

May 8, 2024 **CBM Aberfoyle South Pit Expansion**





Meeting Format



CBM will provide a presentation about the ARA application for the proposed Aberfoyle South Pit Expansion.



A Q&A session will be held after the presentation is finished.



Enquiries will be addressed during the Q&A portion of this meeting.



The meeting is being recorded.

CBM looks forward to answering your questions and having a meaningful and respectful Q&A session with attendees.



Your microphone will be muted during the presentation. Following the presentation, raise your hand if you would like to ask a question.



The slide deck and the recording of the presentation will be made available in the project website shortly after the meeting. https://www.cbmaberfoylepit.ca/

Projects/index.html



How to Ask Questions (Computer)

Using the "Raise Hand" Option (Microphone)

This option will only be available during the Q&A session On the <u>top</u> menu, click here to raise your hand. We will unmute your microphone when it's your turn to ask a question

How to Ask Questions (Phone App)

On the bottom menu, click here to expand the menu for the meeting

Using the "Raise Hand" Option (Microphone)

This option will only be available during the Q&A session Click here to raise your hand. We will unmute your microphone when it's your turn to ask a

> Once you're done with your question, repeat as above to lower your hand



Once you're done with your question, repeat as above to lower your hand





Who is CBM Aggregates?



- St Marys Cement Inc. (Canada) is a leading supplier of cement, concrete and aggregates used to support modernization and infrastructure development and improvements in Ontario.
- Its concrete and aggregate divisions operate under the names CBM Ready Mix and CBM Aggregates (CBM).
- CBM safely operates nearly 60 licenced aggregate pits and • quarries in Ontario.
- CBM has a long history of working closely with communities to minimize the influence of our operations, manage environmental effects and maximize our positive contribution to the communities in which we operate.
- CBM and St Marys Cement Inc. (Canada) are part of the North American operations of international building materials supplier, Votorantim Cimentos.







What is CBM Proposing?

- CBM is proposing an expansion to the existing CBM Aberfoyle South Pit (McNally Pit), known as the Aberfoyle South Pit Expansion (the Site). The following provides a summary of the proposal:
 - The Site (Proposed Licensed Area) is approximately 44.8 hectares (110 acres).
 - The total area proposed for extraction is approximately 27.5 hectares (67 acres).
 - Extraction is proposed to take place both above and below the groundwater table.
 - Maximum annual tonnage of 1,000,000 per year. CBM anticipates that aggregate extraction on the Site would take approximately 6 to 10 years, depending on market demand.
 - No aggregate processing or washing on the Site as material from this site would be transported to the processing plant located to the east known as CBM's Aberfoyle South Pit operation.
 - The Site will be progressively rehabilitated to natural heritage features including new wetlands and woodland, and final rehabilitation will be compatible with surrounding land uses.
- Technical studies have been undertaken to assess potential impacts and support the Site application.





What is CBM Proposing?

- Site plan includes setbacks, buffers and mitigation measures to minimize impacts.
- No extraction or disturbance is proposed in any portion of the adjacent Provincially Significant Wetland (PSW) and extraction would be setback a minimum of 30m from this feature.
- Four sequential extraction phases are proposed.
- Proposed hours of operation: 7 am to 7 pm. Shipping hours restricted to 7 am to 6 pm on weekdays and 8 am to 4 pm on Saturdays.
- Pit would be accessed via a new entrance located at the east end of the site. Trucks would ship extracted aggregate from the site along Concession 2 to existing processing plant at Aberfoyle South Pit, which is approximately 2 km to the east. Trucks would not be permitted to travel west on Concession 2 or use Sideroad 20.
- The proposed pit would be operationally linked with the Aberfoyle South Pit (McNally Pit) in terms of aggregate processing and shipping, therefore it is considered an "expansion". Regardless of the expansion terminology, the application must satisfy the requirements for a "new" licence application including required studies and site plans.

Sequence of Operations



Project Location



LEGEND WATERCOURSE ROAD PROVINCIALLY SIGNIFICANT WETLAND (EVALUATED) PROPERTY BOUNDARY LICENCE BOUNDARY / SITE BOUNDARY PROPOSED EXTRACTION AREA





Application Status

- In November 2023, CBM submitted its application for a sand and gravel pit to the Province (Ministry of Natural Resources and Forestry), County of Wellington and Township of Puslinch.
- The application to the Province is to operate a sand and gravel pit under the Aggregate Resources Act. The application to the County is an Official Plan Amendment and to the Township a Zoning By-law Amendment to permit the proposed pit.
- The Aggregate Resources Act licence application has been deemed complete and is now undergoing the public consultation and technical review process. The County and Township are still reviewing the planning applications for completeness.
- The application review process is lengthy and will allow for several periods of public and agency consultation and review.
- Separate notices (and public meetings) will come directly from the County and Township in the future.



Technical Studies

Hydrogeology

Surface Water Resources

Natural Environment

Noise

Archaeology

Traffic

Land Use

Aggregate Resources

Air Quality Best Management Practices Plan (BMPP)

Agriculture

- Technical studies have been completed for these disciplines in accordance with the Aggregate Resources Act (ARA) and the Planning Act requirements.
- Field studies were initiated in 2017 and have been on-going since that time.
- The studies also assessed potential effects of the project on the environment and the community and identified mitigation requirements.



Hydrogeology

•



- site began in 2017.
- •
- ٠
- The study concluded: •

- negatively affected by this slight decrease.
- completed.



• The hydrogeology field program had the objectives of characterizing hydrogeologic conditions, including: geologic units and their characteristics, groundwater levels and quality. The current monitoring on the

The operation will not involve any pumping or active dewatering.

An assessment of potential impacts of the proposed extraction on groundwater was completed.

No negative impacts to groundwater quality is anticipated.

There will be localized temporary reductions in baseflow during active extraction, mostly confined to the licence area and immediate surrounding CBM-owned property.

Post-extraction, groundwater discharge to the Mill Creek-Puslinch Provincially Significant Wetland (PSW) upgradient of the pit pond will decrease slightly, but it will increase downgradient. There will also be less seasonal variability in groundwater levels. There are no features upgradient that would be

The temperature influence of the rehabilitated pond is expected to result in a slight increase of less than 1°C at Mill Creek and Tributary #3, which will not impact the coldwater fishery.

Water level monitoring is ongoing and will continue through operations until rehabilitation has been

• A domestic water well survey will be completed as a condition of the licence should one be issued.





Surface Water Resources

- Surface water levels in features outside of the proposed extraction area and in the study area have been monitored since 2017.
- The annual water balance for the Site was determined for current conditions, and then calculated for operational and rehabilitated conditions.
- No adverse effects on the local surface water hydrology of Mill Creek or the Mill Creek-Puslinch Provincially Significant Wetland (PSW) are anticipated.
- The average setback distance of the proposed extraction area from Mill Creek is approximately 200 m. A small portion of the extraction area is 60 to 100 m from Mill Creek.
- The reduction in runoff from the Site is predicted to have minor localized effects on Tributary #3.
- The runoff lost would be offset by water directed to the rehabilitated pond, most of which will report to Mill Creek and the Mill Creek-Puslinch PSW as baseflow.







Natural Environment

- The following natural environment surveys were completed on the Site, starting in 2017:
 - Species at Risk
 - Breeding birds
 - Anuran (frog and toad) call count surveys
 - Amphibian egg mass surveys
 - Turtle habitat assessment
 - Bat habitat and acoustics surveys
 - Fish habitat assessment
 - Wildlife Visual Encounter Surveys (VES)
 - Ecological Land Classification (ELC)
 - Botanical inventory
 - Wetland/woodland boundary delineation and staking with the GRCA and County

Findings



• There are no Species at Risk wildlife, plants or plant communities on the Site, within the proposed extraction area.

A temporary reduction in baseflow to Tributary #3 is expected. Consultation with Fisheries and Oceans Canada (DFO) is being completed to identify any required approvals, or additional mitigation.

No negative impacts on coldwater fish habitat in Mill Creek are anticipated.

No changes to the form or function of the adjacent Mill Creek-Puslinch PSW/ significant woodland or Tributary #3 are anticipated.

• There would be no disturbance to the Mill Creek-Puslinch PSW/ significant woodland the proposed pit has been designed to maintain a minimum of a 30 m setback.





Noise

- levels should be considered for the area.
- are identified as Points of Reception (POR) within the vicinity of the Site.
- the Site in order to determine if noise mitigation measures would be needed.
- Implementation of noise control mitigation measures (i.e., strategically located berms) was identified.



• Baseline noise levels were measured at the Site in order to determine what the background noise

• The closest residential receptors to the Site were identified as being representative of the most sensitive to potential noise generated as a result of future Site activities. These residential receptors

• A noise impact assessment was completed based on the equipment that is proposed to be used on

• With the recommended noise controls in place, including berms, the noise levels at PORs are expected to comply with Ministry of Environment, Conservation and Parks (MECP) noise guidelines.







Archaeology

- Stage 1, 2 and 3 Archaeological Assessments were completed on the Site, in consultation with Indigenous Communities.
- The Stage 2 assessment resulted in the identification of two sites that required further study through a Stage 3 Archaeological Assessment (also in consultation) with Indigenous Communities):
 - A historical mid- to late-Euro-Canadian site, with the main occupation date between the 1840s and 1880s
 - A domestic historical Euro-Canadian occupation from the mid-1870s to the 20th century
- A third site was identified for long-term protection and avoidance.
- The Ministry of Heritage, Sport, Tourism and Culture Industries has approved the Stage 1 and Stage 2 Archaeological Assessment reports.
- The Ministry of Citizenship and Multiculturalism is currently reviewing the Stage 3 Archaeological Assessment reports.









Traffic

- A Transportation Impact Study was prepared to assess the potential traffic impacts of the proposed pit on the surrounding road network.
 The study determined that the pit would
- The study determined that the pit would generate a total of 28 truck trips during a peak hour (14 in, 14 out) which would travel 2 km along Concession 2 from the pit to the Aberfoyle South Pit.
- The study concluded that nearby intersections are projected to operate with nearly zero delay and highly efficient conditions with the addition of future truck traffic.







Land Use

- A Planning Report was prepared to review and assess the proposed pit relative to provincial, County and Township land use planning policies and regulations.
- The Site is currently designated Core Greenlands and Greenlands in the County's Official Plan, and is zoned Natural Environment and Agricultural in the Township's Zoning By-law.
- While the Site is not located within the County's Mineral Aggregate Resource Overlay, it is identified as a tertiary deposit in Provincial geological mapping and contains high-quality aggregate resources based on site-specific resource testing. Applications for new pits are not limited to only those areas identified within the County's Overlay.
- The Planning Report concluded that the proposed pit represents the wise use and management of aggregate resources, and that the proposal is consistent with the Provincial Policy Statement, and conforms to the Province's Growth Plan and the County's Official Plan.



COUNTY OF WELLINGTON Official Plan



ontario.ca/PPS

Provincial Policy

Statement, 2020

Under the Planning Act

This is an office consolidation of the Wellington County Official Plan which was adopted by Wellington County Council on September 24, 1998. ved by the Ministry of Municipal Affairs on April 13, 1999 and effect on May 6, 1999.

Last Updated: February 2024





Aggregate Resources

- Total of 16 resource boreholes were drilled on the property in 2018, obtaining continuous 100 mm diameter cores at locations across the entire site.
- The soil cores were logged, photographed and tested for grain size.
- The drilling results confirmed there to be 5.5 million tonnes of sand and gravel present within the proposed extraction limits of the site.
- Aggregate quality was seen to be the same as material at other CBM pits in the area, which is routinely tested by independent labs.
- The resource investigation confirmed the property to be a significant source of high-quality sand and gravel.









Air Quality BMPP

- A Best Management Practices Plan (BMPP) was prepared for the control of fugitive dust emissions from the proposed pit.
- The BMPP identifies main source of dust and outlines preventative and control measures to minimize the likelihood of dust emissions including the following:
 - Watering and sweeping of internal roadways and 0 entranceway.
 - Speed limits for on-site trucks. Ο
 - Vegetation of overburden piles and berms. 0
 - Material handling best practices e.g. reduce activities during high wind conditions, minimize length of time material is stored on site, etc.









Agriculture

- An Agricultural Considerations Review was prepared to outline any potential impacts the proposed pit may have on the agricultural system and any agricultural operations in the area.
- The Site contains Class 2, 3 and organic soils.
- A small portion of the Site is identified as Prime Agricultural Area by provincial mapping (1.9 ha). Other identified Prime Agricultural Areas on the Site are located outside of the proposed extraction area and will not be removed.
- The proposed pit is not anticipated to have negative impacts on the agricultural system in the area, subject to the implementation of recommended mitigation measures.







Rehabilitation Plan

- The final rehabilitation plan consists of a pond with an irregular shoreline, wetlands and terrestrial habitats
- A minimum of 35% of the non-aquatic portion of the licence would be rehabilitated to forest cover
- Nodal plantings would focus on locally native, non-invasive species that create habitat in the short term and promote natural succession processes.
- Above-water side slopes would be seeded with a mix of grasses and legumes consisting of native, non-invasive species. The setback area and slope of the above-ground extraction area would be planted with a higher density of trees to create a transitional zone between the adjacent Mill Creek-Puslinch PSW and the rehabilitated pit.
- This transitional zone would also increase overall woodland cover, improve the buffer to Mill Creek-Puslinch PSW and Mill Creek, enhance the existing wildlife movement corridor and enhance ecological conditions.
- To facilitate a natural connection with the existing wetland, plantings would include species characteristic of the Mill Creek-Puslinch PSW as well as a transitional upland / wetland interface.
- Wetlands would also be created in the setback areas.





Review of Technical Reports





- All technical reports were submitted to the Township, the County, the Grand River Conservation Authority, MECP, MNRF, OMAFRA and Fisheries and Oceans Canada for review.
- These agencies will use their own experts and specialists to evaluate the technical assessments and determine if they agree with the findings in the reports. The Township and County have also engaged expert peer reviewers to review the technical assessments.
- Approval on the technical reports is needed from the Township, the County and the MNRF before a licence is issued and any extraction on the Site can begin.





Aggregate Resources Act Application Process

- Planning Act applications and Aggregate Resources Act (ARA) Licence application required
- ARA sets out comprehensive set of study requirements
- Requires detailed site plans with operating conditions and mitigation requirements
- Full agency review required
- Mandated public notice and consultation
- Indigenous duty to consult
- Unresolved objections would be referred to Ontario Land Tribunal
- Zoning for pit must be approved before licence can be issued
- NOTE: the Township and County do <u>not</u> manage the ARA consultation process.





Public Consultation

- ARA requires public consultation including landowner notification, notice sign, newspaper notice and public information session. CBM will be required to attempt to address all comments received.
- CBM is open to meeting with residents one-on-one to discuss the application and obtain feedback directly.
- Project website contains the application materials, study summaries and updates:

<u>https://www.cbmaberfoylepit.ca/Projects/index.html</u>

- CBM is committed to working closely with the public and all levels of government to ensure a transparent and collaborative application process





Next Steps

- Ongoing public comment period
- Official commenting period under ARA process ends June 3, 2024 Comments to be submitted to both CBM (<u>stephen.may@vcimentos.com</u>) and MNRF
- (<u>ARAapprovals@ontario.ca</u>)
 - CBM to review and respond to public and agency comments
 - The Township and County will provide separate notices related to the planning applications which will include public meeting and other opportunities for public consultation





We want to hear from you!

CBM is committed to keeping the community informed about the Project.

If you have any questions or comments about the proposal,

Contact us by phone or e-mail:

Stephen May Region 647-637-6707

Lands Manager – Western Stephen.May@vcimentos.com



Contact Information



How to Ask Questions (Computer)

Using the "Raise Hand" Option (Microphone)

This option will only be available during the Q&A session On the <u>top</u> menu, click here to raise your hand. We will unmute your microphone when it's your turn to ask a question

How to Ask Questions (Phone App)

On the bottom menu, click here to expand the menu for the meeting

Using the "Raise Hand" Option (Microphone)

This option will only be available during the Q&A session Click here to raise your hand. We will unmute your microphone when it's your turn to ask a

> Once you're done with your question, repeat as above to lower your hand



Once you're done with your question, repeat as above to lower your hand





CBM Community Involvement

- CBM has a positive history of working with our neighbours to understand how our operations can seamlessly into our daily operations that minimize the influence our business could have on our neighbours and the environment.
- CBM supports local businesses and involves the community through neighbourhood events and site tours.
- CBM also supports the environment through progressive rehabilitation efforts on our sites and initiatives such as tree planting and roadside litter clean-up with community groups.
- Corporate participation in key charitable initiatives includes CBM's Pink Cement Mixer campaign for Breast Cancer Awareness and the Becel Ride for Heart and Stroke.
- Locally, CBM is involved with the Mill Creek Stewardship Rangers, Friends of Mill Creek, and various material donations to support local building needs
- CBM also supports learning opportunities with local schools (Puslinch Public School) and various universities such as University of Guelph and University of Waterloo.



be part of the communities in which we operate. We continuously look to incorporate practices and technology



CBM Breast Cancer Awareness truck at special event





The Local Need for Aggregate

- CBM's Aberfoyle operations are a key, close to market supply of high-quality aggregate materials locally in Puslinch and Wellington County, and into the western Greater Toronto Area (GTA)
- The GTA alone uses over 50 million tonnes of aggregate annually, and demand is growing there and locally.
- The price of aggregates is highly influenced by transportation costs.
- Ontario is experiencing a shortage of high-quality aggregate resources located close to local markets, which drives up the cost of infrastructure investments across Ontario and in the GTA.
- CBM continues to look at all available, environmentally responsible options to address this shortage.





Dragline and off-road truck at CBM Neubauer Pit





Aggregates in Our Lives

What is Aggregate?

Aggregate is stone, sand and gravel used in construction and products in everyday life. It is used in everything from the buildings we live and work in, to the toothpaste we use daily. Aggregates are the foundation of our economy – an impressive contribution for something as small as a grain of sand.





On average, approximately 164 million tonnes of aggregate are used in Ontario each year.

That's about 12 tonnes annually per person

Where Does Aggregate Come From?

- Aggregates are only found in places where nature put them.
- When solid rock material is extracted for aggregate it is called a **quarry**.
- **Pits** are located in areas where glaciers left deposits of sand and gravel.
- Pits and quarries operate above and/or below the groundwater table.









Aggregates in Our Lives

Aggregate Use in Numbers

- The average brick home requires 250 tonnes of aggregate (12 truckloads).
- The average school needs 13,000 tonnes of aggregate (650 truckloads).
- One kilometre of a six-lane road uses 51,800 tonnes of aggregate (2,590 truckloads).
- One kilometre of a subway needs 91,200 tonnes of aggregate (4,560 truckloads).

Gravel Facts

- 90% of all aggregates are used within 80 km of where they are produced.
- In Ontario, 745,454 tonnes of stone, sand and gravel are delivered to job sites each day.

Stone, Sand & Gravel Economics and Jobs

- The industry contributes \$1.6 billion to Ontario's GDP.
- Virtually every job and every home in Ontario relies on stone, sand and gravel.
- Annual contribution of aggregate to the Ontario GDP \$1.6 billion.
- The aggregate industry creates 7,000 direct jobs and 34,000 indirect jobs.
- Approximately 4 additional jobs created for each quarry job in related fields: environmental consultants, equipment n more.

Protecting the Environment

- Aggregate industry is one of the cleanest, and highly regulated industries in Ontario.
- 25 pieces of legislation protect environment and future resources.
- Producers often go beyond requirements to protect wildlife.
- 293+ hectares of aquatic habitat created in rehabilitated pits and quarries.
- 1000+ hectares rehabilitated to nature, agricultural and recreational use each year.



Where is Aggregate Used?



Rural Environment



Urban Environment

ROOFING MATERIALS: Tar roof with stone layer

WINDOWS:

 Glass in buildings, cars, subways, etc.

BUILDING INTERIOR (CONSUMER PRODUCTS):

- Glassware
- CorningWare
- Ceramic plates, vases, etc. Clay in porcelain for sinks
- and toilets
- Tiles for bathroom and kitchen Glass in mirrors
- Cosmetics
- Toothpaste
- Paint • Cleaning agents
- Paper
- Chewing gum
- Aggregate used to produce plastic and vinyl products

HARDSCAPING:

- Decorative armour stones
- Stone retaining walls for gardens Water features
- Stone and concrete walkways

BUILDING STRUCTURE (CONCRETE AND BRICK):

- Building foundation
- Exterior brick or
- concrete blocks
- Mortar Columns
- Underground parking lots
- Concrete roof

RECREATION:

- Concrete for swimming pools Sand boxes and sand under swing set
- FIREPLACE (STONE OR BRICK) Chimney
- Mantle
- Interior fireplace façade
- ROOFING MATERIALS: • Asphalt shingles (includes filler
 - plus grit on surface)

WINDOWS:

• Glass in buildings, cars, subways, etc.

PAVED ROADWAYS & **EXTERIOR INFRASTRUCTURE:**

- Paved driveways
- Paved parking lots for business and retail
- Curbs in parking lots, driveways and on roads
- Sidewalks Storm drains
- Street lamp bases

HOME INTERIOR

- (CONSUMER PRODUCTS): Glassware
- CorningWare
- Ceramic plates, vases, etc.
- Clay in porcelain for sinks and toilets
- Tiles for bathroom and kitchen Glass in mirrors
- Cosmetics
- Toothpaste
- Paint Cleaning agents
- Paper
- Chewing gum
- Aggregate used to produce plastic and vinyl products

HARDSCAPING:

- Decorative armour stone
- Stone retaining walls for gardens Water features and fish ponds
- Stone or concrete walkways
- and paths
- Clay pots for plants • Concrete to anchor fence posts and deck structures

- Balconies Floors Interior walls Drywall (gypsum)

- Suburban Environment
- Discover how stone, sand and gravel are used in rural, urban and suburban environments with the infographics above
- Fiberglass insulation (sand) Drywall (gypsum)
- HOME STRUCTURE:
- Building foundation Bricks & mortar, stone,
- and/or stucco exterior Concrete block support
- walls in basement
- **BUILDING BEDDING:** Compacted gravel bed below building, including bedding
- hat uses aggregate
 - and fill for water and sewer pipes
- Municipal water that enters building is filtered through a purification system
- WATER:

- Fiberglass insulation (sand)

and paths • Clay pots for plants



Thanks

