

# WRAP States Four Factor Reasonable Progress

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WRAP IWG Meeting

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# 4-Factor Help Request

- Under the RHR States are required to “make reasonable progress toward meeting the national visibility goal. In determining whether a given implementation plan provides for reasonable progress, states shall consider the following four factors:
  - costs of compliance
  - time necessary for compliance,
  - energy and non-air quality environmental impacts of compliance, and
  - remaining useful life of any existing source subject to such requirements.
- At the September ‘08 Seattle WRAP planning meeting states were asked if they wanted help on this task – AK, AZ, CO, ID, NM, ND, SD, WA & WY accepted the offer

# 4-Factor Project

- States requested help on: Sources Categories
  - Reciprocating Internal Combustion Engines and Turbines
  - Oil & Gas Exploration & Production Field Operations
  - Natural Gas Processing Plants
  - Coal or Oil Fired Industrial Boilers (six category bins)
    - By Size Category
      - Up To and Including 200 MM Btu/Hr
      - Greater Than 200 MM Btu/hr
    - Then by Age Category
      - » Pre PSD Regulations (pre August 7, 1977)
      - » Post PSD Regulations (August 7, 1977 through December 31, 1990)
      - » Post Clean Air Act Amendments of 1990 (1991 and beyond)
    - Wood Fired Industrial Boilers
    - Gas Fired Industrial Boilers
    - Cement Manufacturing Plants
    - Sulfuric Acid Manufacturing Plants
    - Pulp & Paper Plant Lime Kilns
    - Petroleum Refinery Process Heaters

# 4-Factor Project

- .....And on: Specific Individual Facilities
  - Colorado
    - Electric Generating Units
    - Industrial Boilers
    - Petroleum Refinery
    - Cement Manufacturing Plants
  - New Mexico
    - Petroleum Refineries
  - North Dakota
    - EGU's
    - Natural Gas Processing Plants including reciprocating internal combustion engines, amine units and sulfur recovery units
    - Coal Gasification Plant
  - South Dakota
    - Electric Generating Unit
    - Cement Manufacturing Plant
  - Wyoming
    - Electric Generating Units
    - Cement Manufacturing Plant

# 4-Factor Project

- A sole source contract was issued to EC/R because they:
  - recently completed a similar project for the MWRPO to evaluate the potential control measures to mitigate regional haze in the Midwest
  - ..... and EC/R is currently carrying out the four-factor analyses for major emissions sources in Montana, under contract to the EPA
- Contract Tasks include:
  - Review existing information and available guidance documents
  - Identify appropriate emission control options for priority source categories and individual sources
  - Develop methodology for conducting economic and engineering analyses to assess the 4 factors
  - Evaluate the control strategy options by applying the methodology
  - Provide reports on the implementation of the four factor methodology
    - The report for the Source Categories will be a general report provided to the WRAP
    - The reports for itemized State Sources will be compiled for each Individual State and will remain a confidential report between the WRAP and that particular affected State

# 4-Factor Project

- To date EC/R has made contact with each of the states to obtain specific information on their source categories/point sources
- Has provided a list of control options for each of the source categories/point sources
- Schedule:
  - by March 23, 2009 provide
    - Draft Report of General Source Categories
    - Draft Report of Individual Sources (by State)
  - by April 13, 2009 provide
    - Final Report of General Source Categories
    - Final Report of Individual Sources (by State)