Base Level Industrial Emission Requirements

Expectations of Sector and Equipment Sub Groups

September 2009

Proposed CAMS Framework

Comprehensive Air Quality Management System

Requirements of industry to meet a good base-level of environmental performance

National Ambient Air Quality Standards (NAAQS)

Air Zone and Air Shed Management (AZMRA)

Base Level Industrial Emission Requirements (BLIERS)

Base Level Industrial Emission Requirements - BLIERs

- Apply across Canada ensuring good industry performance everywhere
- Reflect what is required of industry in attainment areas in leading jurisdictions
- Improve over time - gap between new and existing facilities not growing

BLIERS in a Layered System

- BLIERS set base level requirement only
  - not intended to achieve all emissions reductions needed to address non-attainment of a national air quality standard
- CAMS proposal addresses regional air quality
  - Place-based Air Zone Management Plans
- How BLIERs will be implemented is under discussion, e.g.
  - Federal and provincial instruments with equivalency agreements
  - Provincial instruments with a federal “backstop” tbd

Nature of BLIERs

- Quantitative equipment based performance standards, rolled up to a facility level
  - Could be imposed by regulations or permits on existing and new facilities
  - May include equipment standards, process standards, facility standards, fuel-based standards or a combination
- Sector based assessment of requirements
  - Drawing on previous federal analysis
  - Building on current frameworks

Stringency of BLIERS

- Match the requirements of leading jurisdictions – inside or outside Canada - for comparable industrial sources in air quality attainment areas, adjusted where necessary for Canadian circumstances
- Represent a good base level of environmental performance which would
  - Apply to every facility in the sector within a pre-defined time period
  - Ensure an improvement in industry performance over time
  - Create a level playing field for facilities across Canada
- Be better than status quo or lowest common denominator in the sector
- Expect to generate significant future emission reductions and environmental improvement over time

BLIERS for New vs Existing Facilities

- May be different for existing and new facilities
- Expectation that retrofits and additional abatement technology may be required for existing plants
  - Some facilities may already meet a BLIER performance level
  - Where not technically or economically feasible for an individual facility to meet the BLIER, the plant may have to close
  - May consider and provide recommendations for managing extenuating circumstances where flexibility may be required for existing facilities to meet the BLIER
  - Where longer timeframes are proposed, the environmental and economic justification is to be documented in detail
- BLIERs for new facilities may be warranted for sectors which anticipate significant growth

Sub-Group Deliverables

By September 18, 2009

- Recommend the list of criteria air contaminants (CACs) for which BLIERs will be developed
- Equipment groups should also specify what equipment will be addressed

By October 30, 2009

- Recommend a BLIER for each CAC
- Sub-groups which reach agreement on a BLIER should report without delay

September 18 Deliverables

- Recommend and provide rationale for a the list of CACs for which a BLIER will be developed
  - Consider the CACs identified in T*urning the Corner (TTC)* and the preliminary recommendations of EC
- Specify for each CAC (if ready)
  - Whether a quantitative or qualitative performance requirement will be developed
  - Sources to which the requirements would apply (e.g. equipment, fugitives, etc.)
- For equipment-based standards
  - Specify what equipment will be addressed in the BLIER
  - Identify sectors to which standards could apply

October 30 Deliverables

- Proposed BLIER for each CAC
- Date on which BLIER would come into effect
- Report which includes
  - Rationale for proposed standard, including information on key factors considered (see slide 11)
  - Expected emission reductions
  - Description of how the standard meets the objective of a BLIER
    - How it compares to what leading jurisdictions require for comparable industrial sources in areas where air quality standards are being met, adjusted for Canadian circumstances

Form of a BLIER

- Quantitative performance standard
  - Equipment standards
  - Process standards
  - Facility standards
  - Fuel-based standards
  - Combination of these
- In some cases, a qualitative instrument (e.g. Code of Practice for fugitives) may be best option
  - Document recommended approach, with rationale and expected emission reductions
  - Outline steps required to develop a quantitative standard in future

Information to Consider

- Sub-group Terms of Reference and CAMS document
- EC recommendations for substances and targets arising from validation of Turning the Corner targets
- Requirements in leading jurisdictions inside or outside Canada
  - Regulations, permits or other performance requirements for comparable industrial sources in areas where AQ standards are met
- CCME documents, e.g., Codes of Practice, Guidelines, Multi-pollutant Emissions Reduction Strategies
- Other guidance, adjusted to Canadian circumstances
  - e.g., Best Available Retrofit Technology from the US, fuel standards
- Information available from industry, governments or other sources
  - Emissions and production data
  - Technical information on process and control technologies
  - Economic information
  - Other studies and analysis

Factors to Consider

- Adjustments to benchmark performance requirements to address Canadian circumstances, e.g.
  - Age, technology of facilities
  - Characteristics, availability of feed-stocks and fuels
- Expected emission reductions
- Analysis of non-air-quality environmental impacts, e.g.
  - Co-benefits or conflicts of potential standards
  - Impact on GHG emissions
- Facility and sectoral considerations
  - Sources' remaining useful life and capital cycle
  - Facilities in compliance with proposed BLIER
  - Potential for plant closures
- Costs of implementation
  - Estimated cost of implementation
  - Estimated cost per tonne of reductions
- Reporting, enforcement and compliance mechanisms required for the BLIER

Operating Principles

- Sub-groups to work towards consensus
  - Do not need to reach consensus on all points
  - Points of disagreement should be documented and presented to the BLIERs What Working Group
- Regulatory and compliance mechanisms are being dealt with by other Working Groups

Framework Proposal Development