



AIR & WASTE MANAGEMENT  
ASSOCIATION

Québec section

# Controlling Industrial Air Emissions: How We Do It in the U.S.

- Darryl Chartrand
- 10 February 2011



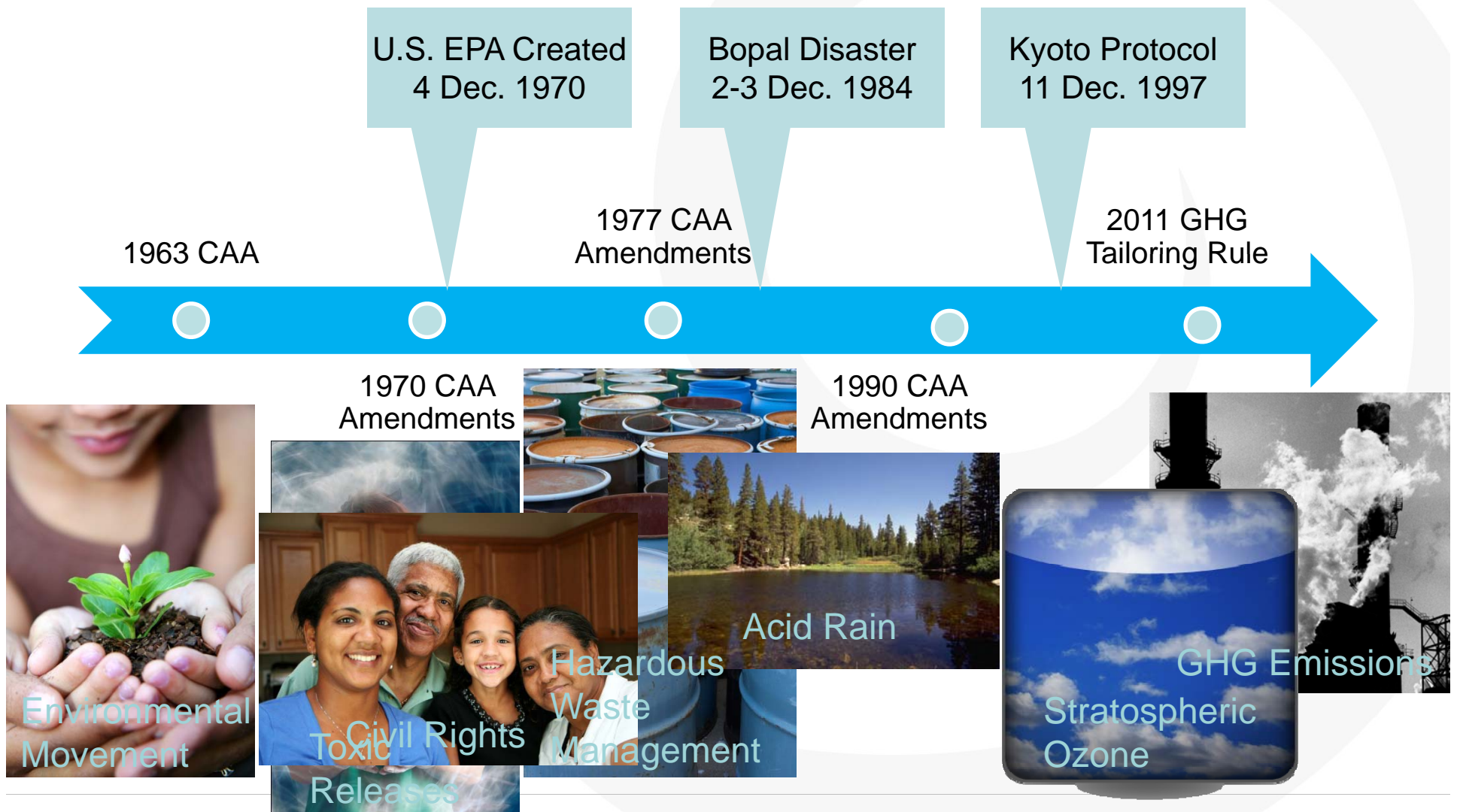
**CH2MHILL**

# Agenda

- Clean Air Act Timeline
- Laws, Regulations and Guidance
- Regulated Pollutants
- Approach to Air Quality Permitting
- Greenhouse Gas Emissions
- Legal Challenges



# Clean Air Act Timeline



# Laws, Regulations, and Guidance

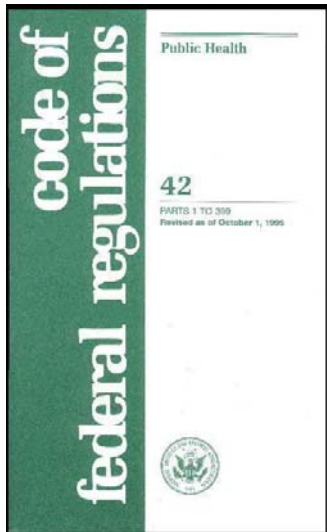
Clean Air Act as Amended

Titles => Sections =>  
Subsections

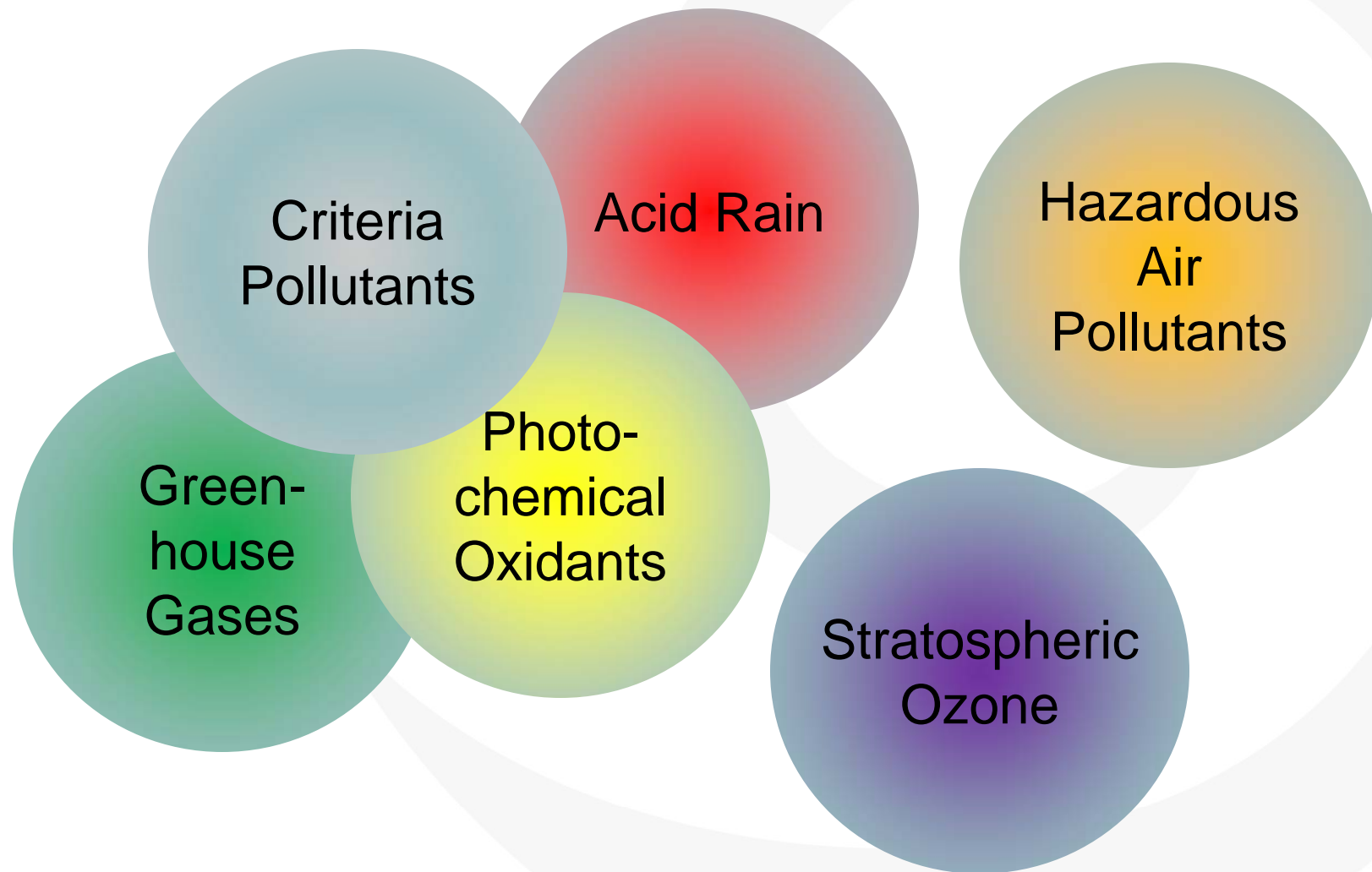
Code of Federal  
Regulations

Titles => Parts => Subparts

Guidance Documents,  
Policy Statements and  
Court Cases



# Regulated Pollutants



# What Rules, Regulations or Limits Apply to My Project?

- Depends
- Ça dépend



The permit process is interactive not proscriptive.

# Approach to Air Quality Permitting

Planning

Implementation

Construction

Operation

Schedule

- Effective Communication
- Regulations Establish Emission Limits Not Control Technology
- Start the Permitting Process Early in the Design Process
- Requirements of the CAA Go Beyond Getting a Construction Permit

# Project Planning: Pre-Permitting

Planning

Implementation

Construction

Operation

Schedule

- Attainment Status
- Facility Classification
  - New / Modification
  - Major / Non-Major
  - Synthetic Minor
- Potential Emissions
  - Existing actual
  - Future potential





# Implementation: Permit to Construct

Planning

Implementation

Construction

Operation

Schedule

- Permit Requirements
  - Permit forms
  - Process description
  - Emission estimates
  - Control technology assessment
  - Air quality compliance
- Federal Requirements
  - NSR, PSD, NSPS, NESHAPs
- State Requirements
  - HAPs, Noise, Odour

# Construction: Commence Construction

Planning

Implementation

Construction

Operation

Schedule

- Performance Demonstration
  - Process performance
  - Stack testing
  - Monitoring equipment
- Title V Operating Permit

# Operation: Permit to Operate

Planning

Implementation

Construction

Operation

Schedule

- Title V Operating Permit
- State Operating Permit
- Accidental Release Prevention
- Compliance Assurance Monitoring

# Permitting Schedule

Planning

Implementation

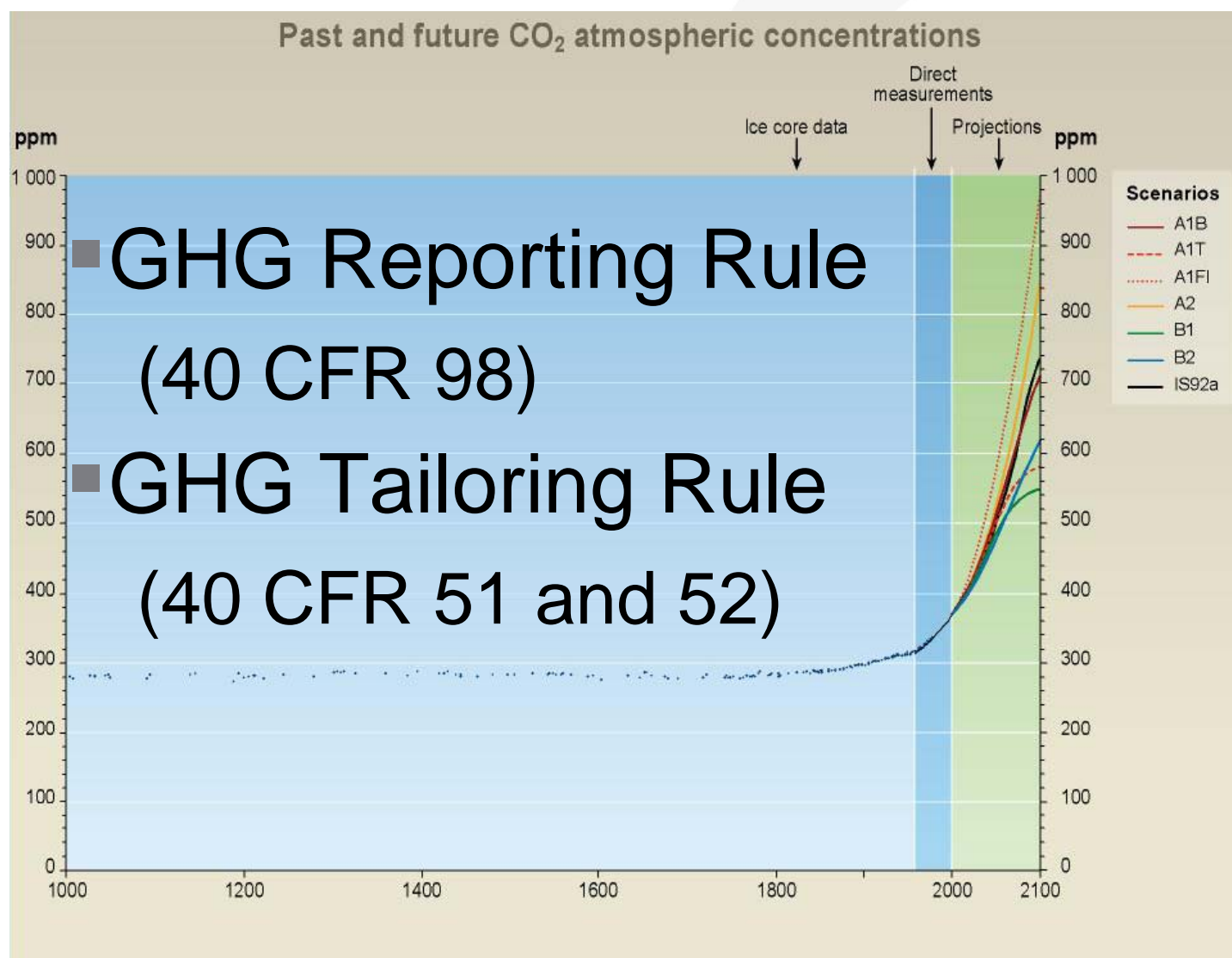
Construction

Operation

Schedule

- Prepare and Submit Permit Application Documents
- Determination of Permit Completeness (2 to 4 weeks)
- Technical Review (4 to 12 weeks)
- Response to Technical Comments (2 to 8 weeks)
- Public Comment Period (4 to 8 weeks)
- Issuance of Draft Permit Conditions (2 to 4 weeks)

# Greenhouse Gas Emissions



# Legal Challenges

- Modification to an Existing Source
- Potential to Emit
- Massachusetts v. EPA
- Environmental Organizations
- Industrial Trade Groups



# Questions

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*Solutions Without Boundaries*

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