



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Overview of Air District Regulations and Rules

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PRESENTATION SUMMARY

- Introduction and Background Information
- Sources of Air District Regulations and Rules
- Requirements Other than Air District Rules
Applicable to Sources in the Air District
- General Organization of Regulations and Rules
- Regulations and Rules
- Questions



INTRODUCTION AND BACKGROUND

- The first Air District regulation was adopted in 1957, and controlled burning of garbage at garbage dumps and wrecking yards
- In 1960, the Air District adopted its first controls on industrial stack emissions of smoke, sulfur dioxide and particulate matter
- In 1967, the Air District adopted a rule controlling emissions of organic compounds from industrial sources
- In 1970, the Air District banned garbage incinerators in residential backyards
- In general, rules set standards for existing sources, while permitting ensures control over new sources



INTRODUCTION AND BACKGROUND

- Today, the Air District has 110 rules covering a wide variety of sources and operations
- Air District has approximately 10,000 permitted facilities
- Air District has approximately 23,000 individual permitted sources
- There are thousands of additional “sources” and activities covered by Air District rules, for example:
 - Painting and coating operations
 - Solvent cleaning operations
 - Demolition jobs
 - Fireplaces
 - Residential water heaters and forced air furnaces
 - Valves and flanges at refineries and chemical plants



SOURCES OF AIR DISTRICT REGULATIONS AND RULES

- Efforts to attain and maintain California and federal Ambient Air Quality Standards (AAQS)
 - Standards for 6 “Criteria” pollutants (Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone, Particulate Matter, and Sulfur Dioxide)
 - Ozone Precursors Include Oxides of Nitrogen and Volatile Organic Compounds (District “Reactive Organic Gases”)
 - Regulations limit emissions of these pollutants to bring ambient levels to the point of attainment



SOURCES OF AIR DISTRICT REGULATIONS AND RULES

- Requirements to control emissions of federal Hazardous Air Pollutants (HAPs) and California Toxic Air Contaminants (TACs)
 - Federal 1990 Clean Air Amendments added HAPs requirements and 187 pollutants are listed
 - California TACs include Diesel PM as well as the pollutants listed as federal HAPs



OTHER APPLICABLE REQUIREMENTS

- California Health and Safety Code section 41700 – public nuisance
- Criteria Pollutants - Permits
 - Federal New Source Performance Standards (NSPS)
 - Best Available Control Technology (BACT)
 - Offsets
 - Prevention of Significant Deterioration Permitting Program (PSD) for pollutants for which attainment has been achieved



OTHER APPLICABLE REQUIREMENTS

- Toxics/Hazardous Air Pollutants
 - Federal National Emission Standards for Hazardous Air Pollutants (NESHAP)
 - Federal Maximum Achievable Control Technology Standards (MACT)
 - California Airborne Toxic Control Measures (ATCM)
 - Air District permitting rules for Best Available Control Technology for Toxics (T-BACT)
- California Air Resources Board and federal greenhouse gas rules



ORGANIZATION OF REGULATIONS

- Air District Rules are currently divided into 12 Regulations:
 - General Provisions and Definitions
 - Permits
 - Fees
 - Air Pollution Episode Plan
 - Open Burning
 - Particulate Matter
 - Odorous Substances
 - Organic Compounds
 - Inorganic Gaseous Pollutants
 - Standards of Performance for New Stationary Sources
 - Hazardous Pollutants
 - Miscellaneous Standards of Performance
- AND ... coming soon ... Regulation 14, Commuter Benefits



ORGANIZATION OF REGULATIONS AND RULES

- Air District regulations and rules use common section numbering
 - 100 series – General Provisions
 - 200 series – Definitions
 - 300 Series – Standards
 - 400 series – Administrative Requirements
 - 500 series – Monitoring and Records
 - 600 series – Manual of Procedure References



REGULATIONS AND RULES

- Regulation 1 – General Provisions and Definitions
 - Sets out basic principles and definitions of terms applicable to all Air District Rules
 - Provides for certain enforcement mechanisms
 - Establishes the Manual of Procedures which sets out methodology for compliance testing
- Regulation 1, Rule 2 – Notice to Comply
 - Establishes guidelines for a written Notice to Comply procedure for enforcement response to minor violations



REGULATIONS AND RULES

- Regulation 2 – Permits
 - Rule 1 – General Requirements
 - Rule 2 – New Source Review
 - Rule 3 – Power Plants
 - Rule 4 – Emissions Banking
 - Rule 5 – New Source Review of Toxic Air Contaminants



REGULATIONS AND RULES

- Regulation 2 – Permits (continued)
 - Rule 6 – Major Facility Review
 - Rule 7 – Acid Rain
 - Rule 9 – Interchangeable Emission Reduction Credits
 - Rule 10 – Large Confined Animal Facilities



REGULATIONS AND RULES

- Regulation 3 – Fees
 - The most amended Air District Rule (typically amended in connection with the annual Budget process)
 - Sets out fees for Air District permitting, registration, emissions, Hearing Board filings, and other Air District services



REGULATIONS AND RULES

- Regulation 4 – Air Pollution Episode Plan
 - Consistent with the California Air Pollution Emergency Plan, provides for declarations by the APCO of health advisories, alerts, warnings and emergencies at specified levels
 - Requires stationary sources to prepare plans for, and implement emergency reduction strategies under certain circumstances
 - Trigger levels have not been seen in the Air District in several years



REGULATIONS AND RULES

- Regulation 5 – Open Burning
 - Forbids open burning within the Air District with exceptions (primarily agricultural, forest management, and related burning)
 - Puts in place procedures for APCO declaration of permissive burn days for allowable fires
 - Provides standards for allowable fires
 - Provides administrative procedures for prior notification of Air District for allowable fires



REGULATIONS AND RULES

- Regulation 6 – Particulate Matter
 - Rule 1 – General Requirements
 - Rule 2 – Commercial Cooking Equipment
 - Rule 3 – Wood-burning Devices
 - Rule 4 – Metal Recycling and Shredding Operations



REGULATIONS AND RULES

- Regulation 7 – Odorous Substances
 - Last amended in 1982, this rule places limits on certain odorous compounds
 - Provides a method for determining whether a substance is “odorous” that involved having three qualified “subjects” sniff diluted samples of a compound using a controlled apparatus and determining whether they could smell the substance
 - Typically, odor issues are addressed with a public nuisance enforcement approach



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds
 - Rule 1 – General Provisions
 - Rule 2 – Miscellaneous Operations
 - Rule 3 – Architectural Coatings
 - Rule 4 – General Solvent and Surface Coating Operations
 - Rule 5 – Storage of Organic Liquids
 - Rule 6 – Terminals and Bulk Plants



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 7 – Gasoline Dispensing Facilities
 - Rule 8 – Wastewater (Oil-Water) Separators
 - Rule 9 – Vacuum Producing Systems
 - Rule 10 – Process Vessel Depressurization
 - Rule 11 – Metal Container, Closure and Coil Coating



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 12 – Paper, Fabric and Film Coating
 - Rule 13 – Light and Medium Duty Motor Vehicle Assembly Plants
 - Rule 14 – Surface Coating of Large Appliances and Metal Furniture
 - Rule 15 – Emulsified and Liquid Asphalts
 - Rule 16 – Solvent Cleaning Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 17 – Petroleum Dry Cleaning Operations
 - Rule 18 – Equipment Leaks
 - Rule 19 – Surface Coating of Miscellaneous Metal Parts and Products
 - Rule 20 – Graphic Arts Printing and Coating Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 21 – Rubber Tire Manufacturing Operations
 - Rule 22 – Valves and Flanges at Chemical Plants
 - Rule 23 – Coating of Flat Wood Paneling and Wood Flat Stock
 - Rule 24 – Pharmaceutical and Cosmetic Manufacturing Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 26 – Magnet Wire Coating Operations
 - Rule 28 – Episodic Releases from Pressure Relief Devices at Petroleum Refineries and Chemical Plants
 - Rule 29 -- Aerospace Assembly and Component Coating Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 30 – Semiconductor Wafer Fabrication Operations
 - Rule 31 – Surface Coating of Plastic Parts and Products
 - Rule 32 – Wood Products Coatings
 - Rule 33 – Gasoline Bulk Terminals and Gasoline Delivery Vehicles



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 34 – Solid Waste Disposal Sites
 - Rule 35 – Coating, Ink and Adhesive Manufacturing
 - Rule 36 – Resin Manufacturing
 - Rule 37 – Natural Gas and Crude Oil Production Facilities



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 38 – Flexible and Rigid Disc Manufacturing
 - Rule 39 – Gasoline Bulk Plants and Gasoline Delivery Vehicles
 - Rule 40 – Aeration of Contaminated Soil and Removal of Underground Storage tanks
 - Rule 41 – Vegetable Oil Manufacturing Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 42 – Large Commercial Bread Bakeries
 - Rule 43 – Surface Coating of Marine Vessels
 - Rule 44 – Marine Vessel Loading Terminals
 - Rule 45 – Motor Vehicle and Mobile Equipment Coating Operations



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 47 – Air Stripping and Soil Vapor Extraction Operations
 - Rule 49 – Aerosol Paint Products
 - Rule 50 – Polyester Resin Operations
 - Rule 51 – Adhesive and Sealant Products



REGULATIONS AND RULES

- Regulation 8 – Organic Compounds (continued)
 - Rule 52 – Polystyrene, Polypropylene and Polyethylene Foam Product Manufacturing Operations
 - Rule 53 – Vacuum Truck Operations



REGULATIONS AND RULES

- Regulation 9 – Inorganic Gaseous Pollutants
 - Rule 1 – Sulfur Dioxide
 - Rule 2 – Hydrogen Sulfide
 - Rule 3 – Nitrogen Oxides from Heat transfer Operations
 - Rule 4 – Nitrogen Oxides from Fan Type Residential Central Furnaces
 - Rule 5 – Hydrogen Sulfide from Geothermal Power Plants



REGULATIONS AND RULES

- Regulation 9 – Inorganic Gaseous Pollutants (continued)
 - Rule 6 – Nitrogen Oxides Emissions from Natural Gas-fired Water Heaters
 - Rule 7 – Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters
 - Rule 8 – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines



REGULATIONS AND RULES

- Regulation 9 – Inorganic Gaseous Pollutants (continued)
 - Rule 9 – Nitrogen Oxides and Carbon Monoxide from Stationary Gas Turbines
 - Rule 10 – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators and Process Heaters in Petroleum Refineries
 - Rule 11 – Nitrogen Oxides and Carbon Monoxide from Utility Electric Power Generating Boilers



REGULATIONS AND RULES

- Regulation 9 – Inorganic Gaseous Pollutants (continued)
 - Rule 12 – Nitrogen Oxides from Glass Melting Furnaces
 - Rule 13 – Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing



REGULATIONS AND RULES

- Regulation 10 – Standards of Performance for New Stationary Sources
 - Incorporates by reference certain federal New Source Performance Standards that existed on August 7, 1991
 - This gave the Air District direct enforcement authority over these provisions
 - In practice, these federal standards are typically made directly enforceable by the Air District through incorporation in Air District permits



REGULATIONS AND RULES

- Regulation 11 – Hazardous Pollutants
 - Rule 1 – Lead
 - Rule 2 – Asbestos Demolition, Renovation and Manufacturing
 - Rule 3 – Beryllium
 - Rule 4 – Beryllium Rocket Motor Firing
 - Rule 5 – Mercury
 - Rule 6 – Vinyl Chloride



REGULATIONS AND RULES

- Regulation 11 – Hazardous Substances (Continued)
 - Rule 7 – Benzene
 - Rule 8 – Hexavalent Chromium
 - Rule 9 – Ethylene Oxide Sterilizers
 - Rule 10 – Hexavalent Chromium Emissions from Cooling Towers



REGULATIONS AND RULES

- Regulation 11 – Hazardous Substances (Continued)
 - Rule 11 – National Emissions Standard for Benzene Emissions from Coke By-Product Recovery Plants and Benzene Storage Vessels
 - Rule 12 – National Emission Standard for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations
 - Rule 13 – Medical Waste Incinerators
 - Rule 14 – Asbestos Containing Serpentine



REGULATIONS AND RULES

- Regulation 11 – Hazardous Pollutants (continued)
 - Rule 15 – Airborne Toxic Control Measure for Emissions of Toxic Metals from Non-Ferrous Metal Melting
 - Rule 16 – Perchloroethylene and Synthetic Solvent Dry Cleaning Operations
 - Rule 17 – Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use



REGULATIONS AND RULES

- Regulation 12 – Miscellaneous Standards of Performance
 - Rule 1 – Kraft Pulp Mills
 - Rule 2 – Rendering Plants
 - Rule 3 – Asphalt Air Blowing
 - Rule 4 – Sandblasting
 - Rule 5 – Phosphate Fertilizer Plants
 - Rule 6 – Acid Mist from Sulfuric Acid Plants



REGULATIONS AND RULES

- Regulation 12 – Miscellaneous Standards of Performance (continued)
 - Rule 7 – Motor Vehicle Air Conditioner Refrigerant
 - Rule 10 – Oleum Transfer Operations
 - Rule 11 – Flare Monitoring at Petroleum Refineries
 - Rule 12 – Flares at Petroleum Refineries
 - Rule 13 – Foundry and Forging Operations

Winter PM_{2.5} Seasons

Year	Days > 35 µg/m ³	Winter Spare the Air Alerts
2011/2012	11	15
2012/2013	1	10
2013/2014	15	30

- **Spare the Air Alert Called for:** 11/25, 11/26, 11/29, 11/30, 12/8, 12/9, 12/10, 12/11, 12/12, 12/13, 12/14, 12/15, 12/16, 12/17, 12/18, 12/23, 12/24, 12/25, 12/26, 12/27, 12/28, 12/29, 12/31, 1/1, 1/2, 1/3, 1/4, 1/18, 1/19, 1/25
- **Days > 35 µg/m³ 24-hr NAAQS:** 11/10, 11/27, 12/14, 12/15, 12/16, 12/17, 12/18, 12/22, 12/23, 12/25, 12/30, 12/31, 1/1, 1/2, 1/24

The exceedance on 11/10 was associated with the Sims metal fire on that date.