

# Area Sources General Manufacturing

Lucy Thompson  
Department of Natural Resources  
Air Pollution Control Program  
Assistance  
573-526-2414

# Overview

- Overview of new area source regulations
- Small Business sources

# Fuels

- BBBBBB Gasoline Distribution
- **CCCCCC Gasoline Dispensing**
- HH Oil & Natural Gas Prod.

# Hospitals

- WWWWWW Hospital Sterilizers - Ethylene Oxide

# General

- ZZZZ Reciprocating internal combustion engines (RICE) - NEW
- ??? Reciprocating internal combustion engines – EXISTING

(Emergency Generators)

# PVC, Acrylic, Polyurethane Foam, etc

- DDDDDD PVC & Copolymer Production
- LLLLLL Acrylic/Modacrylic Fibers Production
- OOOOOO Flexible Polyurethane Foam Fabrication and Production

# Metal Smelters/ Foundries, etc

- EEEEEEE Primary Copper Smelting
- FFFFFFF Secondary Copper Smelting
- GGGGGG Primary Nonferrous Metal
- TTTTTT Secondary Non-Ferrous Metal
- ZZZZZ Steel and Iron Foundries
- X Secondary Lead Smelting
- RRR Secondary Aluminum Prod.
- YYYYY Stainless & Non-stainless Steel Mfg (EAFs)

# Chemicals

- M M M M M M M Carbon Black Production
- N N N N N N N Chromium Compounds

# Manufacturing

- PPPPPP Lead Acid Battery Manufacturing
- QQQQQQ Wood Preserving
- RRRRRR Clay Ceramics Mfg
- SSSSSS Pressed & Blown Glass Manufacturing.

# Manufacturing

- HHHHHH Paint Stripping Operations, Misc. Surface Coating, Autobody Refinishing
- WWWWWW Plating and Polishing
- XXXXXX Fabricated Metal Products

# Future

- Ferroalloys Production
- Ag Chemicals & Pesticide Mfg
- Industrial Organic Chemical Mfg
- Cyclic Crude & Intermediate Prod.
- Industrial Inorganic Chemical Mfg
- Inorganic Pigments Mfg
- Misc Organic Chemical Mfg
- Plastic Materials and Resins Mfg
- Pharmaceutical Prod.
- Synthetic Rubber Mfg

# Future

- Brick and Structural Clay
- Chemical Preparations
- Copper, Aluminum, and Nonferrous Foundries
- Paint and Allied Products
- Asphalt Processing & Asphalt Roofing Mfg
- Prepared Feeds Mfg
- Institutional/commercial/ industrial Boilers
- Sewage Sludge Incineration

# Existing

- AAAA Municipal Landfills
- NSPS Ec & 62. HHH Medical Waste Incinerators - HMIWI
- NSPS AAAA & 62. JJJ Small Municipal Waste Combustors
- NSPS CCCC & 62. III Commercial Industrial Solid Waste Incinerators - CISWI
- NSPS EEEE (no Fed plan yet) Other Solid Waste Incineration Units - OSWI

# Existing

- M Dry Cleaning Facilities
- N Chromic Acid Anodizing,  
Decorative Chromium  
Electroplating, Hard Chromium  
Electroplating
- O Commercial Sterilization  
Facilities
- T Halogenated Solvent Cleaners /  
Degreasing Organic Cleaners
- X Secondary Lead Smelting

# Existing

- EEE Hazardous Waste Incineration
- IIII Mercury Cell Chlor-Alkali Plants
- LLL Portland Cement
- RRR Secondary Aluminum Production
- VVV Publicly Owned Treatment Works

# CCCCCC Gasoline Dispensing

- Initial Notification 5/9/2008

# CCCCCC Gasoline Dispensing

## Three Levels of Control

- All
  - minimize evaporation by improved work practices.
- Larger facilities
  - install equipment to reduce vapors also
- Largest facilities
  - capture and send vapors back into the delivery tank truck also

# Reciprocating internal combustion engines (RICE)

NEW - ZZZZ and Existing – Due 2009

- ZZZZ
  - New Equipment
  - Initial Notification 7/16/2008
- Existing facilities
  - Regulation out in 2009
- Can include emergency generators

# ZZZZ Reciprocating internal combustion engines (RICE)

- Control emissions
- Document as required
- Possible testing
- Notification

# HHHHHH Paint Stripping Operations, Miscellaneous Surface Coating, and Autobody Refinishing

- Initial Notification for existing sources  
– 1/11/2010

HHHHHH



Paint Stripping Operations



Miscellaneous Surface Coating



Autobody Refinishing

# HHHHHH Paint Stripping Operations

- Limit fumes of MeCl
- Document MeCl content (MSDS)
- Track annual usage of MeCl (paint stripping)
- If annual usage > 2,000 lbs, written MeCl minimization plan required
- Document and plan to reduce high MeCl events

# HHHHHH Miscellaneous Surface Coating and Autobody Finishing

- Paint contains chromium, lead, manganese, nickel, or cadmium

# HHHHHH Miscellaneous Surface Coating

- Train/certify painters
- Spray booth requirements
- Use only defined spray guns (ie HVLP).
- Appropriate paint spray gun cleaning
- Notification and documentation.

# HHHHHH Autobody Refinishing

- Train/certify painters
- Spray booth requirements
- Use only defined spray guns (ie HVLP).
- Appropriate paint spray gun cleaning
- Notification and documentation.

W W W W W W  
Plating and Polishing

- Initial Notification – 10/30/2008

W W W W W W

## Plating and Polishing

- Non-cyanide electroplating, electroforming or electropolishing with  $\text{pH} < 12$
- Flash or short-term electroplating
- Dry mechanical polishing and thermal spraying (permanent operations)
- Cyanide electroplating ( $\text{pH} \geq 12$ ), non-electrolytic plating and coating operations, and temporary thermal spraying

W W W W W W

## Plating and Polishing

- Minimize emissions through various techniques
- Reporting
  - Annual compliance report
  - Initial notification
  - Notification of compliance status
- Retain records noting compliance with requirements

XXXXXXX

## Fabricated Metal Products

- Initial Notification for existing sources
  - 7/23/2011
- ONLY applies to area sources where primary activity is one of the listed categories

# XXXXXX Fabricated Metal Products

## Primary Activities Listed

- 1) Electrical & Electronic Equipment Finishing
- 2) Fabricated Metal Products
- 3) Fabricated Plate Work (Boiler Shops)
- 4) Fab. Structural Metal Manufacturing
- 5) Heating Equipment, except Electric
- 6) Industrial Mach. & Equipment Finishing
- 7) Iron and Steel Forging
- 8) Primary Metal Products Manufacturing
- 9) Valves and Pipe Fittings NEC

# XXXXXX Fabricated Metal Products

## Industrial Process Regulated

- 1) Dry abrasive blasting
- 2) Dry grinding & dry polishing with machines
- 3) Dry machining
- 4) Spray painting
- 5) Welding

XXXXXX

# Dry Abrasive Blasting

- Normally enclosed with filtration
- Large objects (> 8 feet) may be blasted without control devices
- Small “glove box” operations have fewer requirements

XXXXXXX

# Dry Grinding & Dry Polishing w/Machines

- Emissions captured and vented to control device
- Dust in surrounding areas minimized

# XXXXXXX Dry Machining

- Dust in surrounding areas minimized

# XXXXXXXXX Spray Painting

- Applied with high volume low pressure (HVLP) spray guns (or equivalent)
- Workers properly trained
- Spray guns cleaned properly
- Most spray painting of objects  $\leq 15$  feet done in booth with filters to capture metal particulates.

# XXXXXXX Welding

- Implement management practices to minimize emissions
  - Modify welding processes and material to reduce emissions
  - Use a welding fume capture and control system

# For More Info

<http://www.smallbiz-enviroweb.org/sba/newruleinfo.html>

# For More Info

Bob Randolph 573-751-8326

Lucy Thompson 573-526-2414

Carlton Flowers 573-526-1718

Don Kotur 314-416-2960

# For More Info

## - CHECK Local Agencies

*City of St. Louis*

Harris Tyler

(314) 613-7300

[HarrisT@stlouiscity.com](mailto:HarrisT@stlouiscity.com)

*City of Kansas City*

Aveen Noori

(816) 513-6177

[Aveen\\_Noori@kcmo.org](mailto:Aveen_Noori@kcmo.org)

*St. Louis County*

Jennifer Phillips

(314) 615-8916

[JPhillips@stlouisco.com](mailto:JPhillips@stlouisco.com)

*City of Springfield*

Brian Adams

(417) 864-1412

[badams@ci.springfield.mo.us](mailto:badams@ci.springfield.mo.us)