Proposed Suggested Control Measure for Automotive Coatings

Board Meeting
Sacramento CA
October 20, 2005

California Environmental Protection Agency

Air Resources Board

Today's Presentation

- Background
- Reasons for Proposed SCM
- SCM Development
- SCM Provisions
- Benefits & Impacts
- Summary & Recommendation

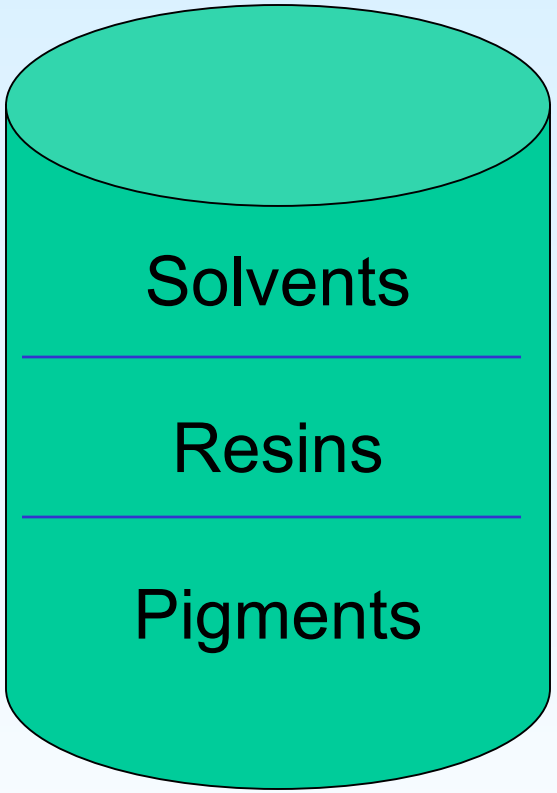
Background

Background

- What Are Automotive Coatings?
  Coatings used in motor vehicle or mobile equipment refinishing or repair

Background

Coatings Technology



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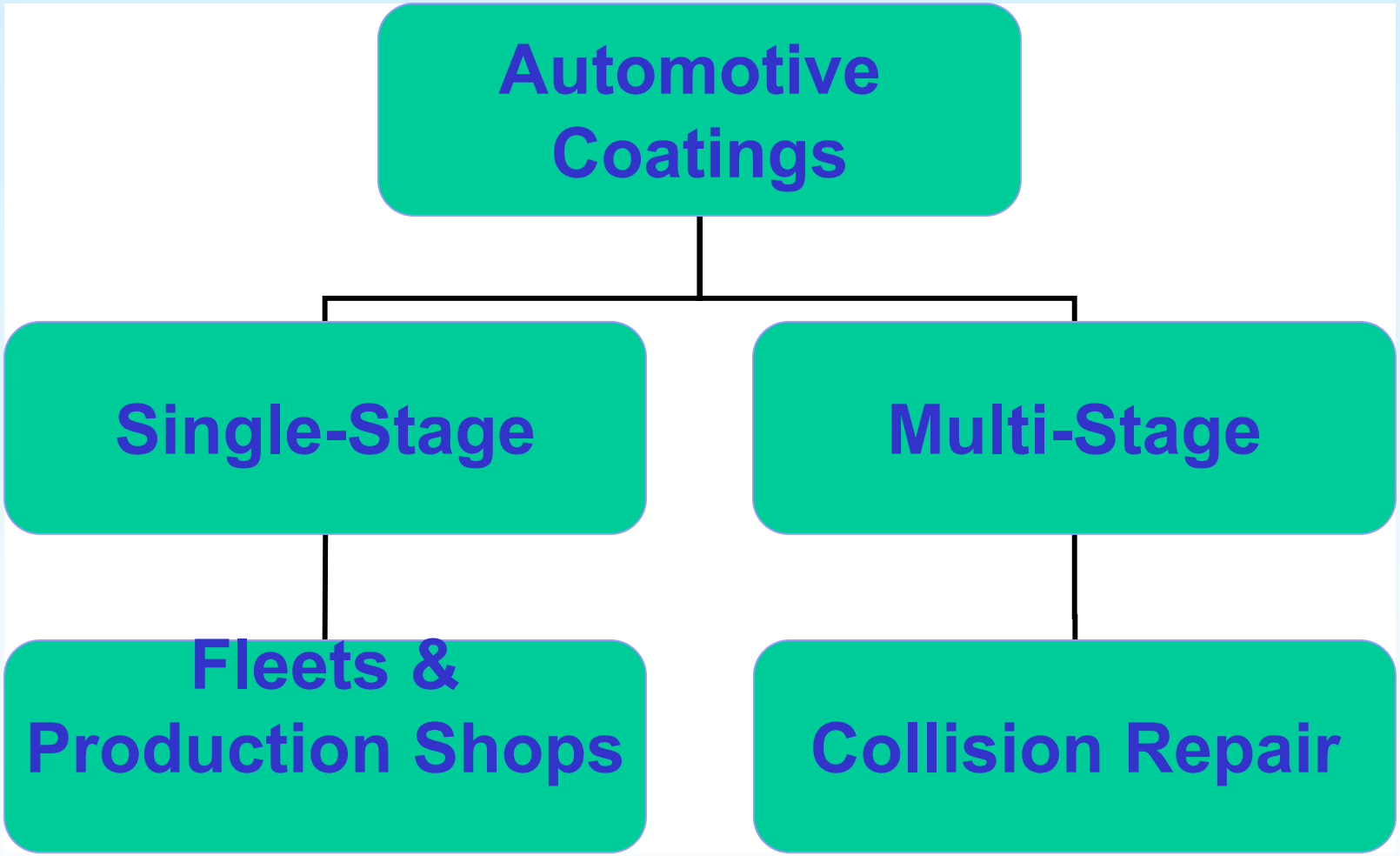
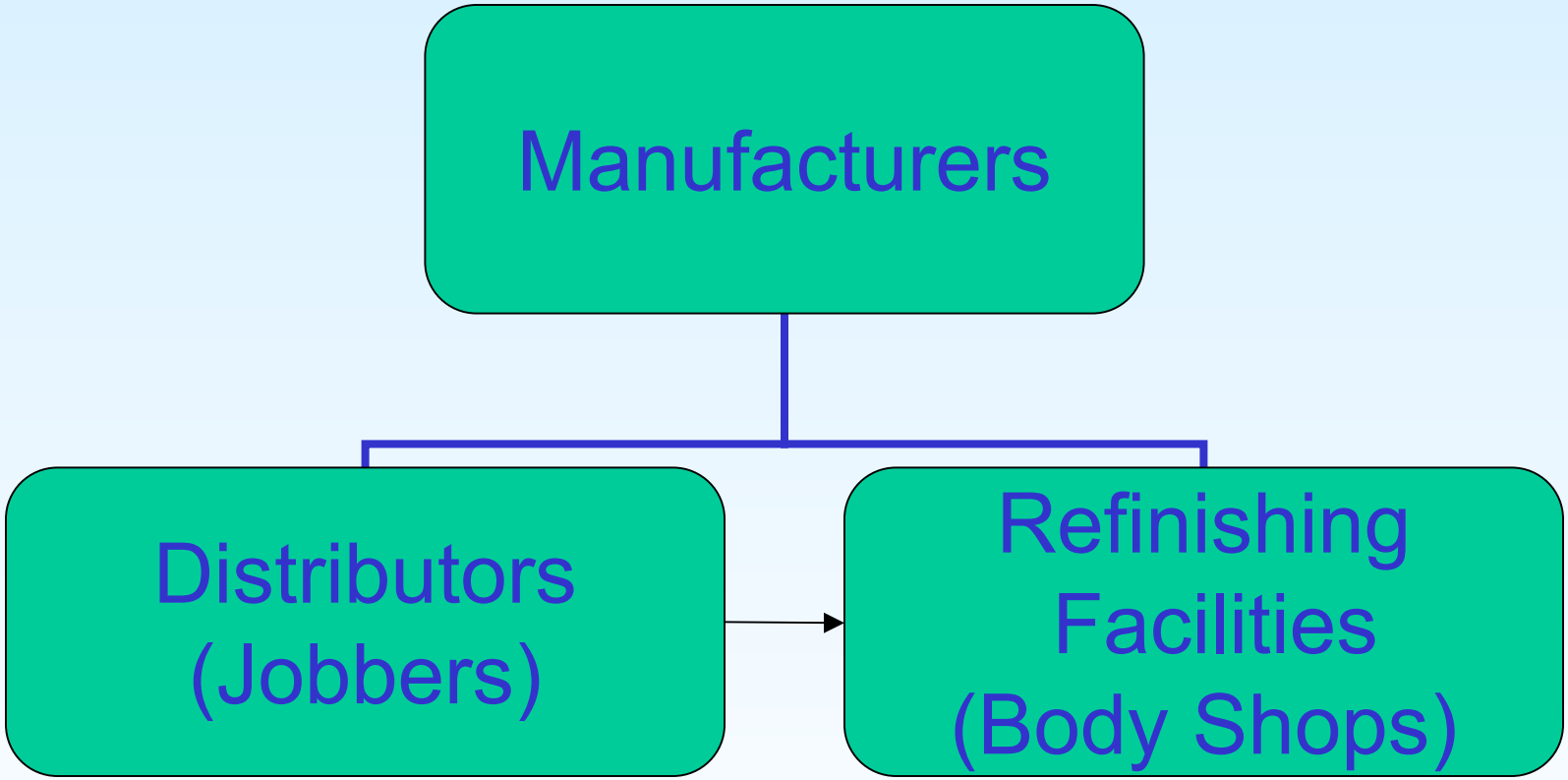

Automotive Coatings
Single-Stage
Multi-Stage
Fleets & Production Shops
Collision Repair

Background

Coatings Industry Overview



Background

- Automotive Refinishing Industry
  - Over 4,000 refinishing facilities
  - Most are small businesses

Background

- Who controls VOC emissions from automotive coatings?
  - Air Districts
  - U.S. EPA
- ARB has oversight authority

Background

- Current Requirements
  - 20 Air District Rules
  - U.S. EPA National Rule

Reasons for Proposed SCM

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- Reduce VOC emissions
- Meet State Implementation Plan and California Clean Air Act requirements
- Ozone and PM attainment plans due in 2007 and 2008

Reasons for Proposed SCM

- Promote consistency and uniformity among air district rules
- Improve enforceability
- Community Health/Environmental Justice


SCM Development

SCM Development

- ARB's 2002 Automotive Coatings Survey
- Technical analyses of coating categories
- Meetings with districts, U.S. EPA and industry
- Six public workshops statewide
- Analysis of cost and environmental impacts

SCM Development

- ARB's 2002 Automotive Coatings Survey
  - Captures 2001 sales data
  - Collected by coating category
  - Requested complete coating formulations

SCM Development

- ARB's 2002 Automotive Coatings Survey Findings
  - 17 manufacturers participated
  - 3.7 million gallons sold in 2001
  - Seven manufacturers sold 95% of volume

SCM Provisions

SCM Provisions

- Overview of SCM Proposal
  - Combines VOC limits for cars and fleet vehicles
  - Eliminates the composite VOC limit for color and clear coatings
  - Combines coating categories
  - Replaces specialty coatings categories with specific categories

SCM Provisions

- Overview of SCM Proposal
  - Establishes most VOC limits based on available technology
  - Establishes a prohibition of possession
  - Lowers the VOC limits for cleaning solvents
  - Proposes TBAC exemption
  - Simplifies recordkeeping and improves labeling

SCM Provisions

Proposed VOC Limits Effective January 1, 2009

Coating Category	*Proposed VOC limit*
Adhesion Promoter	540
Clear Coating	250
Color Coating	420
Multi-color Coating	680
Pretreatment Coating	660
Primer	250
Single-Stage Coating	340
Temporary Protective Coating	60
Truck Bed Liner Coating	310
Underbody Coating	430
Uniform Finish Coating	540
Any Other Coating Type	250

SCM Provisions

Companies with Compliant Products

Coating Category	No. of Companies
Adhesion Promoter	0
Clear Coating	11
Color Coating	6
Multi-color Coating	1
Pretreatment Coating	2
Primer	12
Single-Stage Coating	2
Temporary Protective Coating	1
Truck Bed Liner Coating	1
Underbody Coating	2
Uniform Finish Coating	1
Any Other Coating Type	N/A

SCM Provisions

- Proposes 25 g/l VOC Limit for Cleaning Solvents
- Currently in effect in South Coast
- SCM would extend South Coast limit statewide

Issues

Issues

- The SCM proposes to exempt TBAC
  -U.S. EPA has exempted TBAC
  - ARB conducted a health risk assessment

- ARB recommends that districts do a category specific evaluation

Issues

- Primer sealers need higher VOC limit for collision repair
  - Primer sealers subject to primer limit
  - Compliant primer sealers on the market
  - Compliant primer sealers similar to higher VOC products

Issues

- Single-stage metallics need higher VOC limit for collision repair

- Primarily used by fleets or production shops

- Most collision repairs use color and clear coatings

- Compliant single-stage metallics similar to higher VOC products

Benefits & Impacts

Benefits & Impacts

Category	Statewide VOC Emissions (tons per day)	Statewide VOC Emission Reductions (tons per day)
Coatings	20.7	13.4
Cleaning Solvents	3.0	2.4

Benefits & Impacts

Coating Category	Emissions (tpd)	Emission Reductions (tpd)
Color Coating	12.9	8.8
Single-stage Coating	2.9	1.7
Clear Coating	2.7	1.6
Primer	1.8	1.0
All Other Categories	0.5	0.3

Benefits & Impacts

- Potential Impacts on Refinishing Facilities
  - Likely require use of water-borne color coatings
  - Likely require air movement and heating equipment
  - May require training of paint technicians

Benefits & Impacts

- Potential Cost Impacts
  - Total annual cost of the proposed SCM:
    - $14 million
    - Average annual cost:
      $320,000 (manufacturers)
      $3,400 (refinishing facilities)
  - Cost-Effectiveness: $ 1.43/lb VOC reduced

Benefits & Impacts

- What do these costs mean to consumers?
  - Estimated cost to consumers:
    - $11 increase in average repair cost

Summary & Recommendation

Summary

- The proposed SCM reduces public exposure to ozone and PM
- The SCM is technically feasible and cost effective
- It is consistent with ARB's environmental justice goals

Recommendation

- Approve the proposed SCM
- Direct staff to work with the air districts to implement the SCM