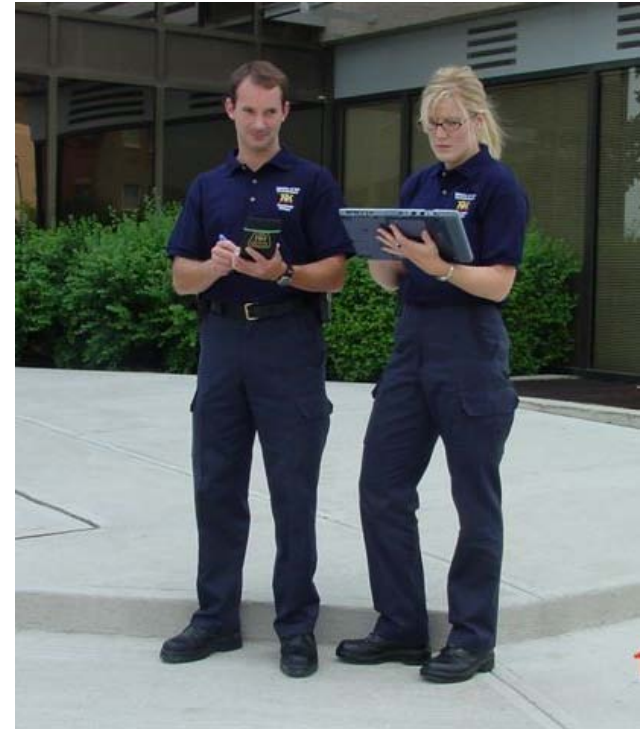


# Inspections in the Primary Metals Sector (2008 – 09)

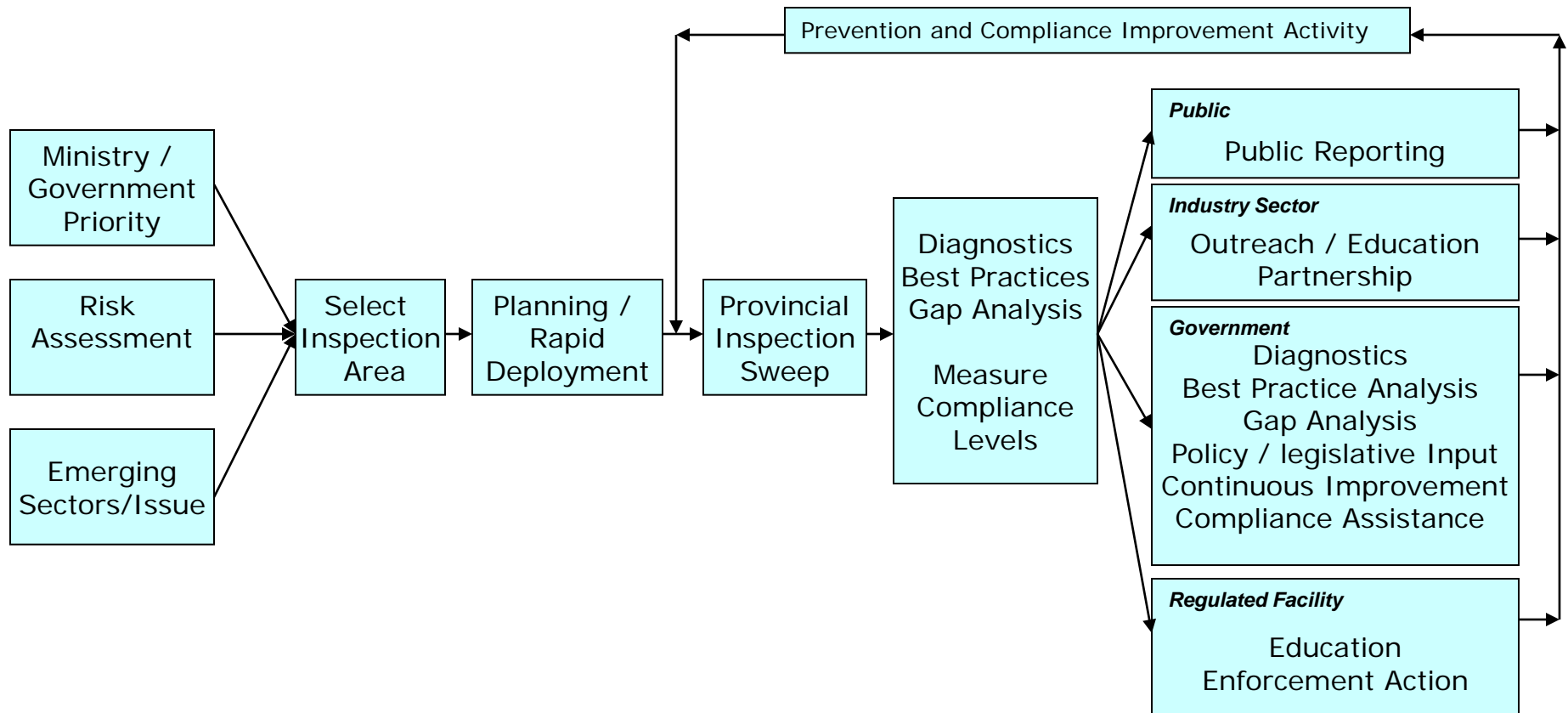
Sector Compliance Branch Presentation to the  
Canadian Die Casters Association  
February 2010

# SECTOR COMPLIANCE BRANCH

- Sector-based approach includes:
  - Up-front sector analysis
  - Provincial inspection sweeps
  - Collection of compliance-related information
  - Sharing of this information with
    - Regulated sector (conferences, meetings, newsletters, internet)
    - Ministry staff and management



# THE SECTOR COMPLIANCE BRANCH BUSINESS MODEL



# SECTOR RISK RANKINGS

- Risk = Likelihood x Consequence
  - combination of the number and severity (defined as the potential for impact to human health and/or the environment) of events
- Risk assessment determines which sectors to inspect
  - Assess undesirable events within each sector (for example: spills, illegal discharges)
  - Determine the consequences of these events (ranges from no impact to major human health/environmental impacts)
  - Sectors are ranked by compiling all reported incidents associated with the sector, applying a consequence weighting to each incident, and generating a total score for each sector

## RISK BASED PLANNING

- Sector Compliance Branch conducted inspections of facilities in the Primary Metals sector in the fiscal year 2008 - 09



# DEFINING THE SECTOR

- North American Industrial Classification System (NAICS) 331
- Establishments primarily engaged in smelting and refining ferrous and non-ferrous metals from ore, pig or scrap in blast or electric furnaces. The output of smelting and refining, usually in ingot form, is used in rolling and drawing operations to produce sheet, strip, bars, rods and wire, and in molten form to produce castings and other basic metal products.
- In 2008-09, inspection sweep focussed on facilities falling under the following functional categories according to their predominant activity:
  - Foundries - Metal Casting and Metal Melting
  - Drawing, rolling and shaping of metal



# PREPARING LISTS OF FACILITIES

- **Company/Facility identification**
  - Scotts Directory – to identify companies presently in business
  - IDS – MOE historical involvement and approvals
  - NPRI – to determine if the company is required to report emissions
  - Web Based searches
- **Screening**
  - sort companies and/or facilities by MOE region and district
  - select random sample of facilities throughout the province

# POTENTIAL ENVIRONMENTAL ISSUES RELATED TO THIS SECTOR

- **Air:** Emissions from multiple stages of the manufacturing process (gases, metals & particulate matter) as well as chemical storage
- **Waste:** Dust, used sand, slag (withdrawn impurities), refractories (furnace and ladle linings), used lubricating & process oils, and waste scrap disposal
- **Wastewater:** from quenching baths, cooling systems, wet scrubber air emission systems and other minor sources



Casting Process

# SUMMARY OF APPLICABLE LEGISLATION

- ***Environmental Protection Act (EPA)***

Sec. 9 – requirement to obtain a Certificates of Approval ( Air) to operate equipment and comply with the conditions of approval

Reg. 419/05 (Air Pollution - Local Air Quality) – comply with point of impingement standards for air emissions

Reg. 127/01 (Monitoring and Reporting – Air Borne Contaminant Discharge) – monitor emissions, and maintain, prepare and submit annual emission reports

Reg. 347 (General – Waste Management) – register subject waste annually, maintain records, and to dispose of waste in accordance of regulations

Reg. 102/94 – maintain, prepare and submit a report of waste audit or a waste reduction work plan

Reg. 103/94 – source separation of waste for reuse or recycling

- ***Ontario Water Resources Act (Note: Waste water discharge to municipal sewer governed by the local Municipal Sewer use By-law)***

Sec. 34 – Water Taking (PTTW)

Sec. 53 – requirement to obtain a Certificate of Approval (Sewage Works) and comply with the conditions of approval

# INSPECTION STEPS

- Pre-Inspection:
  - database, document searches/reviews (Waste Generator reports, Certificates of Approval, etc)
  - review local Ministry office files
  - site-specific information obtained (location, facility size, etc)
- Inspection:
  - meet Company representative
  - review authorizing, other environmental documents (photocopy/scan)
  - facility inspection with Company representative (notes, samples, photographs)
  - review initial findings with Company representative
  - length of time for inspection: few hours to few days

# INSPECTION STEPS

- Post Inspection:

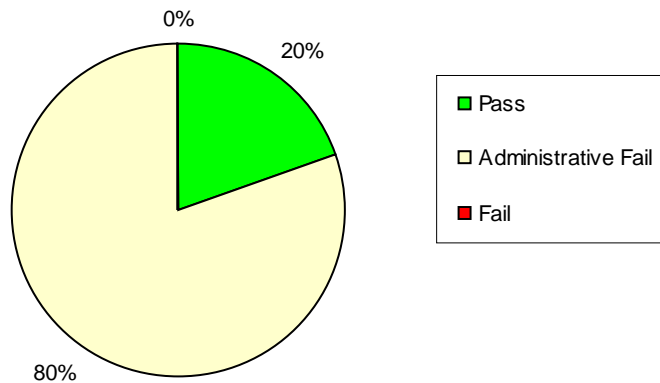
- detailed review of inspection findings (notes, documents, laboratory sample results)
- prepare inspection report, response to any non-compliance (letter, Notice of Violation, Order, referral to Investigations & Enforcement Branch for investigation)
- deliver inspection report to Company representative, discuss
- monitor to full compliance



# INSPECTION STEPS

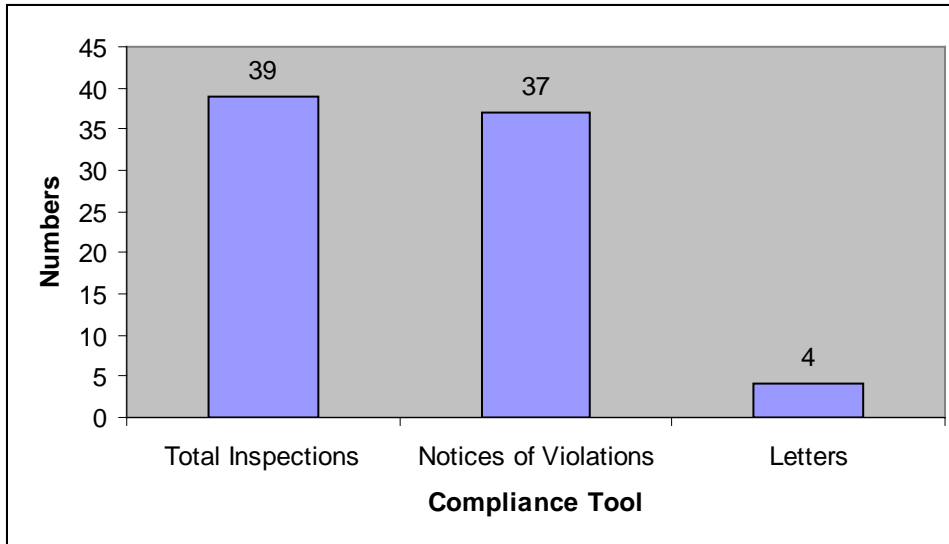
- Review for compliance with:
  - Environmental Protection Act (Sec. 9 Air, Reg. 419 Air, Reg. 347 Waste)
  - Ontario Water Resources Act (Sec. 53 Sewage Works, Sec. 34 PTTW)
  - Conditions of any authorizing documents (Certificates of Approval, etc)
- Responses to Non-Compliance:
  - Letter
  - Notice of Violation
  - Provincial Officer Order
  - Director's Order
  - Referral to MOE Investigations & Enforcement Branch for further investigation
- Review, discuss with Company
  - Circumstances that can warrant amendment to direction given

# SECTOR INSPECTION FINDINGS



Pass/Fail	# of Companies	% of Companies
Pass	10	20.4%
Administrative Fail	39	79.6%
Fail	0	0%
<b>Total</b>	<b>49</b>	

# Compliance Status for Administrative Failed facilities (39 of the 49)



**Total # of facilities with compliance tool served : 39**

**Facilities in compliance : 34**

**Working towards compliance : 5**

Note: Numbers are as of January 31, 2010 and subject to change

Note: Some facilities were issued more than one type of abatement tool

# REGULATORY NON-COMPLIANCE FOUND

Provision	Non-compliance Type	Inspections	Percentage
EPA Act 9(1)(a)	Air - No Cof A/ Fail to comply CofA – construct, alter plant, structure etc	22	56
EPA Act 9(7)	Air - No Cof A/ Fail to comply CofA – use or operate plant, structure without C of A	19	48
EPA Reg347 17.2(3)i	Generator Registration - Fail to notify Ministry when first time a subject waste is retained at facility for more than three month period	10	26
EPA Reg347 23(2)(b)(iii)	Manifests / Generator - Fail to Retain Copy 2 of Manifest (2 Years)	8	21
EPA Reg347 23(2)(b)(ii)	Generator Registration - Fail to return Copy 1 of Manifest to Director	7	18
EPA Reg347 18(2)	Generator Registration – Inadequate Report	6	15
EPA Reg347 17.2(5)	Facilities – No/Inadequate Record of waste stored more than three months period	6	15
EPA Reg347 18(6)	Generator Registration - Fail to submit a supplementary report to Ministry when there is a change to initial generation registration report	6	15
EPA Reg347 23(2)(b)(i)	Manifests / Generator - Fail to Complete Section A of Manifest	6	15
EPA Reg347 17.2(1)i	Facilities - Improper storage of waste/leaks	5	13
EPA Reg102 57(1)	Waste Audits and Plans - Fail to Conduct Audit (Large Manufacturing Establishments)	4	10
EPA Reg102 58(1)	Waste Audits and Plans - Fail to Prepare Plan (Large Manufacturing Establishments)	4	10
OWRA Act 53(1)	Sewage Works - No Cof A/ Fail to comply CofA	3	8
EPA Reg347 84(1)	Land Disposal – Generator fail to notify receiver facility the waste information	3	8
EPA Reg347 18(1)(b)	Generator Registration - Fail to submit annual generator registration report	3	8

# TYPICAL REGULATORY NON-COMPLIANCE FOUND



## NEXT STEPS

- SCB officers will follow up to ensure compliance is achieved at all facilities
- Post the sector performance report on MOE's website