PRESENTATION TO:

Standing Committee on General Government

Review of the Aggregate Resources Act

FROM:

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Canadian Network for Respiratory Care
The Canadian Network for Respiratory Care (CNRC), through its Certified Asthma and Respiratory Educators (CAEs and CREs) and member organizations, works to improve the quality of life for Canadians and their families living with respiratory disease, by developing, promoting and advocating the highest standards of quality respiratory healthcare and innovative education.

There are 1,026 Certified Asthma & Respiratory Educators across Canada (respiratory therapists, pharmacists, nurses and other healthcare professionals)

CNRC has a particular interest in smoking cessation, asthma, allergies and COPD (Chronic Obstructive Pulmonary Disease, including chronic bronchitis and emphysema).

Member Organizations
Allergy/Asthma Information Association
Anaphylaxis Canada
Asthma Society of Canada
Canadian Association of Cardio – Pulmonary Technologists
Canadian COPD Alliance
Canadian Lung Association
Canadian Physiotherapy Association – Cardio-Respiratory Division
Canadian Pharmacists Association
Canadian Respiratory Health Professionals
Canadian Society of Allergy and Clinical Immunology
Canadian Society of Respiratory Therapists
Canadian Thoracic Society
Clean Air Champions.
College of Family Physicians of Canada
COPD & Asthma Network of Alberta
Family Physicians Airways Group of Canada
Quebec Asthma and COPD Network (QACN)
Air

Air is a common term for the atmosphere: the layer of nitrogen, oxygen and other trace gases that surround our planet and make life on Earth possible.

The atmosphere is a complex natural system. Air pollution from transportation, industries, and other sources causes an imbalance in this system by modifying its chemical composition. Living things are affected by air pollution in a variety of negative ways.

Source: Environment Canada [www.ec.gc.ca]

State of Lung Health in Canada

Each year more than 21,000 Canadians die from the effects of air pollution.

Canada has one of the highest rates of asthma in the world with an astonishing 3.2 million Canadians believed to have asthma and an estimated 1.7 million with COPD (Chronic Obstructive Pulmonary Disease). COPD and lung cancer rates are expected to increase more than 50% by 2030. COPD will be the third leading cause of death worldwide. It is the only chronic disease with a rising mortality rate.

15.6% of children have asthma. Asthma is the leading cause of emergency room visits for children in Canada.

In 2012, asthma, COPD & Lung Cancer caused $12 billion in direct healthcare costs in Canada (drugs, hospitals, physicians) and $8.6 billion in indirect costs (e.g. premature death, long-term disability). Cost are projected to increase by 32% by 2030.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Chronic Lung Disease Prevalence Projections—Base-Case (number of cases; per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>42,507</td>
</tr>
<tr>
<td>Asthma</td>
<td>3,191,566</td>
</tr>
<tr>
<td>COPD</td>
<td>1,855,063</td>
</tr>
<tr>
<td>Total</td>
<td>4,889,136</td>
</tr>
</tbody>
</table>

Source: The Conference Board of Canada.
**Pits and quarries produce dust.**

Dust is produced from blasting, crushing, screening and stacking operations, as well as conveyor belts and loader and truck transport on site and trucks offsite as haul routes. Dust is also produced during overburden removal and from wind blowing over stockpiles and across barren pit floors. It is also harmful to vegetation.

**Fine Particulate Matter**, 10 microns or less in diameter (PM 10) can be inhaled and is considered toxic under the Canadian Environmental Protection Act (CEPA). Smaller respirable particulate matter, (PM 2.5) with a diameter of 2.5 microns or less, is even more dangerous, lodging deep within the lungs and tissue.

There is no biological mechanism for clearing it from the body.

Recent studies show that **fine particulates pose a greater danger to our health** than better-known kinds of air pollution, such as smog, sulphur dioxide and carbon monoxide.

Fine particles (PM2.5) pose a threat to human health because they can travel deep into the lungs. Particulates can irritate eyes, throat, nose and cause coughing, breathing difficulties, reduced lung function, inflammation and increased use of asthma medication. Research has shown that long-term exposure to PM2.5 is associated with an increased risk of early death from all causes, cardiovascular and respiratory causes, lung cancer, and overall reduced life expectancy.

**Evidence**

A recent meta-analyses of 14 different studies worldwide concluded that “moderate air pollution levels, currently considered to pose little risk to human health, may not be so safe after all”. The meta-analyses concluded that even moderate air pollution created increased levels of heart attacks, strokes, as well as traditional respiratory disease (asthma, COPD etc.) (Source: Globe & Mail, February 17, 2012).

A new study published in the journal Respirology reveals that dust storms have an adverse effect on emergency hospital admissions of COPD. Dust storms in East Asia and Southern China are caused by wind-blown dust that travels long distances from North China. The concentrations of coarse particles - those with a diameter ranging from 2.5 to 10 micrometers – can reach very high levels. Results showed that significant increases in emergency hospital admission due to COPD were found 2 days after a dust storm episode, with a 5% increase in risk. There is a link between the raised concentrations of coarse particles encountered during dust storms and a higher risk of hospital illnesses for respiratory illness, in particular, for COPD.

**Source:** URL: [http://www.medicalnewstoday.com/releases/238709.php](http://www.medicalnewstoday.com/releases/238709.php)
Silica Dust

Crystalline silica dust is common from processing sand and gravel and is a known carcinogen. The Ontario Ministry of Labour has strict guidelines in place for workers who come into contact with silica dust, requiring them at all times to wear respirators.

Yet there are no guidelines in place to protect Ontarians living near pits and quarries to protect them from being exposed to silica dust.

http://www.labour.gov.on.ca/english/hs/pubs/silica/gl_silica_1.php

The prolonged inhalation of respirable dust containing crystalline silica may result in silicosis, a disease characterized by progressive fibrosis of the lungs. A pneumoconiosis (lung disease caused by the inhalation of dust), silicosis is marked by shortness of breath and impaired lung function, which may give rise to complications that can result in death. The development and the severity of silicosis depends on the airborne concentration of silica dust to which a worker is exposed and the duration of exposure.

The International Agency for Research on Cancer (IARC) has concluded that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans and has classified these forms of silica as Group 1 carcinogens. In addition, the American Conference of Governmental Industrial Hygienists (ACGIH) has classified silica as a suspected human carcinogen with an A2 classification.

Crystalline silica may be harmful following high exposure levels received over a period, ranging from a few weeks to years or after long-term exposures to lower levels. There are three major types of silicosis: chronic, accelerated, and acute.

Chronic Silicosis
Chronic silicosis is most common. Symptoms may not appear for a long time, usually more than 10 years, and may progress and worsen over a period of many years. Chronic silicosis may be either a simple or a complicated type.

The effects of silicosis can continue to develop even after the exposure ceases and they are irreversible. In addition, the progression of lung fibrosis can also lead to the development of lung cancer.

Simple Chronic Silicosis
Simple silicosis is almost entirely without symptoms. In the early stages of the disease the lung nodules are small (usually 1 to 3 mm) and discrete in the upper lung fields. As the disease progresses the nodules increase in number and size and also occupy the lower field. Although simple silicosis may never grow more serious, long-term exposure to silica dust may lead to complicated silicosis.

Complicated Chronic Silicosis
Complicated chronic silicosis is also called progressive massive fibrosis (PMF). The first symptoms may be shortness of breath with exercise, wheezing or sputum that causes coughing. However, some people with the disease have no symptoms. Complicated silicosis can become worse when in combination with other lung diseases. Severe complicated silicosis can result in heart disease in addition to lung disease.

Accelerated Silicosis
Accelerated silicosis is almost the same as chronic silicosis. However, it develops more quickly and the lung scars show up sooner. Accelerated silicosis can develop when exposure to large amounts of silica dust occurs over a short time period. Nodules may appear on a chest x-ray five years after the first exposure to silica dust and the disease can quickly worsen.
**Acute Silicosis**
Acute silicosis is a lung disease that develops rapidly. As few as 8 to 18 months may elapse from the time of first exposure to the onset of symptoms, which include progressive shortness of breath, fever, cough and weight loss. There is a rapid progression of respiratory failure usually resulting in death within one or two years.

**How Does Silica Enter the Body?**
Occupational exposure to silica occurs through inhalation of small airborne particles of silica dust, mainly in the range of 5.0 mm to 0.5 mm, which are not expelled from the lung when inhaled. Instead, they remain in the lung and are deposited in lymph nodes, where over time, calcium can deposit in those nodes and settle along the rim of the lymph node. This condition is known as “egg-shell” calcification. In some cases, silica particles are carried into the lungs where a scar may form around the particles. Over time, the hardened scars gradually start to show up on the chest x-ray as fibrosis of the lung.

**The Relationship between Silica Dust and Lung Cancer**
Exposure to silica dust has been identified as a clear exposure-response for lung cancer. In 1997, the International Agency for Research on Cancer concluded that there was sufficient evidence for the carcinogenicity of inhaled crystalline silica.

There are no safe mitigation procedures when it comes to dust.

They are either inadequate (e.g. Relying on an operator to spray water to haul routes when they determine there are high winds. What happens when it’s windy at night?)

Or they create additional adverse health effects (spraying chemicals such as CaCl2 and MgCl2 on stock piles).

Other Adverse Air Quality Effects from Aggregate Operations

Diesel Exhaust from Trucking and Other Heavy Equipment

Diesel exhaust (DE) is not one contaminant, but a complex mixture of hundreds of compounds including many different toxic gases, metals and particulate matter. Some gases in diesel exhaust are known or suspected of causing cancer including benzene, 1,3-butadiene, arsenic, polycyclic aromatic hydrocarbons (PAHs) and formaldehyde, while other gases such as NOx contribute to smog. Small particles in the particulate component of DE have large surface area for adsorption of organic and inorganic contaminants, and can be inhaled deep in the lung. Exposure to DE can have health effects such as:

- eye, nose, and throat irritation,
- coughing,
- headaches,
- nausea,
- aggravate chronic respiratory systems and asthma, and
- cancer and other systemic effects.

There is some evidence that DE can affect immune function and worsen allergies. Most regulatory agencies around the world classify diesel as a probable human carcinogen by inhalation exposure, with increased risk of lung cancer found in railway workers, truck drivers and diesel equipment operators in epidemiological studies.

Exposures to most air pollutants follow a gradient; those living closer to hot spots experience higher exposures compared to those living further away.

Source: Region of Peel, Public Works, March 2012
Who Is Most at Risk?

People with Existing Respiratory or Cardiovascular Conditions
People who have existing respiratory illnesses such as asthma, chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema or lung cancer, and those with existing cardiovascular conditions such as angina, previous heart attack, congestive heart failure or heart rhythm problems (arrhythmia or irregular heartbeat) are sensitive to air pollution. People with diabetes are also more sensitive because they are more likely to have cardiovascular disease. Air pollution makes it even harder for people to breathe, can make existing lung or heart-related symptoms worse. For example, it can trigger heart attacks.

Young children
Young children are included in the sensitive groups because on a per-body-weight basis they tend to inhale relatively more air than adults. Their elevated metabolic rate and young defence systems make them more susceptible to air pollution.

The elderly
The elderly also are more likely to be affected by air pollution, due to generally weaker lungs, heart and defence systems, or undiagnosed respiratory or cardiovascular health conditions.

Those active outdoors
People participating in sports or strenuous work outdoors breathe more deeply and rapidly allowing more air pollution to enter the lungs.

People who are otherwise healthy may have the following symptoms:
- irritated eyes,
- increased mucus production in the nose or throat,
- coughing,
- difficulty breathing especially during exercise.

People with existing illnesses may have the following specific symptoms:
- People with asthma or COPD may notice an increase in cough, wheezing, shortness of breath or phlegm.
- People with heart failure may experience increased shortness of breath or swelling in the ankles and feet.
- People with heart rhythm problems may notice increased fluttering in the chest and feeling light-headed.
- People with angina or coronary artery disease may have an increase in chest or arm pain.
Weather Variables

- **Wind** speed plays a role in diluting pollutants. Generally, strong winds disperse pollutants, whereas light winds generally result in stagnant conditions allowing pollutants to build up over an area.

- **Inversion** or ‘stagnant’ conditions are commonly associated with major air pollution episodes. Under normal conditions, the air near the surface is warmer. The warmer air rises and mixes with the above cooler air. This condition is known as ‘unstable.’ Inversions can develop when a warmer, less dense air mass moves over a cooler, denser air mass creating a temperature inversion where the air is now cooler closer to the surface. Pollutants are unable to mix vertically and will stay pooled near the ground due to these ‘stable’ conditions. Inversions can persist for hours or days.

- **Topography** can create conditions that allow the trapping of pollutants. At night, cold air tends to drain downhill, settling into low-lying basins and valleys. Unable to rise, the cool air settles and accumulates in these valleys, trapping air pollutants.

**Pits & Quarries Create Ideal Topography For Trapping Pollutants.**
Air Quality Health Index

The AQHI is calculated based on the relative risks of a combination of common air pollutants which are known to harm human health. These pollutants include:

- **Ozone** (O$_3$) at ground level,
- **Particulate Matter** (PM$_{2.5}$/PM$_{10}$) and
- **Nitrogen Dioxide** (NO$_2$).

![AQHI Chart]

The AQHI and our Certified Respiratory Educators and other healthcare professionals teach patients to control asthma and COPD triggers by staying inside with the windows closed.

Educating Ontarians about poor air quality isn't the solution. We need to focus on prevention. We have to work to improve our air quality.

Ontarians who have the misfortune of living next to a pit or quarry should not be made prisoners in their own homes yet this is the only way to manage the adverse health effects.
LEGISLATIVE CONTEXT

Air Quality

An air quality technical report is not listed as a requirement under the Provincial Standards or ARA Regulations.

There are also no references to air quality assessment reports and no recommended monitoring reports.

The only reference to air quality is found under Section 3.0: “Prescribed Conditions that Apply to Category 1 Licences.”:

Subsection 3.1: “Dust will be mitigated on site.”
Subsection 3.2: “Water or another provincially approved dust suppressant will be applied to internal roads and processing areas as often as required to mitigate dust.”
Subsection 3.3: “Processing equipment will be equipped with dust suppressing or collection devices, where the equipment creates dust and is being operated within 300 metres of a sensitive receptor.”

Of course, neither the Act itself nor the Provincial Standards define what a “sensitive receptor” is. Air quality is currently covered by other acts. This is inadequate and needs to be specifically addressed in the ARA.

What Can We Do?

The only safe mitigation is to stop approving industrial extraction in the midst of highly populated residential areas.

The Ontario government has a responsibility to protect the health of Ontarians who live “close to market”!

Recommendation: Ensure that air quality assessment reports and ongoing monitoring are mandatory under ARA regulations and provincial standards (and must include detailed analyses of specific mineral content (e.g.: silica, mica etc.).
OTHER LEGISLATION
Ontario Environmental Protection Act

Environmental (including human health) impacts for emissions of substances from “man-made” items or activities are governed by the Ontario Environmental Protection Act and therefore fall under provincial jurisdiction. The purpose of the Act is “…to provide for the protection and conservation of the natural environment” by disallowing any person from “…discharge(ing) into the natural environment any contaminant, and no person responsible for a source of contaminant shall permit the discharge into the natural environment of any contaminant from the source of contaminant, in an amount, concentration or level in excess of that prescribed by the regulations.” In the Act, a “contaminant” is defined as “any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect.” An “adverse effect” is defined as “one or more of, (a) impairment of the quality of the natural environment for any use that can be made of it, (b) injury or damage to property or to plant or animal life, (c) harm or material discomfort to any person, (d) an adverse effect on the health of any person, (e) impairment of the safety of any person, (f) rendering any property or plant or animal life unfit for human use, (g) loss of enjoyment of normal use of property, and (h) interference with the normal conduct of business”.

Provincial Policy Statement (2005) Section 1.1. Managing and Directing Land Use to Achieve Efficient Development and Land Use Patterns (Subsection 1.1.1) Healthy, livable and safe communities are sustained by: (c) avoiding development and land use patterns which may cause environmental or public health and safety concerns.

Provincial Policy Statement (2005) Section 1.7 Long-Term Economic Prosperity Subsection 1.7.1 Long-term economic prosperity should be supported by: (e) planning so that major faculties (such as airports, transportation/transit/rail infrastructure and corridors, intermodal facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, and resource extraction activities) and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety.

Section 6.0 Definitions (PPS) Sensitive Land Uses: means buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more adverse effects from contaminant discharges generated by a nearby major facility. Sensitive land uses may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities.
Other Health Concerns – Vapour Intrusion

Vapour intrusion, particularly of volatile organic compounds (VOCs), is increasingly recognized as a potential source of indoor air contamination. Since strict regulations on dumping, spill handling and usage of chemicals were not in place until the mid-80s, many industrial sites and landfills near residential areas were inadvertently contaminated before these regulations came into effect. Contaminants in soil or ground water persist for many years and are slow moving, thus, problems may only appear after many years and may lead to serious indoor air quality issues, potentially exposing occupants and, in the long term, their health if concentrations are above acceptable limits.

How are air quality tests conducted?

In Ontario, the Ministry of the Environment (MOE) sets provincial Ambient Air Quality Criteria (AAQC)s, based on human health and environmental effects, which are used in the assessment and management of regional air quality. AAQC’s are generally established for defined averaging times, generally 1-hour, 8-hour, 24-hour and/or annual. The AAQC for PM$_{2.5}$ is as follows:

<table>
<thead>
<tr>
<th>PM$_{2.5}$ (µg/m$^3$)</th>
<th>24-hour</th>
<th>30 *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

NA – Not Applicable

Source: Ontario Ministry of the Environment (unless otherwise noted)

* Canada Wide Standard (2000)

Federal air quality standards, called Canada Wide Standards (CWS), exist for PM$_{2.5}$. The CWS for PM$_{2.5}$ is reported as a 98th percentile, 24-hour concentration and averaged over three consecutive years.
PERSONAL IMPACT –
Glaring Loophole and Abuse of Authority of ARA by MNR Staff

Site Plan Amendments

In September 2012, I was shocked to learn that there were plans to re-open an old pit 500 metres from my home. The Canadian Network for Respiratory Care operates as a virtual association in order to dedicate money to programs instead of expensive office buildings and rent. I work at home as do other CNRC staff.

And so began my “initiation by fire” into the world of the ARA.

The Brock site plan amendment application for a massive site plan amendment at a old long inactive pit in the Palgrave residential community in Palgrave could be used as the “poster child” for everything that is wrong with the ARA.

From the beginning, MNR staff at the Aurora office refused to provide nearby residents with information about this pit. They insisted that site plan amendments do not “legally require” them to inform any residents, even though this pit had been exhaustively mined, declared closed and supposed to be returned to its residential use. MNR informed the Town of Caledon, the Region of Peel, the Ministry of the Environment and the Nottawasage Valley Conservation Authority but no one felt it was necessary to inform the residents until the last moment (after a nearby resident stumbled upon the information) when the ARA officer at the Aurora office insisted that the site plan amendment would be approved before Christmas.

The community was forced to form a community group and hire an attorney in order to seek information about the application and the license. It took three letters from a lawyer to get access to public documents!

When the pit was last operating in the 80s and 90s, there were serious adverse environmental effects. Many neighbouring residents lost their wells, ponds and water features. When they turned to government for help, they were told the burden of proof was on them. No one was compensated in any way when their wells dried up.

You can see in the following pictures that there were serious adverse environmental affects as a wetland system on the pit property has completely dried up. It is part of a larger wetland system that makes up the headwaters of the Beeton Creek, a tributary of the Nottawasaga River.
Despite the fact that this proposed site plan amendment is a clear violation of the Oak Ridges Moraine Conservation Plan, we expect that the application will be given approval within days.

This site plan amendment will increase the size of the pit lake five times its current size, despite the fact that the pit is located in a Natural Linkage Area of the Oak Ridges Moraine, and below-the-water table extraction is not permitted under the Oak Ridges Moraine Conservation Plan for natural linkage areas.

Section 7 (1) of the Oak Ridges Moraine Legislation states that 7. 1) A decision that is made under the Planning Act or the Condominium Act, 1998 or in relation to a prescribed matter, by a municipal council, local board, municipal planning authority, minister of the Crown or ministry, board, commission or agency of the Government of Ontario, including the Ontario Municipal Board, shall conform with the Oak Ridges Moraine Conservation Plan. 2001, c. 31, s. 7 (1).

The subject property is located within the Oak Ridges Moraine Area and is designated as a Natural Linkage Area and Country Side Area (Palgrave Estate Residential Community).

Section 35(2) of the ORMCP states that in Natural Linkage Areas, “… there will be no extraction within 1.5 metres of the water table”.

The MNR’s Aggregate Resource Policy (AR 5.00.00) states that the Oak Ridges Moraine Conservation Plan (“ORMCP”) applies to changes to site plans:

The Review of Proposed Changes to Site Plans and Conditions of the Licences or Wayside Permits under the ARA

MNR will have regard to the requirements of section 35 of the ORMCP when considering requests for changes to site plans or conditions of existing licences and wayside permits.

MNR should not approve changes that would constitute a new conflict of the requirements of section 35 of the ORMCP or a significant increase in the amount or extent of an existing conflict.

However, MNR can apply some discretion in dealing with situations where a conflict is insignificant or does not exacerbate the degree to which an existing licence or permit does not comply with section 35 of the ORMCP. For example, minor adjustments to permissions already permitted in the licence (e.g. changes in sequencing and planning) or relatively minor extensions to a pond that extends below the water table.

There are also situations where a change that conflicts with the ORMCP requirements could be considered for health or safety reasons (e.g. a minor expansion into a significant woodlot to stabilize an unstable slope).

When MNR supports such changes, the basic justification and rationale for such change should be clearly documented in the file.
MNR has acknowledged that the current application is a **major** site plan amendment. MNR Aggregate Policy AR 5.00.00 states that ORMCP section 35 would apply. Section 35 clearly states that there will be **no** extraction within 1.5 metres of the water table in Natural Linkage Areas.

The 32.7-hectare site has a current licensed extraction area of 15.7 ha. 5.3 ha is permitted to be below the water table (even though only 3.8 ha is the size of the current pit lake). The amendment to the existing license would increase the area of extraction to 24.9 ha, with a below the water table extraction of 15.4 ha. Tripling the size of the below-the-water table extraction cannot be characterized as “relatively minor”.

The residents in our community will have no choice but to take the Ministry of Natural Resources to court to seek an injunction to stop this illegal activity from proceeding. We should not have to waste money getting the government to follow their own laws.

Additionally, Section 35(2) also states that there must at all times be excluded area (both undisturbed and completely rehabilitated land) that is at least 1.25 kilometres wide. Due to the small size of this pit (with a width of less than 1.25 km), any increase in the extraction footprint (i.e. above the water table) would also not be allowed under the ORMCP, **as the pit already exceeds the maximum area allowed to be disturbed at any one time.**
Lessons I have learned:

1. Site Plan Amendments Should Not Be Used As Loopholes To Exempt Pit And Quarry Operators From Current Legislation And Environmental Regulations

MNR staff are using site plan amendments as loopholes to exempt old pits and quarries from today's regulations.

Many of these pits, like this Tottenham Pit, have never had any type of environmental assessment.

A new license in Caledon today would have to provide the following:

- Planning Justification Report to address the Caledon Official Plan Policies for aggregates, the Provincial Policy Statement (PPS) and the related policies in the Regional Official Plan
- Demarcation of the limits of Natural Heritages systems, ecosystem components, natural Hazards
- Visual Impact Report
- Environmental Impact Study and Management Plan
- Phase 1 Environmental Site Assessment
- Grading and Drainage Plan
- Transportation Study
- Hydrogeological Impact Report
- Water Resources Study
- Water Balance/Budget Analysis
- Soil Stability Report
- Geotechnical Report
- Noise and Vibration Study
- Air Quality Assessment
- Landform Conservation Plan
- Vegetation Analysis
- Tree preservation Plan
- Cultural heritage Study
- Archaeological Heritage Resource Assessment
- Aggregate Resource Impact Assessment Study
- Rehabilitation Plan Fiscal Impact Assessment Analysis
- Monitoring Program.

We have heard members of the aggregate industry complain about the time and cost involved in having a new license application approved. Recently there have been several high profile “losses” at the Ontario Municipal Board by the aggregate industry.

There are an estimated 6,900 abandoned pits and quarries in the province. Aggregate licenses never expire. Would it not be simpler for industry to just bypass all of the current requirements of the ARA by buying up these old licenses and doing massive site plan amendments that merely require the approval of an MNR aggregate officer?
2. The Land Use Conflict Creating By Allowing Industrial Extraction In Residential Communities Can Not Continue

I object to being referred to as a NIMBY, having a “vested interest” or being a “special interest group” because I want to protect my family from the adverse health effects created by living next to a pit – not to begin to mention the loss of property value (estimated to be 50%) and loss of enjoyment of our home due to noise and possible contamination of our water. Tests at the current site have already shown levels of fecal and coliform contamination and residents in our community have been given “boil water advisories”.

There are 7,000 people living in the Palgrave Estates residential area. This is the highest density in a rural area in Ontario. One-third of the residences in Palgrave Estates are on private wells without an alternate water source. 100% of the residents in the immediate area of the Tottenham Pit are on residential wells. There are another 5,000 New Tecumseh residents directly impacted just north of Hwy 9, in the Tottenham area.

Private business interests should not trump the rights of the public.

This is a picture of my eleven-year old son Jakob.

We moved to Caledon in 2002 when my son was a baby. My mother had just died of lung cancer (on October 15th, one day after my son Jakob’s first birthday, and on the eight-year anniversary of my father’s death from throat cancer).

After watching my non-smoking mother die a horrible, excruciatingly painful death from lung cancer, my husband and I decided that we needed to change our lives. We moved to our lovely, quiet country property because we thought it would be a beautiful, safe place to raise our son. Our real estate agent informed us that there used to be a pit north of our property but that it had been shut down and that the only future use on the property would be estate residential, as that was what the community was now zoned for.

My son already suffers from severe respiratory allergies. He cannot live next to the dust emissions that will be produced from the Brock Tottenham pit. As a mother, it is my responsibility to provide my child with a safe environment to grow up in.

Further, I have dedicated my life’s work to helping Canadians with respiratory disease. At the Canadian Network for Respiratory Care, we work hard to prevent Canadians from developing respiratory disease. Imagine my absolute horror when I opened the letter in September that a long inactive pit literally in my backyard was about to reopen, creating a major health hazard for my son.

And when the Brock Aggregates consultants at the public meeting (that we forced MNR to have Brock hold) just answered my question that there is silica dust produced in this pit as if this was completely inconsequential, I was appalled. It will be forever entrenched in my consciousness the sound of my poor mother struggling to breathe as she died of lung cancer. And now my home and my child will be 500 metres from processing and crushing. This area is often windy. Fine dust particulates can travel great distances but my family will literally be in the “eye of the dust storm”.
I certainly recognize that aggregate operations are a necessary and valuable part of our society. But we need to start being smart about where they are located. And we can minimize the risk by locating them away from where large numbers of people live (aka “the receptors”). Industry needs to start being serious about finding safer ways to mine this aggregate – ways that won’t harm the environment and the residents who have the misfortune to live next to these pits. Government must also create full cost accounting that does not allow these companies to make millions of dollars in profit on the backs of the poor residents who live in adjacent properties.

MNR needs to stop abusing the site plan amendment process by allowing sweeping changes to old pits that never had to undergo any rigour by today's standards. This is an abuse of authority by MNR staff.

**Recommendation:**

The health and safety of Ontarians should not be "grandfathered"!

I respectfully urge this committee to ask that the Minister of Natural Resources issue an immediate moratorium on all site plan amendment applications until the Aggregate Resources Act is reviewed and updated.

**Recommendation from Environmental Commissioner of Ontario:**

The ECO recommends that MNR improve the rehabilitation rates of Ontario pits and quarries by introducing stronger legislation with targets and timelines; by applying up-to-date rules to grandparented licences, and by further strengthening the ministry's own field capacity for inspections.

**Source:** Our Cratered Landscape: *Can Our Pits and Quarries be Rehabilitated?*  
Environmental Commission of Ontario, 2007
3. MNR Staff Should Be Impartial When Reviewing Applications

We shouldn't have to hire lawyers to be allowed to view public documents. Key documents shouldn't “disappear” or be “archived”. In the Tottenham Pit/Brock application, MNR has not been able to produce an original site plan or a site plan prior to 1995, despite the fact that the pit was licensed in 1972. One operator was actually given a Pits & Quarries Control Act license for an expansion of the pit three months after the ARA came into effect.

Disrespect from Ministry of Natural Resources Staff

After the Palgrave community in Caledon sent hundreds of letters and emails as well as made numerous phone calls that were ignored for months, everyone finally received the following group email blast at the same time on February 8, 2012. Specific questions and concerns were unanswered and remain unanswered to this day. MNR staff did not even take the time to personally address the correspondence.

MNR4825MC-2011-708
cconnors@cnrchome.net

Thank you for your e-mail regarding the site plan amendment application submitted under the Aggregate Resources Act (ARA) by Brock Aggregates Inc. in the Town of Caledon. I appreciate your concerns about the potential impact the site plan amendment may have on area properties and residents.

The Ministry of Natural Resources (MNR) is in the process of reviewing these comments, and no approval has been given for the amendment to proceed.

The government recognizes the importance of using our natural resources sustainably, and we are committed to making the right decisions that best serve the interests of people, the environment and the economy.

If you have any further questions about this matter, please contact Brent Armstrong, Aggregates Officer in the ministry’s Aurora District, at (905) 713-7388.

Thank you again for taking the time to share your views with me.

Sincerely,

Michael Gravelle
Minister of Natural Resources

c: Brent Armstrong
When I was employed in the Ontario public service, I took my oath as a public servant to serve the best interests of the public very seriously. My experience with MNR staff has been that they serve the interests of the aggregate industry and not the public. I would suggest that this very wealthy aggregate industry is more than capable of serving their own needs and does not need MNR staff working as if they are employees of the aggregate companies.

Members of the public should not have to spend millions of dollars in an unbalanced David & Goliath fight where the public is ill-equipped to win against industry’s much deeper pockets.

**Self-regulation is not working.**
Government oversight is necessary to ensure that our precious non-renewable resources are protected, especially vital source water. The health and safety of nearby residents must be given the highest level of priority.

**Recommendation:**

Form an Independent Regulatory Body Governing the Operations of the Aggregate Industry. Include a forum to deal with public complaints.
One Last Word

Public servants should behave with impartiality and transparency.
A public servant is required to behave like a judge – setting aside all personal prejudices and behaving with transparency.

Editorial in Jeremy Hunt Scandal in England. guardian.co.uk, Tuesday 24 April 2012 20.42 BST

A public servant is required to behave like a judge – setting aside all personal prejudices and behaving with such transparency, candour and integrity that people can have total faith in his or her rulings. Judges don’t book private meetings with one side in the cases they or their colleagues on the bench are hearing. They don’t offer inside information, or appeal for private help in formulating their decisions or covertly demolishing the other side’s arguments. They don’t suggest PR strategies or brief one side what the other’s been saying in confidence. They don’t offer winked assurances that they share one party’s aims or outcomes. They don’t have private chats on their mobile phones to get round official scrutiny or slip confidential information through back channels. Any judge who behaved like that would not command public confidence and would be forced to resign.