required for:
  – Drums or similar containers in good condition
  – Above ground storage tanks
  – Lidded dumpsters
  – Adequately maintained vehicles
  – Final products intended for use outdoors
Exposure checklist

• You are eligible for the no exposure exclusion if you answer no to all of the eleven items in the list
Net DMR

• Earn two technical contact hours
  – Complete enrollment process
  – Submit first DMRs with MMRs/MROs electronically prior to effective date of federal rule or December 31, 2015, whichever comes first

• Contact Rose McDaniel
  – RMcDaniel@idem.IN.gov
  – (317) 233-2653
Wastewater operator certification and continuing education

www.idem.IN.gov/cleanwater/2393.htm
Wastewater operator certification and continuing education

Ivy Tech Community College Certification Centers – 25 locations, April 22, 2015 -
http://www.in.gov/idem/ctap/files/announce_20150423_ivy_tech_locations.pdf
CTAP

• Section 507 of the Clean Air Act, U. S. Code 7611(f), requires states to establish “Small Business Stationary Source Technical and Environmental Compliance Assistance Program”

• Established by Indiana legislators in January 1995, Indiana Code 13-28
  – Multimedia (air, waste, and water)
• Promote IDEM’s goal of “assistance first, enforcement second” by assisting Hoosier businesses in understanding and achieving environmental compliance

• All of our services are:
  • Free
  • Voluntary
  • Confidential
CTAP Services

- Assistance via phone
- Site visits
- Sector-specific compliance manuals and fact sheets
- Online resources
- Initiatives and Training
- Outreach and Partnerships
• We are a non-regulatory division of IDEM, that means we will **never** issue a:
  – Violation;
  – Permit;
  – Fee;
  – Fine; or
  – Take enforcement action
CTAP Site Visits

• Full site compliance review or targeted issue
• Summary letters provided within 45 days
• Quality Assurance Guarantee (QAG)
CTAP Quality Assurance Guarantee

IDEM shall not issue either a Violation Letter or a Notice of Violation assessing a gravity-based penalty against a Regulated Entity upon learning that a Regulated Entity sought out, received, and relied upon CTAP’s written compliance assistance prior to the alleged violation.
- **IDEM/Compliance**
  - Unannounced
  - Single Media Inspections
  - Violations
  - Fines/penalties
  - Not Confidential (matter of public record)

- **CTAP**
  - Voluntary (you invite us)
  - Multimedia Review
  - Recommendations, will not impose obligations
  - Confidential
How can CTAP save you money?

• Helping businesses avoid enforcement penalties
• Identifying P2 and other opportunities to reduce your regulatory burden
• Empowering businesses to handle compliance issues
Partners for P2

www.idem.IN.gov/ppp/index.htm
ESP

www.idem.IN.gov/prevention/2359.htm
Contact information
Mark C. Stoddard
CTAP
mstoddar@idem.IN.gov
(317) 233-1039
www.idem.IN.gov/ctap/index.htm
Informational resources:
The Finishing Industry and State Agencies Cooperate, Blair Vandivier, President, Benchmark Products Inc. and Kathy Prosser, Commissioner, IDEM, Products Finishing, August 1995
Informational resources:

Low Cost Pollution Prevention, Frank Altmayer, Scientific Control Labs Inc., October 1996
Informational resources:


http://www.epa.gov/sectors/pdf/finishing_ems_all.pdf
Informational resources:

Metal Finishing Checklist, keys to pollution prevention, Michigan Manufacturing Technology Center, February 1999

Informational resources:
Identifying and Reducing Contamination in Metal Cleaning, Plating and Rinsing Baths, North Carolina Division of Pollution Prevention and Environmental Assistance, 2 pages, April 1997
http://infohouse.p2ric.org/ref/01/00225.pdf
Informational resources:

Substitution of PFOS for use in non-decorative hard chrome plating, Danish EPA, 2011

http://www2.mst.dk/udgiv/publications/2011/06/978-87-92779-10-6.pdf
Informational resources:
Guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals, 2\textsuperscript{nd} revised draft, 26 April 2013, Stockholm Convention

Informational resources:

PFOS Detections in the City of Brainerd, Minnesota, ATSDR, August 13, 2008

MPCA initiated a study of perfluorochemicals (PFCs) in influent, effluent and sludge at WWTPs across the state.

Informational resources:
Management of Contaminated Wipes and Reusable Cloth Items, Guidance Document, July 27, 2015,
http://www.in.gov/idem/landquality/files/hw_info_contaminated_wipes.pdf
Informational resources:

Method 9095B
Paint Filter Liquids Test

Informational resources:
Hazardous Waste Regulations and the Metal Finishing Industry, EPA Region 9

http://www.epa.gov/region9/waste/enforcement/pdf/Metal-Finishing-Presentation.pdf
Informational resources:
Top Ten Hazardous Waste Violations, IDEM Office of Land Quality, January 24, 2000
http://www.in.gov/idem/landquality/files/hw_info_top_ten_violations.pdf
Informational resources:
Informational resources:

Uncontaminated Soil Policy


This NPD applies to soils, which do not include waste streams that are specifically regulated by 329 IAC 10 and which contain human introduced constituents (or chemicals) below RCG residential screening levels, and designates how those soils may be managed when excavated.
Informational resources:

Contained-in Determination Policy

Environmental media that has become mixed with “listed” hazardous wastes must be managed as hazardous waste when generated (e.g., exhumed for discard during remedial activities) because it contains “listed” hazardous waste(s).
Informational resources:
Guidance Manual for Conditional Exclusion from Storm Water Permitting Based on “No Exposure” of Industrial Activities to Storm Water
Informational resources:

IDEM Virtual File Cabinet
vfc.idem.IN.gov

IDEM Air Quality Permit Status Search
www.IN.gov/ai/appfiles/idem-caats/