CAPITAL REGION AND RED DEER FINE PARTICULATE MATTER RESPONSES

EDUCATION AND OUTREACH OPPORTUNITIES







BACKGROUND

Recent ambient air quality assessments showed fine particulate matter to be a concern in Alberta. The Capital Region and Red Deer areas were the first geographic locations in Alberta to require mandatory fine particulate matter management responses to reduce fine particulate matter concentration below national standards. Alberta Environment and Parks led the development of these fine particulate matter management responses in collaboration with local stakeholders. To achieve the overall goal of reducing ambient fine particulate matter concentration, multi-stakeholder advisory committees in both the Capital Region and Red Deer areas identified three main objectives:

Objective 1 – Action: Identify and develop [emission reduction] management actions that can be implemented during event days and throughout the year to achieve measureable reductions in ambient fine particulate matter concentrations and precursors.

Objective 2 – Investigation: Continue to improve knowledge of fine particulate matter in the Red Deer air quality management area and Capital Region.

Objective 3 – Engagement: Empower the public and stakeholders to reduce ambient fine particulate matter through outreach and education on the state of air quality in the Red Deer air quality management area and the Capital Region, and help them take action.



This supplemental document to the Fine Particulate Matter Responses, outlines the approach to meeting Objective 3 as described above.

THE NEED TO IDENTIFY EDUCATION AND OUTREACH OPPORTUNITIES

Clean air is essential for a high quality of life. Although it is easy to take Alberta's clean air for granted, we all make decisions every day in our home and business lives that affect the quality of the air we breathe. Albertans have told us that clean air is important to them and that they want to be a part of protecting this important resource.

- Clearing the Air: Alberta's Renewed Clean Air Strategy (2012)

Taking care of the air is a shared responsibility: every sector, every level of government, and every Albertan has a role to play. While the impacts of air quality issues can be serious and far-reaching, it is becoming increasingly clear that air quality issues are not top of mind for most Albertans. Public opinion research in Canada found that about 96% of people believe air quality affects health to some degree, but very few said they would seek out air quality information on a regular basis. That's a big gap between awareness and action. Helping people understand an issue and see how it is relevant to them personally is the precursor to action and a critical component to the long-term management of air quality.

INTENT

This is an Alberta Environment and Parks document developed in collaboration with the Capital Region and Red Deer multi-stakeholder advisory committees. The Strategy is intended to implement Objective 3 of the Fine Particulate Matter Responses and guide others such as stakeholders, organizations, and the public in pursuing air quality engagement opportunities. Although focused on fine particulate matter, the document can be used to inform general air quality literacy and is also future-focused to inform coordination, priority, and delivery of activities. Therefore, it describes:

- 1. The long-term fine particulate matter literacy vision and outcomes.
- 2. Blocks and barriers preventing the realization of the vision and outcomes.
- 3. Target audiences for the different sectors.
- 4. Future engagement opportunities to overcome blocks and barriers identified in communicating to the key audiences.

OUTCOMES

The document supports the following outcomes:

- Aid stakeholder and the public in having appropriate awareness, knowledge, attitude, and skills required to take action and improve the air quality situation in the places where they live, work, and play.
- 2. Facilitate the dialogue, information-sharing, and collaboration required to help stakeholders and the public work together on lasting and meaningful solution to air quality issues.
- Coordinate efforts across stakeholders within Red Deer North Saskatchewan Region to help engage, educate, and outreach to the public towards common outcomes identified through the Strategy.
- 4. Inform a provincial air quality literacy strategy and provincial scale engagement efforts.
- 5. Through greater awareness and knowledge, stakeholders and the public are motivated to support initiatives by government and others to effectively improve our air quality.

LONG-TERM FINE PARTICULATE MATTER LITERACY VISION

Capital Region and Red Deer area residents have awareness, understanding, ability, and motivation to take action themselves and to support necessary action by others to improve air quality where they live, work and play.

To achieve this vision, there needs to be sufficient awareness, knowledge, skills, and attitudes in order to incorporate appropriate environmental considerations into our daily decisions (action). While the above mentioned components may overlap, it is important to appreciate that in order to achieve the vision, all components needs to be properly addressed. Below are outcomes to strive for with each component.

Awareness: Individuals are aware that air quality is an issue in the Capital Region and Red Deer areas, which could have health, environmental and economic impacts.

Knowledge: Individuals understand what fine particulate matter is, understand what the Air Quality Health Index (AQHI) is, understand the types of activities that contribute to fine particulate matter emissions, know when it is important to reduce their fine particulate matter emissions, and understand how air quality relates to their values and beliefs.

Attitude: Individuals adopt attitudes of appreciation and concern for air quality; want to do their part to reduce their emissions, and support initiatives by government and others.

Skills: Individuals have the skills and ability to take action to improve air quality.

Actions: Individuals are active stewards of air, actively reducing their contributions to fine particulate matter and encouraging others to do the same.

BLOCKS AND BARRIERS

Blocks and barriers pose risk to achieving the long-term vision. Understanding blocks and barriers related to communicating air quality helps to understand what is preventing action and desired results for air quality literacy. Once a block is identified, the removal of that block allows behaviours that were once difficult to become easier. The following possible blocks and barriers were identified as preventing effective public engagement and change to behaviour.

- 1. With air quality quantified as good most of the time as reported via the AQHI, this may prevent the public from seeing and understanding that air quality is a concern in Alberta (i.e. fine particulate matter have not met and/or close to exceeding the national standards).
- 2. There are information gaps and inconsistent messaging resulting in a lack of clear, common direction, and expectations of government, stakeholders, and the public.
- 3. Public, stakeholders, and government can have unrealistic expectations that an action will demonstrate immediate air quality impact. When the expectation is not realized, it can result in lower motivation to take action or change behaviours.
- 4. Cultural paradigms shape our perception, beliefs, emotions, and values which may block our willingness to understand the issue and our contribution to the issue.
- 5. A perception that the economy and environment are disconnected or work at cross-purposes may stop some people from making informed decisions to improve air quality.

- 6. Unreliable funding for air quality engagement program prevents sustainable long-term program delivery to influence action and behavioural change.
- 7. Scientific uncertainty may limit our ability to see the whole picture to influence and take action.

KEY SECTORS, TARGET AUDIENCES AND OPPORTUNITIES

The table below outlines the key sectors, target audiences, and associated opportunities as identified by stakeholders. The rows are reflective of the initial priority order Alberta Environment and Parks and the advisory committees will start to pursue. However, specific top priority engagement actions and the phasing of engagement elements will be determined in the development of the Action Plan.

Key Sector	Audience	Opportunities
General Public	All	 Improve general fine particulate matter literacy, including the state of current air quality and its health and environmental impacts. Create simple and straightforward messaging and tools. Prioritize and support sustainable engagement in air quality management. Partner within the Government of Alberta and coordinate with external stakeholder to agree upon engagement priorities, create common key messaging, and leverage engagement opportunities. Current, targeted, and coordinated media releases, and information sharing. Leverage special event days, such as Clean Air Day and World Car Free Day. Conduct strategic and coordinated public outreach and messaging on air quality event days. Identify and prioritize target audiences with specific messaging and suggested actions. Work with airsheds to leverage opportunities to build on awareness and knowledge in communities and with airshed members.
Industry	 Environmental Managers and coordinators Industry staff and management Industrial organizations or associations Industry regulated by AEP and AER 	 Understand the impact of their industry on air quality and fine particulate matter. Consider cumulative impact when making decisions on capital projects, facility upgrades, and maintenance activities. Educate their stakeholders (community advisory panels, industry neighbours, industry groups, other partners) on the fine particulate matter issue and impact to overall air quality to encourage additional action. Encourage bottom up initiatives to reduce fine particulate matter (employee carpooling or working from home). Adopt and promote best practices (specific to large or small industry) to reduce their contributions to fine particulate matter.

Transportation

- 1. Personal vehicle operators
- 2. Commercial vehicle operators
- On-road heavy duty diesel vehicle operators
- 4. Fleet managers
- 5. Youth/children and parents
- 6. School staff, school boards, and parent advisory councils

- Understand the link between vehicle emissions, fine particulate matter levels, and health impacts to take action to reduce their emissions.
- Understand the impact of transportation on air quality.
- Understand transportation related actions and decisions that can be done to reduce transportation emissions and take action, such as:
 - Reduce idling duration and frequency
 - Selecting more efficient and selecting the appropriate vehicle for the need
 - Choosing alternative forms of transportation

Energy

- 1. Utility companies and employees
- 2. Municipal staff and councillors
- 3. Youth/children and parents
- 4. School staff, school boards, and parent advisory councils
- Communicate where energy comes from.
- Understand the impacts of every day energy use on air quality.
- Adopt energy conservation practices in everyday life.
- Pursue opportunities to develop green energy alternatives.

Residential

- 1. Homeowners and landowners
- 2. Residential developers
- 3. Governments (municipal, provincial, and federal).
- Understand the impact of various forms of home heating on air quality (via energy consumption).
- Understand the impacts of wood/waste burning in air quality.
- Educate and encourage home owners, suppliers, and installers to make energy efficient decisions when doing repairs and repoyations.
- Follow and enforce burning regulations.
- Implement innovative best practices: build new homes that incorporate heat efficient, emission friendly design, and technology.
- Implement new policies and programs to increase energy efficiency for new and existing homes.

Small business and Operations

- 1. Businesses that have between 1 to 49 employees as defined by the Government of Alberta.
 - a. Professional, scientific, and technical services
 - b. Retail & Wholesale Trade
 - c. Construction (includes builders and developers)

- Understanding the fine particulate matter issue and how they contribute to it.
- Understand the options available for 'greening' their operations.
- Take on options and opportunities for greening operations.

REPORTING AND ACCOUNTABILITY

The document was developed by Alberta Environment and Parks and the multi-stakeholder advisory committee as a commitment to Objective 3 in the Capital Region and Red Deer Fine Particulate Matter Responses. However, it is also intended for use by all organizations, stakeholders, and the public to guide them in pursuing future engagement and outreach opportunities.

Alberta Environment and Parks will coordinate engagement activities through an action plan that will incorporate activities from Alberta Environment and Parks, multi-stakeholder advisory committee members, and organizations beyond the advisory committee members. The action plan will be updated annually to capture current priorities and activities. Progress on the action plan, identified engagement priorities, and opportunities taken on by Alberta Environment and Parks and the multi-stakeholder advisory committees will be reported publicly through progress reports associated with the fine particulate matter responses for Capital Region and Red Deer.

Any changes to the document itself will be incorporated upon review and be re-published.

