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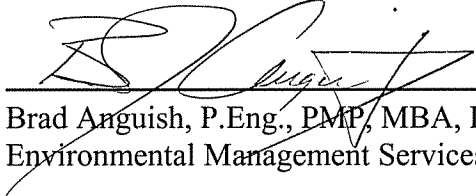


PO Box 1749
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Halifax Regional Council
May 30, 2006

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Brad Anguish, P.Eng., PMP, MBA, Director
Environmental Management Services

DATE: April 18, 2006

SUBJECT: Clean Air Strategy

INFORMATION REPORT

ORIGIN

At the May 20, 2005, Regional Council Sub-Committee of Energy and Underground Services the following motion was approved:

MOVED by Councillor Sue Uteck, seconded by Councillor Linda Mosher that the Energy and Underground Services Committee recommend, that staff provide an Information Report outlining acceptable emission levels in HRM, scientific research supporting the draft By-Law and the implications of the draft By-Law.

This report provides an update on progress to date with HRM's Clean Air Strategy prior to the FCM conference where this subject will be discussed. Staff will return to a future COW session of Regional Council to confirm Council's direction prior to executing the strategy.

BACKGROUND

Staff reviewed the request and determined that there were a number of important questions to address first.

Air quality standards are set federally and monitored provincially, therefore specific roles and responsibilities needed to be clear. We also needed to know what are the air issues in HRM (i.e. what are we facing); what are the gaps and opportunities; how do our various programs (i.e. Climate SMART) fit; and what are the priorities where HRM should focus its attention.

A number of meetings were held with air quality experts, Environment Canada, the Nova Scotia Department of Environment and Labour and others to help determine the scope of the matter.

It became apparent that HRM needed some kind of an all in one place reference document or strategy that will provide guidance and direction on the clean air component of HRM's, healthy, sustainable, vibrant community corporate theme. Further, to provide direction and background when considering such things as local air quality legislation.

On September 9, 2005, staff updated the Energy and Underground Services Sub-Committee that an RFP for a Clean Air Strategy was being called as we did not have the internal resources to carry out the comprehensive air science, human health and socioeconomic components required.

On November 18, 2005, staff and the consultant (Jacques Whitford) provided the Energy and Underground Services Sub-Committee with an overview of the project and received excellent feedback from the Sub-Committee.

Numerous other stakeholder meetings were then held, including Nova Scotia Power, Halifax Port Authority, Nova Scotia Energy, Nova Scotia Environment and Labour, Environment Canada, Capital District Health, Nova Scotia Transportation and Public Works, Department of National Defence, Imperial Oil, local universities, NGO's and others. Several internal departments including Regional Planning were also consulted.

DISCUSSION

A Clean Air Strategy Framework for HRM has been produced. The full document (120 pages plus) will be available on-line at www.halifax.ca/environment.

Attached is the Executive Summary and matrix of strategies/ options that HRM can consider. Recommended priorities are noted.

One of the strongest recommendations coming forth centres around a collaborative Air Shed Management approach that directly involves the key stakeholders. Staff believe this approach is an excellent opportunity to influence activities, regulations and standards that will have the greatest

positive impact on air quality in HRM.

The accompanying Committee of the Whole presentation (copy attached) succinctly summarizes the overall report and key recommendations. Staff will return to a future COW session of Regional Council to confirm Council's direction in executing the strategy.

BUDGET IMPLICATIONS

The Clean Air Strategy is funded from the Environmental Management Services operating budget (D945 Projects) in the amount of \$60,000.

EMS had also applied for Federation of Canadian Municipalities (FCM) Green Municipal Enabling Funds to help off-set costs. The Letter of Intent to the FCM received favourable approval and the project has been in the FCM review process since December 2005. Staff hope to receive a final decision soon.

Regional Plan

The Clean Air Strategy directly supports the Regional Plan and its proposed deliverables and functional plans.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

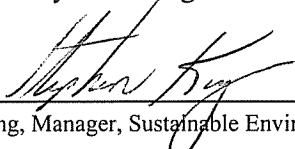
N/A

ATTACHMENTS

- Executive Summary - HRM Clean Air Strategy - April 2006
- Power Point Presentation to Committee of the Whole on the Clean Air Strategy - May 2006

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :

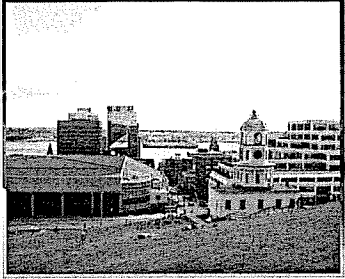
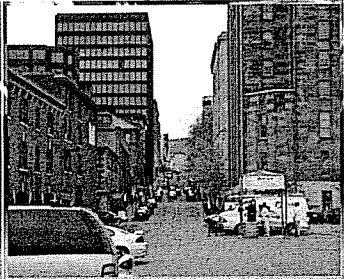

Stephen King, Manager, Sustainable Environment Management Office, 490-6188

Financial Review :


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CLEAN AIR STRATEGY FRAMEWORK DOCUMENT EXECUTIVE SUMMARY

April 2006



Introduction

Council has recognized that one of the most important components of sustainability under the theme "healthy, sustainable, vibrant communities" is the preservation of air quality. Despite the fact that the HRM does not have a delegated mandate to manage air quality, which is the responsibility of the federal and provincial governments, it has a responsibility to its residents to ensure that the environment in which they live is clean and does not pose a threat to their well-being. Within this context it has been proposed that HRM investigate an Air Quality By-Law, particularly to ensure that local air quality issues are adequately addressed. Because of this, HRM has decided to develop a comprehensive Clean Air Strategy for the region, and investigate the strategic options for HRM to ensure clean air for residents. It is envisaged that the proposed strategy will contribute to, and align itself with, existing initiatives in HRM and enhance them (e.g., Sustainability Plan, Regional Plan, Corporation GHG Emission Reduction Plan, Climate SMART, Community Energy Plan, Wind Generation Master Plan, etc). Figure 1 provides a schematic diagram of how the Clean Air Strategy relates to and complements HRM's other responsibilities.

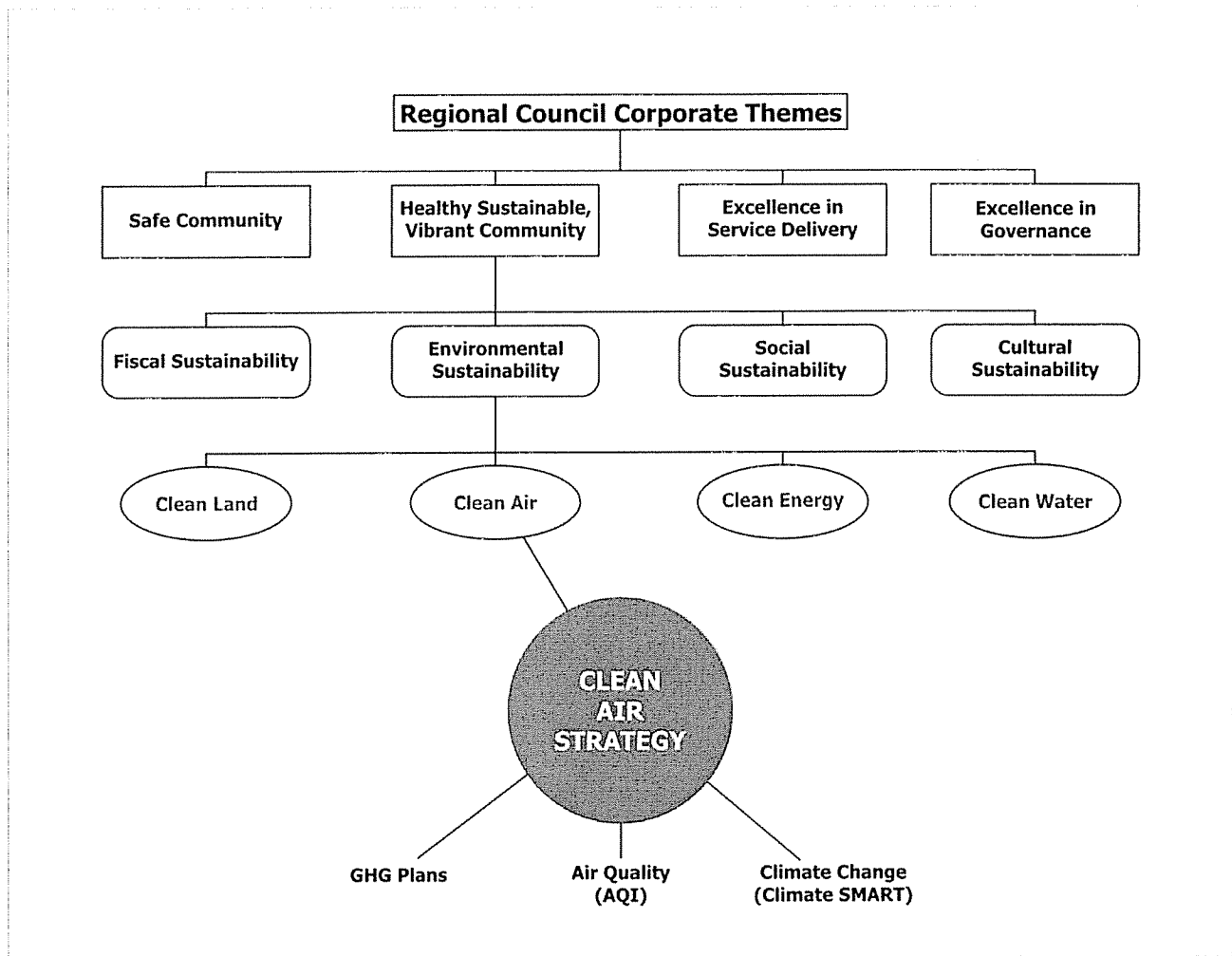


FIGURE 1 Clean Air Links in HRM

Framework for a Clean Air Strategy

The Framework for a Clean Air Strategy focuses on the main issues that affect the air quality and its management within HRM. These issues were identified primarily through a consultation process with key stakeholders, as well as with several Council members (e.g., Energy and Underground Services Committee). A short statement of the issue and strategies options to address each issue are presented in Table 1.

Although several strategies or interventions are proposed for each issue, in essence there are four main strategic themes that HRM can concentrate on in the immediate future. Their implementation will have the greatest impact at the present time, without the need for the introduction of further regulatory instruments (e.g., Municipal Air Quality By-Law). They include:

- **Establishment of an integrated airshed management program** - Currently management of atmospheric resources in Nova Scotia is somewhat fragmented and HRM recognizes that an integrated approach to air quality management is required. The Nova Scotia Department of Environment and Labour (NSEL) has proposed leading an airshed management initiative that will bring parties together in a collaborative forum in order to better manage the airshed of which HRM is a part. It is envisaged that the airshed management initiative will include participation from federal and provincial government, HRM, Halifax Port Authority, industry, the private sector and environmental NGOs. Under the leadership of the Province, the objective will be to encourage all parties to improve on the current situation whatever the context (*i.e.*, monitoring and reporting, emissions, best practices, education and awareness), through interchange of ideas and information. There is an opportunity for HRM to support NSEL's leadership role to establish this initiative for the region.
- **Ongoing dialogue with other government agencies** - HRM has established a good working relationship with several government departments that have jurisdiction over air quality, in particular, Environment Canada, NSEL and Nova Scotia Energy (NS Energy). There are several strategies that could be enhanced through ongoing dialogue with these agencies including, for example:
 - Providing input and making recommendations to the New England Governors and Eastern Canadian Premiers through the Province (NS Energy, NSEL).
 - Encouraging NSEL and Environment Canada to develop an early warning system or AQI forecast to protect the residents of HRM against a decrease in air quality due to transboundary movement of pollutants or local emissions.
 - Encouraging NS Energy, NSEL and other appropriate regulatory agencies to develop and implement a wood burning policy that leads to an improvement in the manufacture, sale, installation and use of wood burning appliances, educates people on the use of alternative fuel sources and investigates incentives for improved practices.
 - Encourage NSEL to improve monitoring where possible in terms of the number of stations, the representativeness of locations, the suite of contaminants measured, and public reporting of the findings in a timely and readily accessible manner, with follow-up action as is appropriate.
- **Implementation of the Regional Plan** - HRM is presently finalizing its first comprehensive, 25-year plan for the future development of the region. Developed over four years, the Regional Plan is currently the most significant planning document for HRM. While the Regional Plan does not include a specific chapter on clean air, it outlines the direction for development in the region and calls for the creation of several functional plans, many of which relate to air quality.

Implementation of the Regional Plan is likely to be the most influential tool in ensuring that the HRM plays an active role in improving air quality in the region. In the immediate future, the Sustainable Environmental Management Office should work closely with the Regional Planning Office to ensure that the functional plans include air quality considerations, including:

- the Transportation Master Plan (Public Transit Functional Plan, Active Transportation Functional Plan, Transportation Demand Functional Plan);
 - the Business Parks Development Functional Plan;
 - the Community Energy Functional Plan;
 - the Open Space Functional Plan and Urban Forest Functional Plan;
 - the Potential Hazards to Development Functional Plan, and
 - the Emissions Reduction Functional Plan.
- **Collaboration with NGOs and other organizations on education and awareness** - One of the obvious characteristics of the current situation in education and outreach is that there many different ongoing initiatives. The approach that HRM will take is to support and strengthen current initiatives that impact air quality and develop new initiatives only where there are gaps. In particular, HRM should use and support NGO networks work that have extensive experience in developing educational programs and in reaching large numbers of people.

It is envisaged that, within the framework presented in this document, the strategies will require further refinement over time, and that the Clean Air Strategy will be a "living document". Further, any action undertaken will be in collaboration with stakeholders. This is particularly important as many of the strategies recommended in this document are collaborative in nature. Ongoing dialogue with stakeholders will be key to the successful implementation of the strategy.

Depending on the strategy options selected and their timing, HRM will need to review current resourcing.

TABLE 1 Summary of Air Quality Issues and Strategies

Statement of the Issue		HRM Strategy Options (*) = similar strategies used by other cities
GENERAL		
Air Quality and Human Health		
<p>The Nova Scotia Community Health Status Report for 2002 (Capital Health, 2002) indicates that respiratory disorders were the leading cause of visits to the doctor's office for children up to eleven years old (about 35% of visits) and for youth twelve to nineteen years (almost 40% of visits).</p> <p>Local health care is a provincial responsibility rather than a municipal one.</p> <p>Despite the recognition that outdoor air quality can have a negative impact on human health, there is little publicly available information on the subject.</p>	<ul style="list-style-type: none"> ▪ The health of the residents of the HRM is the crux of this Clean Air Strategy and all the strategic initiatives proposed in this document aim to improve the air quality in the region primarily for the benefit of human health, though many secondary co-benefits will also occur. ▪ Through an integrated airshed management approach (see Integrated Management): <ul style="list-style-type: none"> ▪ Work with federal and provincial regulators to further develop and test the Air Quality and Health Index that is currently being developed. (*) ▪ Promote and advocate for research into air pollution impacts on health. (*) ▪ Work with the health care sector to promote the delivery of and access to relevant information and advice, which could be utilized in HRM reporting initiatives to the public such as the State of the Environment Report. (*) ▪ Promote and encourage a public education and awareness program on human health and air quality (see also Education and Awareness/Outreach). 	
LARGE SCALE ISSUES		
Transboundary Movement of Air Pollutants		
<p>In the Atlantic Canadian provinces, air pollution originating from the eastern United States and central Canada is the largest contributor to most poor air quality situations in the region.</p>	<ul style="list-style-type: none"> ▪ HRM recognizes that transboundary air pollution is not a municipal mandate. However, HRM can provide input to federal and provincial departmental responsibilities for the management of transboundary air pollutants through enhanced dialogue with these authorities. 	
Climate Change and Greenhouse Gases		
<p>HRM, which is expected to experience sea level rise of up to 0.8 m, increases in precipitation and an increase in extreme weather events due to climate change.</p> <p>Corporate HRM emissions of GHG increased by 18% between 1997 and 2002 and GHG emissions from the community-at-large increased by 19% between 1997 and 2002.</p>	<ul style="list-style-type: none"> ▪ HRM has recognized the need to reduce GHG emissions in the region and has already committed to several climate change initiatives. The Clean Air Strategy supports these ongoing initiatives and encourages the further development and implementation of the strategies developed under the Climate SMART initiative, including strategies outlined in both the Corporate GHG Emissions Reduction Plan and the Community GHG Emissions Reduction Plan (e.g., building audits and retrofits; fleet downsizing and use of cleaner fuels; LED traffic light retrofitting; water loss reduction; waste management, and green procurement). <p>Other strategies that will support these HRM initiatives include:</p> <ul style="list-style-type: none"> ▪ Develop the Community Energy Functional Plan under the Regional Plan, which will include non-polluting alternatives to energy (e.g., wind and solar energy). ▪ Continue to enhance and further develop partnerships with federal and provincial departments to promote and implement energy efficiency programs (e.g. District Community Energy Project; retrofits of existing commercial, institutional and multi-residential buildings). (*) ▪ Continue to investigate and plan for the use of renewable energy (e.g., Wind Energy Master Plan). (*) 	

TABLE 1 Summary of Air Quality Issues and Strategies

Statement of the Issue		HRM Strategy Options (*) = similar strategies used by other cities
		<ul style="list-style-type: none"> ▪ Promote and encourage green building through certifications such as the Leadership in Energy and Environmental Design (LEED) and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) certification. (*) ▪ Promote and encourage existing, and investigate new, federal-, provincial- and industry-offered incentives for individuals, businesses and organizations that are implementing energy efficient and green operations or to those that are pursuing upgrades that would achieve such standards. ▪ Investigate further the concept of carbon credit trading markets and develop an approach that ensures that HRM uses them to advantage. ▪ Continue to report on GHG emission reductions through the Corporate GHG Emission Plan and HRM State of the Environment Report (see Monitoring and Reporting).
EMISSIONS SOURCES		
Industrial Emissions		
<p>Industrial facilities produce about 2% of carbon monoxide, 50% of particulate matter, 12% of sulphur oxides, 14% of nitrous oxides and 16% of volatile organic compounds in Nova Scotia (percentages in HRM unknown).</p> <p>Regulation of industrial facilities within the municipal area is the responsibility of the provincial government.</p>		<ul style="list-style-type: none"> ▪ Using an integrated airshed management approach (see Integrated Management), work together with the provincial government (NS Energy and NSEL) and industry to encourage industry to develop sustainable practices and to continue to develop new technologies to improve air quality. ▪ Investigate HRM input into the review of the environmental assessment of new industrial operations within the region. ▪ Make use of regional planning as a tool to ensure that each industry is located in the optimal location for that industry. Within this context, the Clean Air Strategy supports the strategies outlined in HRM Regional Plan. (*) ▪ Maintain a network of green space and natural areas as outlined in the HRM Regional Plan, through the Open Spaces Functional Plan and the Urban Forests Functional Plan. (*)
Land Transportation		
<p>Transportation is one of the largest sources of air emissions in HRM, with vehicle emissions calculated to be about 0.21 tonnes per person per annum.</p> <p>Emissions of volatile organic compounds from gasoline distribution points can affect the air quality of areas close to the stations, and the health of residents.</p>		<ul style="list-style-type: none"> ▪ The HRM Transportation Master Plan under the Regional Plan is strongly supported by the Clean Air Strategy, including the development of the Public Transit Functional Plan (strengthening public transit); the Active Transportation Functional Plan (providing opportunities to walk or bike), and the Demand Management Functional Plan (providing incentives to reduce reliance on the single occupancy vehicle). (*) ▪ Through an integrated airshed management approach, encourage provincial and federal government to implement further vehicle emission reduction programs. (*) ▪ Ensure that the municipal fleet management provides a good example to other large organizations. (*) ▪ Work with the gas distributors to develop protection apparatus to minimize emissions from service stations, particularly in high density areas.
Shipping and Marine Emissions		
<p>HRM is one of the largest natural ports on the eastern seaboard and is subject to emissions</p>		<ul style="list-style-type: none"> ▪ Although Halifax Harbour is the focus of many activities in HRM, the municipality has no jurisdiction over shipping and marine emissions. However, through an integrated airshed management approach (see

TABLE 1 Summary of Air Quality Issues and Strategies

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<p>generated by ocean-going vessels, harbour vessels, ferries, fishing and recreational vessels. Marine transportation emissions of particulate matter, VOCs and carbon monoxide each accounted for less than 1% of total emissions from the Halifax urban area. Marine sulphur dioxide emissions were 6.8% of total emissions and marine NO_x emissions were 8.9% of total emissions in 2004.</p>	<p>Integrated Management), HRM can partner with Transport Canada, Environment Canada and the Port of Halifax to identify and implement emission reduction measures for ocean-going vessel, ferries, harbour vessels and port operations. (*)</p>	<p>Integrated Management), HRM can partner with Transport Canada, Environment Canada and the Port of Halifax to identify and implement emission reduction measures for ocean-going vessel, ferries, harbour vessels and port operations. (*)</p>
<p>Wood Burning and Residential Heating</p> <p>In Nova Scotia alone, more than 100,000 households rely on firewood to meet at least part of their annual heating requirements. Wood burning is the single highest source of fine particulate matter, PM_{2.5}, (over 13,000 t per year, or 39% of the total from all sources) and volatile organic compounds (29,000 t per year), and the second highest source for PM₁₀ (after dust from roads).</p> <p>Currently there is little or no regulation throughout Nova Scotia regarding wood burning.</p>	<ul style="list-style-type: none"> ▪ Through an integrated airshed management approach, encourage NS Energy, NSEL and other appropriate regulatory agencies to develop and implement a wood burning policy that leads to an improvement in the manufacture, sale, installation and use of wood burning appliances, educates people on the use of alternative fuel sources and investigates incentives for improved practices. (*) ▪ Promote and encourage a public education and awareness program (see Education and Awareness/Outreach) on wood burning. 	<ul style="list-style-type: none"> ▪ Through an integrated airshed management approach, encourage NS Energy, NSEL and other appropriate regulatory agencies to develop and implement a wood burning policy that leads to an improvement in the manufacture, sale, installation and use of wood burning appliances, educates people on the use of alternative fuel sources and investigates incentives for improved practices. (*) ▪ Promote and encourage a public education and awareness program (see Education and Awareness/Outreach) on wood burning.
<p>Contaminated Sites</p> <p>There is currently much uncertainty about the location and extent of contaminated sites in HRM, and their influence on the health and well-being of residents.</p>	<ul style="list-style-type: none"> ▪ The Clean Air Strategy supports the development of the Potential Hazards to Development Functional Plan under the Regional Plan 	<ul style="list-style-type: none"> ▪ The Clean Air Strategy supports the development of the Potential Hazards to Development Functional Plan under the Regional Plan
<p>Pesticide Use</p> <p>The use of chemical pesticides to control such pests results in the emission of unwanted contaminants into the atmosphere with both direct and indirect negative human health effects.</p> <p>HRM has recognized the need to control the use of pesticides, and enacted By-Law P-800 - <i>Respecting the Regulation of Pesticides, Herbicides, and Insecticides</i> (Pesticide By-Law) in 2000.</p>	<ul style="list-style-type: none"> ▪ HRM has already taken steps to reduce pesticide use in the municipality by setting an example in its own use of pesticides and through the enactment of the Pesticide By-Law. These actions have had beneficial results on local air quality, both directly and indirectly, and should continue to be implemented into the future. (*) <p>Further actions could include the following:</p> <ul style="list-style-type: none"> ▪ Advocate that NSEL make available to HRM the data and information on pesticide purchases and use that are gathered through the Pesticide Licensing Process. ▪ Investigate extending the Pesticide By-Law to commercial and institutional properties. ▪ Encourage the federal government to implement the 2002 Parliament-approved <i>Pest Control Products Act</i> for human health and environmental protection reasons. 	<ul style="list-style-type: none"> ▪ HRM has already taken steps to reduce pesticide use in the municipality by setting an example in its own use of pesticides and through the enactment of the Pesticide By-Law. These actions have had beneficial results on local air quality, both directly and indirectly, and should continue to be implemented into the future. (*) <p>Further actions could include the following:</p> <ul style="list-style-type: none"> ▪ Advocate that NSEL make available to HRM the data and information on pesticide purchases and use that are gathered through the Pesticide Licensing Process. ▪ Investigate extending the Pesticide By-Law to commercial and institutional properties. ▪ Encourage the federal government to implement the 2002 Parliament-approved <i>Pest Control Products Act</i> for human health and environmental protection reasons.

TABLE 1 Summary of Air Quality Issues and Strategies

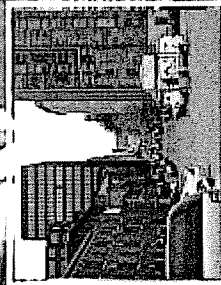
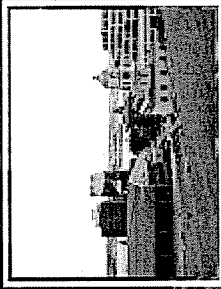
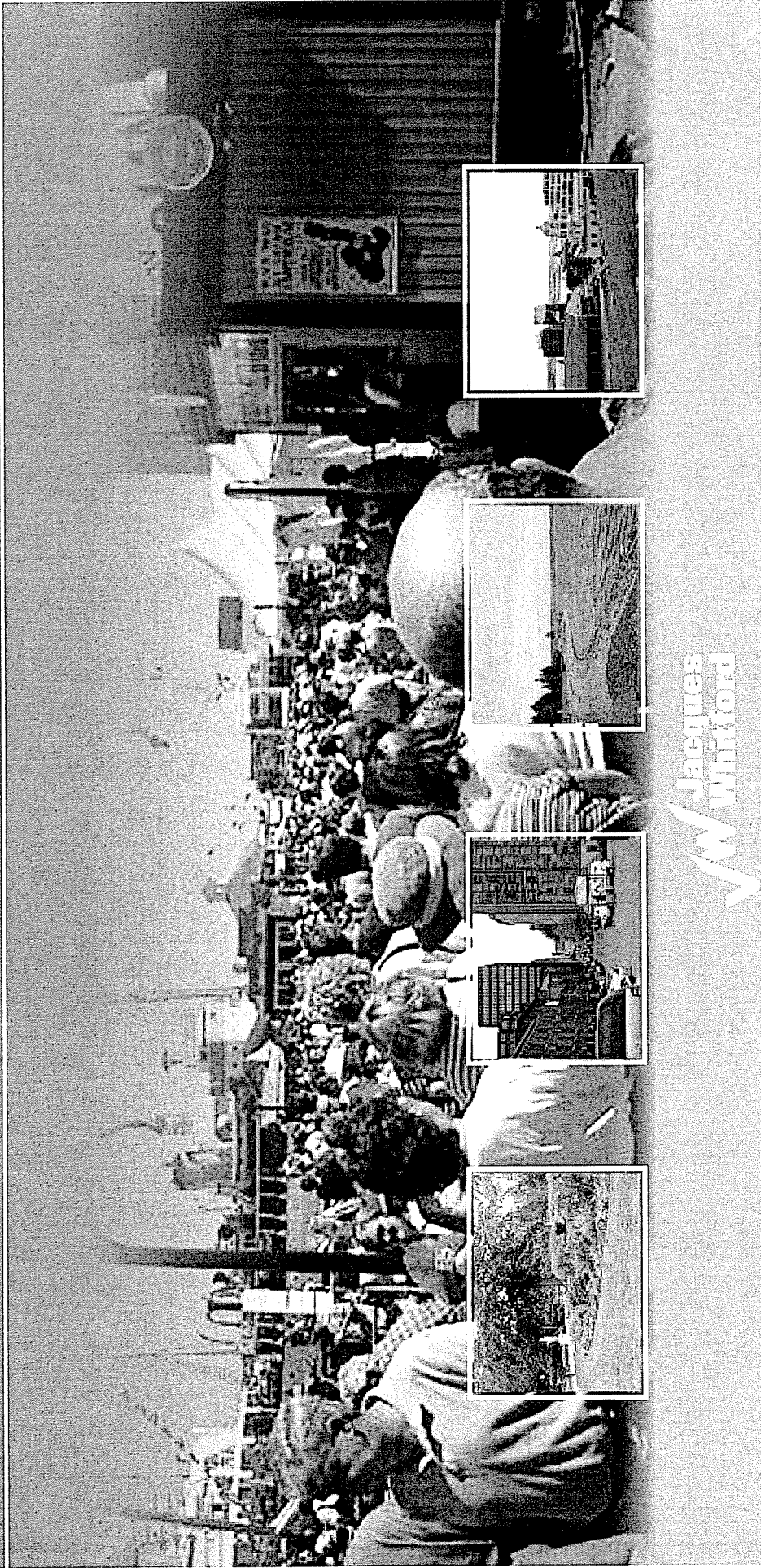
HRM Strategy Options (*) = similar strategies used by other cities	
Statement of the Issue	HRM Strategy Options (*) = similar strategies used by other cities
<p>Odours</p> <p>Although odour is often regarded as a nuisance factor in terms of air quality, it can have a negative impact on communities in HRM. Currently, there is little information on odour problems in the HRM area.</p>	<ul style="list-style-type: none"> ▪ Because so little is known about general odour problems in the HRM area, the focus of HRM's strategy will be to better define the problem. Further investigation is required to identify sources of odour and the extent of odour problems from sources such as sewage treatment plants and landfills.
MANAGEMENT	
<p>Integrated Management</p> <p>Currently management of atmospheric resources in Nova Scotia is somewhat fragmented. Ambient air quality objectives are set federally by Environment Canada, and NSEL has set Maximum Permissible Ground Level Concentrations. Monitoring is managed provincially by NSEL. Climate change and the emission of GHG are managed by NS Energy at a provincial level. In addition, much of the outreach and education are undertaken by a number of third parties, with little integration among them.</p>	<ul style="list-style-type: none"> ▪ Support NSEL to establish an integrated airshed management initiative for the region. This could be promoted as a co-operative venture between federal and provincial government, industry and community representatives (including NGOs); it should not be an exclusive forum. The objective will be to encourage all parties to improve on the current situation whatever the context (i.e., monitoring and reporting, emissions, best practices, education and awareness), through interchange of ideas and information. ▪ Co-ordinate efforts within HRM, particularly with regard to implementation of the Regional Plan, especially the Transportation Master Plan and related functional plans, Open Space Functional Plan, Urban Forest Functional Plan, Emissions Reduction Functional Plan, Business Parks Development Functional Plan, and the Community Energy Functional Plan. ▪ Ensure that resourcing is adequate within HRM to support the implementation of the Clean Air Strategy.
<p>Monitoring and Reporting</p> <p>Although air quality monitoring is undertaken within HRM by NSEL and some industrial emitters, there is currently no mechanism to monitor the impacts of air quality on the residents of Halifax.</p>	<p>Within the context of an integrated airshed management approach (see Integrated Management):</p> <ul style="list-style-type: none"> ▪ Advocate that NSEL improve monitoring in terms of the number of stations, the representativeness of locations, the suite of contaminants measured, and public reporting of the findings in a timely and readily accessible manner. In particular, ensure that the monitoring and information system is able to help identify potential localized areas of concern. ▪ Encourage NSEL to develop a comprehensive emissions inventory and to model cumulative effects on ambient air quality. (*) ▪ Develop ambient air quality objectives for HRM, based on current knowledge about air quality and health science (i.e., Are federal and provincial criteria meeting HRM's needs?). (*) ▪ Encourage NSEL to monitor complaints, which will provide a qualitative assessment of localized air quality problems. ▪ Advocate best management practices to reduce emission from priority area sources using regulatory tools, economic instruments and voluntary approaches as appropriate. ▪ Provide input into the provincial and national efforts to update the AQI and the AQI forecast. ▪ Encourage the establishment of a smog early warning system, if future monitoring indicates that this is warranted. (*) <p>Provide an annual State of the Environment Report on air quality and human health in the HRM, and provide estimates of economic costs associated with these.</p>

TABLE 1 Summary of Air Quality Issues and Strategies

Statement of the Issue		HRM Strategy Options <i>(*) = similar strategies used by other cities</i>
<p>Education and Awareness/Outreach</p> <p>Over the past 20 years, there has been increased environmental awareness and life-style changes (e.g., recycling of solid waste). There are several education and awareness programs currently undertaken by a variety of organizations within HRM area, including school-based education, extension services and general community awareness programs.</p>	<ul style="list-style-type: none"> ▪ Develop capability to monitor air quality for HRM-owned projects, specifically including waste management and sewage treatment projects. ▪ Support, strengthen and integrate current initiatives that impact air quality (particularly in the NGO sector) and develop new initiatives only where there are gaps. 	
<p>Socio-Economic Assessment</p> <p>HRM has committed to "smart growth", which integrates economic growth, environmental sustainability, cultural priorities and social objectives.</p>	<ul style="list-style-type: none"> ▪ Socio-economic analysis can be used by HRM to promote certain practices, both corporately and by other jurisdictions. When and how SEA is applied by HRM will be project or program specific. ▪ Tax incentives could be considered as a tool to change behaviours where appropriate. ▪ Where appropriate, make use of the knowledge base and information available through organizations such as the National Round Table on the Environment and Economy, Nova Knowledge, the Greater Halifax Partnership and Regional Development Authorities. 	



CLEAN AIR STRATEGY FRAMEWORK DOCUMENT



Jacques
Whitford

Why a Clean Air Strategy?

- Air quality may be the most important single indicator of sustainability.
- Vital importance:
 - Health
 - Quality of the living environment
 - Indicator of economic wellbeing
 - Relevant to the urban and suburban parts of HRM
- Precautionary principle.

Strong Foundations and Principles

- Sustainability
- Polluter Pays
- Precautionary Principle
- Stewardship
- Adaptive Management
- Shared Responsibility
- Cost Benefit/Life Cycle Approach
- Cooperative Community Empowerment
- Lead by Example through Innovation

Elements of the Strategy Development

- Review of legislative context
- Consultation with stakeholders
- Review linkages and synergies with HRM plans and policies
- Review and adapt the best strategies of other municipalities
- Develop options for HRM

Issues Addressed in the Strategy

- Does HRM need an Air Quality By-Law?
- NSEL is developing airshed management strategies, and invites active participation from HRM
- Current source sectors have been improving air quality and are within their limits
- Scientific evidence to link air quality issues in HRM with health impacts is very sparse.
- HRM council is concerned about air quality and very supportive of the pursuit of an effective strategy.

Key Strategic Elements

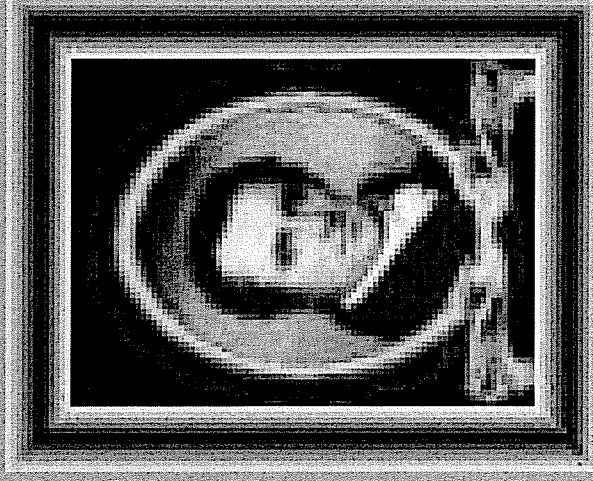
- Integrated airshed management – participation, leading role (information acquisition)
- Dialogue with local and external agencies, for example:
 - NSEL, NS Energy
 - Environment Canada
 - New England Governors and Eastern Premiers
- Support of Regional Plan
- Collaboration with NGO, Educational, Medical groups on public education and awareness (information dissemination)

"The air, the water and the ground are free gifts to man and no one^w has the power to portion them out in parcels. Man must drink and breathe and walk and therefore each man has a right to his share of each."

James Fennimore Cooper (1789-1851)
The Prairie 1827

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t o e v e r y o n e

"The air, the water and the ground are free gifts to man and no one has the power to portion them out in parcels. Man must drink and breathe and walk and therefore each man has a right to his share of each."



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