

July 11 & 12, 2012

**Draft Rules 12-13:
Metal Melting and
Processing Operations &
12-14: Metal Recycling
and Shredding Operations**

**Victor Douglas
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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Overview

- **Background**
- **Focus**
- **Draft Proposals**
- **Rule Development Process**
- **Next Steps**



Background

- Stationary Source Measure 1 in the 2010 Clean Air Plan
- Reduce Fugitive Emissions from Metal Facilities
- Extensive Outreach to Industry and Community Groups
 - Meetings
 - Site visits
 - Conference calls
- 1st Draft Proposal / Workshops July 2011
- Review / Revise Draft Proposal

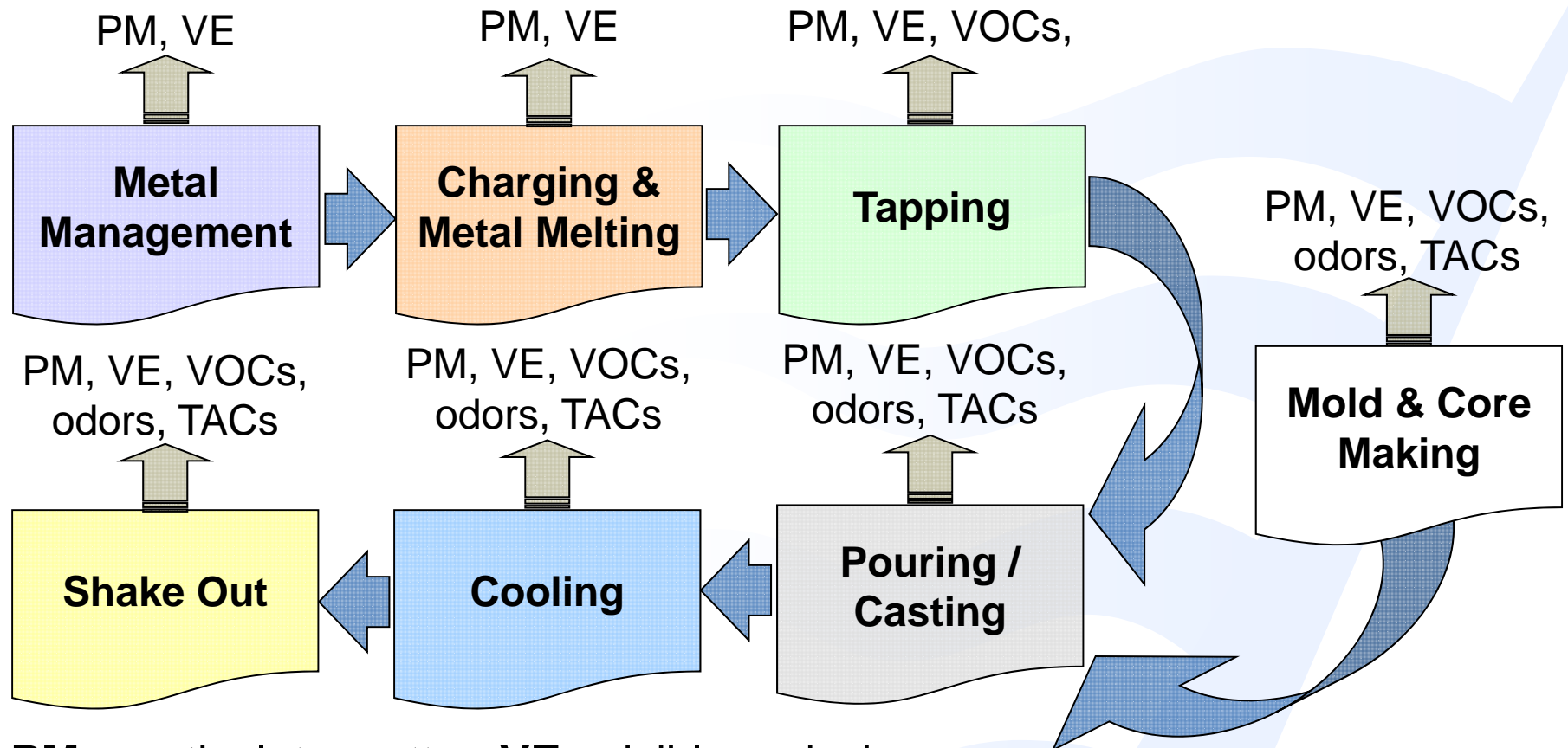


Metal Melting & Processing

- **Foundries & Forges**
 - Metal melting / casting and heat treatment
 - 25-30 permitted facilities
- **Emissions & Controls**
 - Particulate matter (including toxic metals)
 - Visible emissions
 - Odorous substances
- **Nuisance Complaints**



Metal Melting Processes & Emissions



PM: particulate matter; **VE:** visible emissions;
VOCs: volatile organic compounds; **TACs:** toxic air contaminants

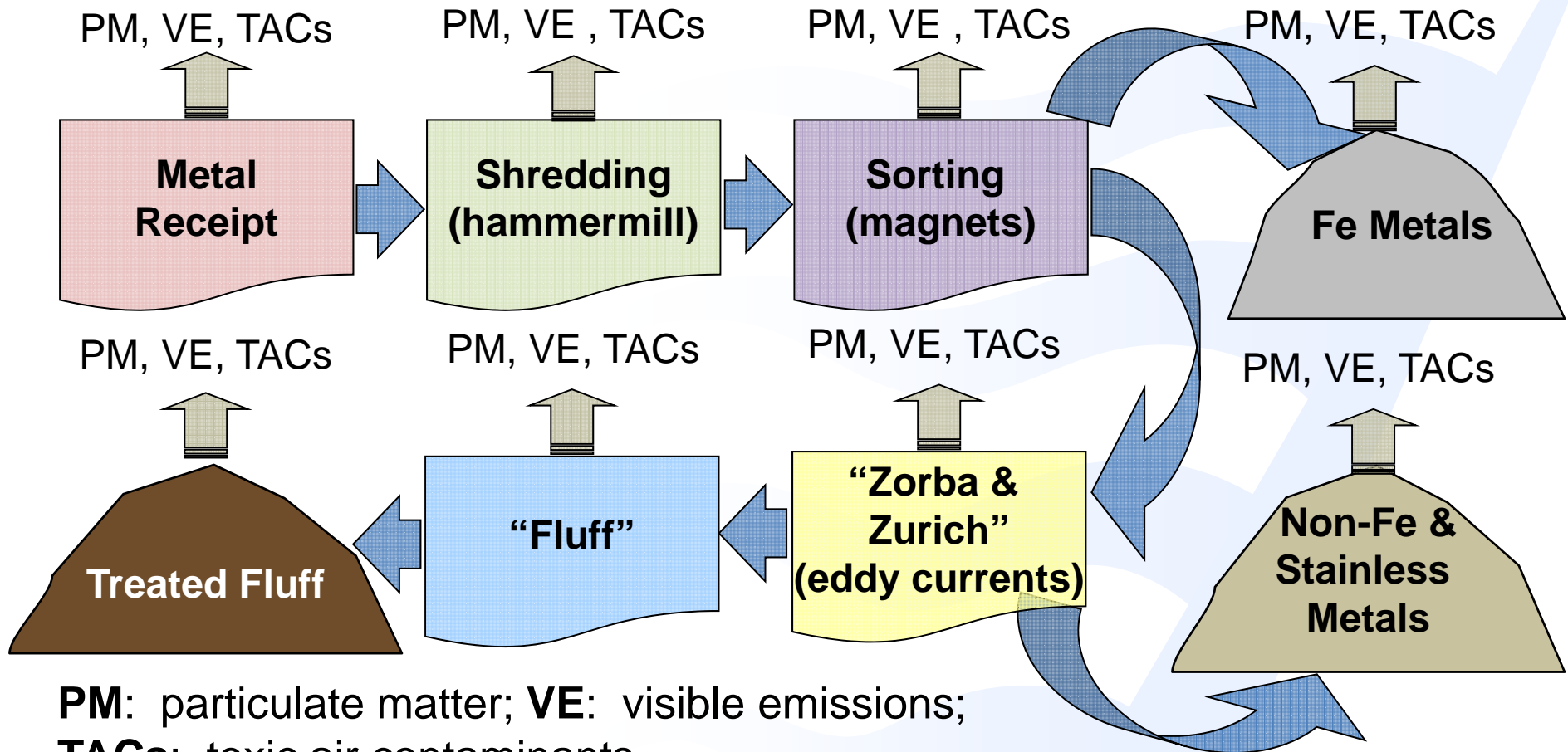


Metal Recycling & Shredding

- **Scrap Metal Recycling**
 - Collection, shredding and sorting of metals
 - Numerous facilities in the Bay Area
 - 3 major operations
- **Emissions**
 - Particulate matter (including toxic metals)
 - Visible emissions
 - Toxic compounds
- **Nuisance Complaints**



Recycling Steps & Emissions



Emissions Controls

Mitigation Measures Used

- Particulate & Visible Emissions
 - Baghouses
 - Dustbusters
 - Tarps / Covers
 - Wet Mopping
 - Cyclones
 - Shakers
 - Wind Screens
 - Street Sweepers
- Odors / VOCs
 - Afterburners
 - Reformulated Binders
 - Carbon Adsorbers
 - Enclosures / Screens



Current Air Rules & Regs

- **Federal Regulations for Toxics**
 - Major Source Iron and Steel Foundries
 - Secondary Aluminum Production
 - Electric Arc Furnace Steelmaking Facilities
 - Area Source Iron and Steel Foundries
 - Aluminum, Copper, and Other Nonferrous Foundries
- **State Regulation: Non-Ferrous Metal Melting ATCM**
- **District Rules**
 - Permits
 - Particulate Matter
 - Odorous Substances



Focus of Regulatory Effort

- **Reduce Fugitive Emissions**
 - Particulate Matter (including toxic metals)
 - Visible emissions
 - Odorous Substances
- **Using Facility-Tailored Plans**
 - Draft Emissions Minimization Plans
 - Include current efforts
 - Identify and assess additional measures
 - Submit for District Review and Approval



Draft Proposals

Applicability:

Requirements	Draft Rule 12-13: Foundries & Forges (Annual Throughput)	Draft Rule 12-14: Metal Recycling (Annual Throughput)
Records Only	\geq One ton & Permitted furnaces or ovens	\geq 1000 tons
Plans & Records	\geq 1000 tons or more & Permitted furnaces or ovens	\geq 50,000 tons

Exemption: Clean Aluminum – records only



Draft Proposals

Main Requirements of Both Drafts

- Develop draft Emissions Minimization Plan (EMP)
- Submit EMP to District:
 - Completeness Determination
 - Release for Public Comment
 - Review and Recommendations
 - Approval
- Comply with approved EMP
- Five-year Updates
- Recordkeeping



Draft Proposals

EMPs to Address Fugitive Emissions From:

- **12-13: Foundries & Forges:**

- Mold & Core Making
- Furnace Operations
- Casting / Cooling
- Sand Reclamation
- Metal Management
- Forging
- Shake-Out
- Dross / Slag Mgt.

- **Review of Alternative Binders**

- **Compliance with Federal & State provisions**



Draft Proposals

EMPs to Address Fugitive Emissions From:

- **12-14: Metal Recycling & Shredding:**
 - Trafficked Surfaces
 - Receipt from Providers
 - Lead Batteries
 - Mercury Switches
 - Metal Management
 - Auto Shredder Residue
 - PCB Capacitors
 - Air Bag (NaN₃) canisters



Emissions & Reductions

Potential Reductions & Benefits

- Fugitive emissions reductions of PM & odors
- Acknowledge current efforts of facilities
- Assess operations for additional reductions
- Reductions vary
- Toxic metal reductions = Lower risks
- Less odor impacts and complaints



Economic Impacts

- **Facility Evaluation & EMP Development**
 - Identifying applicable operations
 - Determining current practices and their efficacy
 - Identifying and incorporating additional measures
- **EMP Implementation**
 - 2,000 cubic foot enclosure: \$25,000
 - 50,000 dscfm baghouse: \$950,000



Review Process

Site Visits

- PSC (3)
- ABI (2)
- A&B Die Casting (1)
- Schnitzer Steel (2)
- CASS (3)
- US Pipe (2)
- USS / POSCO (1)
- Sims Metals (2)

Technical Research

- District Records
- Other Regulations
- Literature Searches
- Industry Experts
- Community Organizations

Public Workshops, July 2011



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*Public Workshop
July 11 & 12, 2012
Slide 17*

Next Steps

- Submit comments by July 20
- Continued site visits / consultations
- Continued meetings and correspondence
- Revision of draft proposal
 - Final Proposal
 - Staff Report
 - Socioeconomic & CEQA analyses
- Public Hearing Fall 2012



Contact Information

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