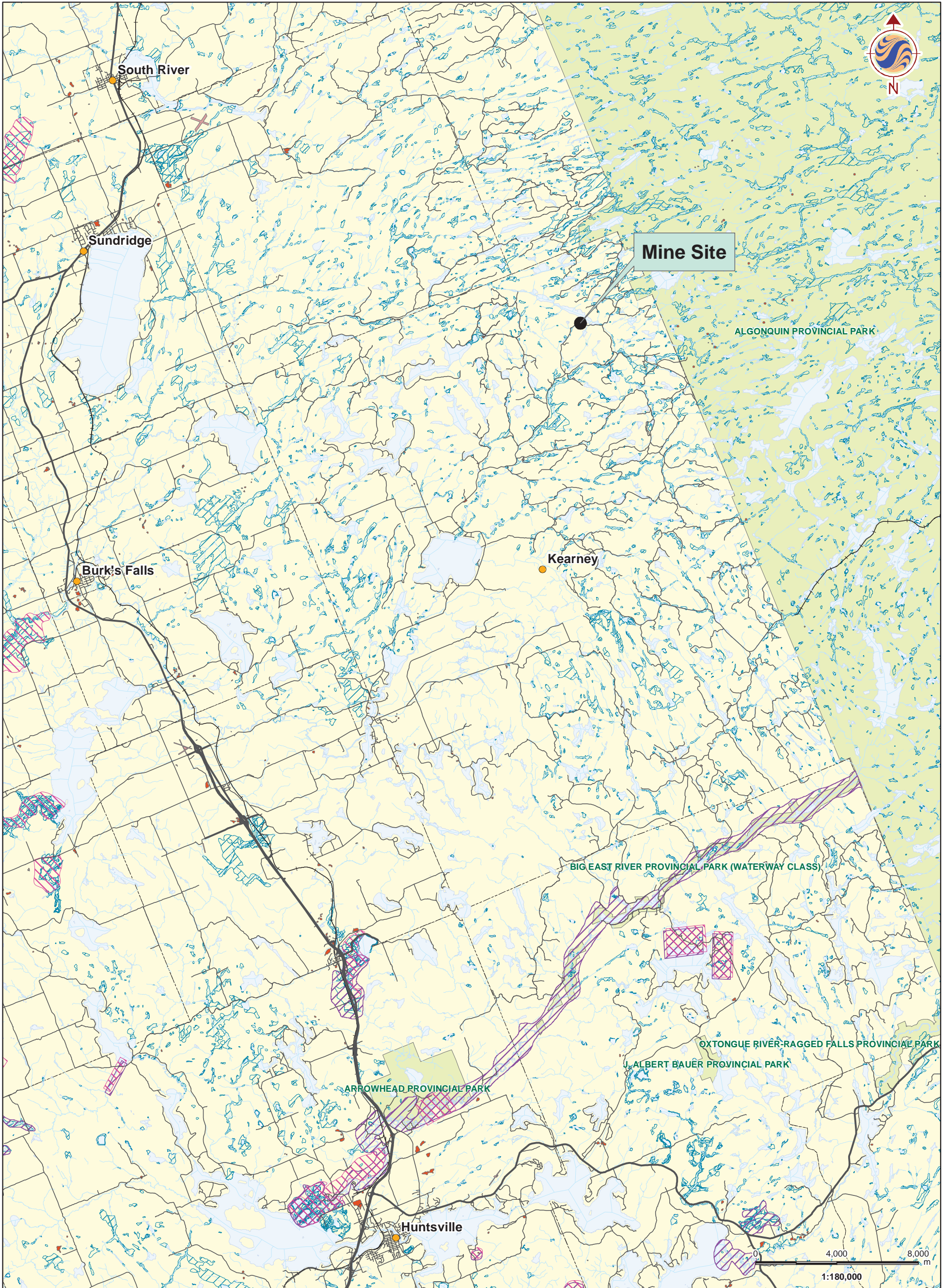


# **Appendix A**

## **Figures**

Project Location Map  
General Site Plan Map  
Aquatic Sampling Points Map



V:\01609\Active\160923504 Ontario Graphite\Drawing\mxd\201109\_Closure\_Plan\160923504\_2011\_CP\_Figure\_3\_1\_Site\_Location.mxd  
 Revised: 2011-10-03 By: bcowper

October, 2011  
160923504



### Legend

- |  |                            |  |                                |
|--|----------------------------|--|--------------------------------|
|  | Location of Mine           |  | ANSI                           |
|  | Cities and Towns           |  | Environmentally Sensitive Area |
|  | Highway                    |  | Airports                       |
|  | Roads                      |  | Watercourse                    |
|  | Railway                    |  | Wetland                        |
|  | Pit or Quarry License Area |  | Waterbody                      |
|  | Pit or Quarry              |  | Provincial Parks               |
|  |                            |  | Municipal Boundaries           |

### Notes

- Coordinate System:  
NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.

Client/Project

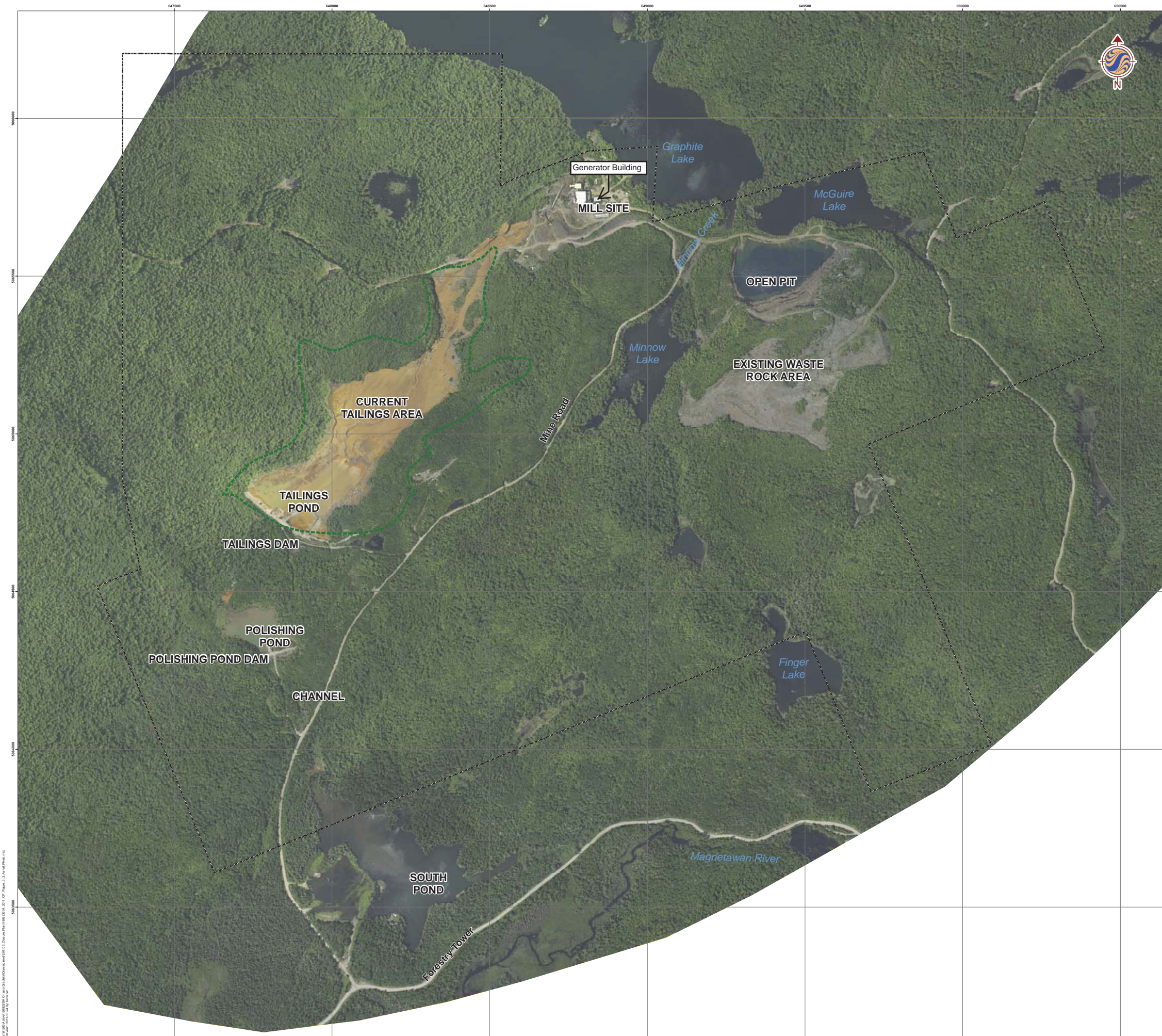
Ontario Graphite Limited  
Kearney Graphite Mine  
Power Supply ESR

Figure No.

A-1

Title

**Site Location**



- Legend
- Property Boundary
  - Roads
  - Watercourses
  - Layer
  - MAJOR
  - Property Boundary
  - Mine Process Area
  - Waterbody
  - Wetland
  - Marsh

Client/Project  
**Ontario Graphite Limited**  
**Kearney Graphite Mine**  
**Power Supply ESR**

Title  
**General Site Plan**

Project No. 160923504	Scale 1:4,000	0 50 100 150 200 m
Figure No. A-2	Revision 0	

V:\160923504\000\Drawings\ESR\GeneralSitePlan.dwg, Date: 2023-08-10 10:00:00, User: jay.davis, Plot: 1:4,000, Scale: 1:4,000, Figure No.: A-2, Revision: 0



**Legend**

- Roads
- Watercourses
- Direct Fish Habitat
- Indirect Fish Habitat
- ▭ Mine Process Area
- Fish Sampling Point
- ▭ Future Waste\_Rock Expansion Area

**Notes**

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.



**Stantec**

October, 2011  
Project No.

Client/Project  
Ontario Graphite Limited  
Kearney Graphite Mine  
Power Supply ESR

Figure No.  
A-3

Title

**Aquatic Sampling Points**

## **Appendix B**

### **Consultation Materials**

Appendix B1	Notice of Project Commencement
Appendix B2	Notice of Project Commencement Distribution List
Appendix B3	Cover Letters – General, First Nations, Metis Nation of Ontario, and AANDC and MAA
Appendix B4	Consultation Summary Tracking Table
Appendix B5	Agency Correspondence
Appendix B6	Stakeholder Correspondence
Appendix B7	Notice of Completion
Appendix B8	Notice of Completion Distribution List
Appendix B9	Cover Letter – General, Viewing Locations, MOE

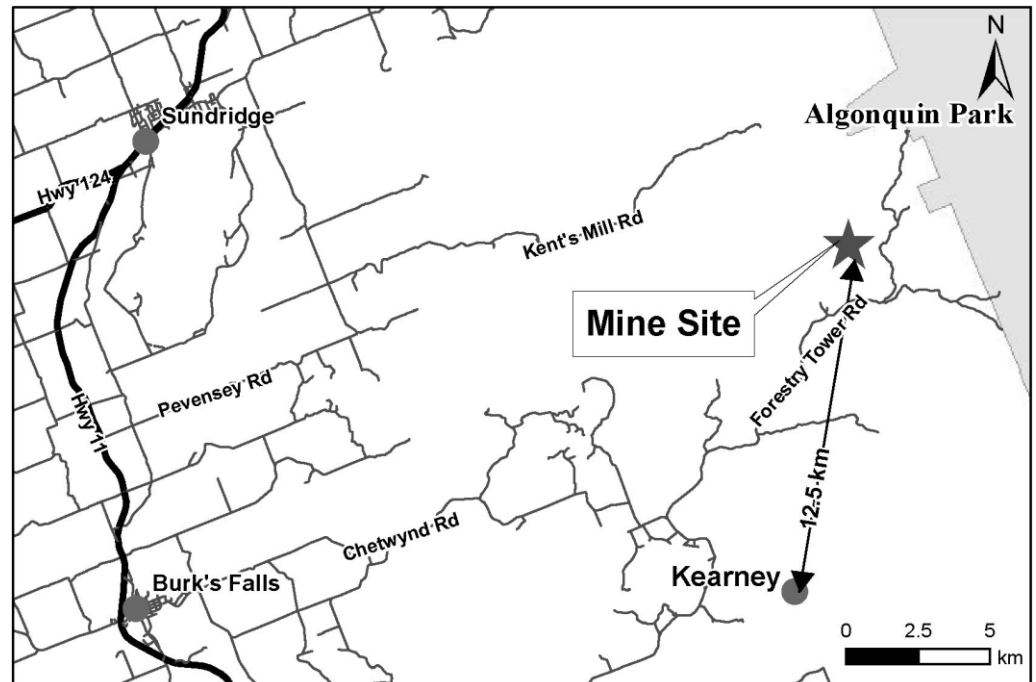
Appendix B1      Notice of Project Commencement

# NOTICE OF STUDY COMMENCEMENT OF AN ENVIRONMENTAL SCREENING UNDER THE ENVIRONMENTAL ASSESSMENT ACT

## ONTARIO GRAPHITE LIMITED - KEARNEY GRAPHITE MINE POWER SUPPLY

Ontario Graphite Limited is undertaking an Environmental Screening for a Category B Project (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine. The Project will follow the MOE's Environmental Screening Process for electricity projects according to the requirements of the MOE's "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011). The purpose of this Notice is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

The Kearney Graphite Mine consists of an open pit mine and a milling facility, located near the Town of Kearney, Ontario. The mine is located on Crown land southeast of Graphite Lake and four kilometres west of Algonquin Park. The Kearney Graphite Mine has been inactive since 1994, but is scheduled for re-activation by 2013. A reliable power supply is required for operation of the Kearney Graphite Mine. The Environmental Screening Process will assess the potential impacts of the installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW on the bio-physical and socio-economic environment during its construction/modification, operation and decommissioning.



Public input and comments are invited for consideration during this Environmental Screening Process. After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Appendix B2      Notice of Project Commencement Distribution List



**Kearney Graphite Mine  
Notice of Project Commencement**

Salutation	First Name	Last Name	Department/Title	Agency	Address	Contact List	Address 2	City	Province	Postal Code	Phone	Email
<b>Federal</b>												
Mr.	Don	Boswell	Senior Claims Analyst, Ontario Research Team Specific Claims Branch	Aboriginal Affairs and Northern Development Canada	10 Wellington St.		Room 1310	Gatineau	QU	K1A 0H4	(819) 953-1940	boswelld@inac.gc.ca
Ms.	Allison	Berman	Program Officer, Consultation & Accommodation Unit	Aboriginal Affairs and Northern Development Canada	300 Sparks Street			Ottawa	ON	K1A 0A4	613-943-5488	allison.berman@inac-ainc.gc.ca
Mr.	Bryan	O'Meara	Litigation Case Manager, Litigation Management and Resolution Branch	Aboriginal Affairs and Northern Development Canada	25 Eddy Street		Room 1430	Gatineau	QU	K1A 0H4	819-994-8647	
Mr.	Jeffrey	Betker	Senior Policy Analyst, Office of the Federal Interlocutor for Métis and Non-Status Indians	Aboriginal Affairs and Northern Development Canada	66 Slater Street		Room 1218	Ottawa	ON	K1A 0H4	(613) 992-7037	jeffrey.betker@inac.gc.ca
			Environmental Unit, Environment & Natural Resources Lands and Trusts Services	Aboriginal Affairs and Northern Development Canada	25 St. Claire Avenue East, 8th Floor			Toronto	ON	M4T 1M2		Eacoordination_ON@inac-ainc.gc.ca
Mr.	Rob	Dobos	Environmental Assessment Section, Environmental Protection Operations Division - Ontario Region	Environment Canada		P.O. Box 5050	867 Lakeshore Road	Burlington	ON	L7R 4A6	(905) 336-4953	rob.dobos@ec.gc.ca
Ms.	Sheila	Allan	Senior EA Officer	Environment Canada		P.O. Box 5050	867 Lakeshore Road	Burlington	ON	L7R 4A6	(905) 336-4948	sheila.allan@ec.gc.ca
Ms.	Louise	Knox	Regional Director, Ontario Region	Canadian Environmental Assessment Agency	55 St. Clair Avenue East		9th Floor	Toronto	ON	M4T 1M2	(416) 952-1575	louise.knox@ceaa-acee.gc.ca
Ms.	Kelly	Eggers	Fish Habitat Biologist	Fisheries and Oceans Canada	28 Waubeeck Street			Parry Sound	ON	P2A 1B9	705-746-2196	kelly.eggers@dfo-mpo.gc.ca
Ms.	Amy	Liu	Project Manager	Canadian Environmental Assessment Agency	55 St-Clair Avenue East, Room 907			Toronto	ON	M4T 1M2	416-952-1585	amy.liu@ceaa-acee.gc.ca
			Environmental Assessment Coordinator	Transport Canada	4900 Yonge Street		4th Floor	Toronto	ON	M2N 6A5		enviroont@tc.gc.ca
<b>Provincial</b>												
Mr.	Ken	Lacroix	Acting Zone Manager - Central Park Zone	Arrowhead Provincial Park (Ontario Parks)	451 Arrowhead Park Road		R.R.3	Huntsville	ON	P1H 2J4	(705) 789-0368	ken.lacroix@ontario.ca
Mr.	Ramesh	Mandal	Mineral Development Advisor (Sudbury Regional Office)	Ministry of Northern Development and Mines	Level B6, Willet Green Miller Centre		933 Ramsey Lake Road	Sudbury	ON	P3E 6B5	(705) 670-5827	ramesh.mandal@ontario.ca
Mr.	Kevin	Buck	Acting Supervisor, North Bay	Ministry of the Environment	191 Booth Road, Unit 16 & 17			North Bay	ON	P1A 4K3	(705) 497-6871	
Mr.	Andy	Heerschap	District Manager	Ministry of Natural Resources	7 Bay Street			Parry Sound	ON	P2A1S4	(705)-773-4236	andy.heerschap@ontario.ca
Ms.	Dorothy	Shaver	District Planner	Ministry of Natural Resources	7 Bay Street			Parry Sound	ON	P2A1S4	(705) 773-4231	dorothy.shaver@ontario.ca
Mr.	Trevor	Griffin	Area Supervisor - Bracebridge Area Office	Ministry of Natural Resources	1350 High Falls Rd			Bracebridge	ON	P1L 1W9	705-646-5519	trevor.griffin@ontario.ca
Ms.	Pam	Wheaton	Director, Aboriginal and Ministry Relationships Branch - Resource	Ministry of Aboriginal Affairs	160 Bloor Street East		9th Floor	Toronto	ON	M7A 2E6	(416) 326-4053	pam.wheaton@ontario.ca
Ms.	Heather	Levecque	Manager, Consultation Unit, Aboriginal Relations and Ministry P	Ministry of Aboriginal Affairs	160 Bloor Street East		9th Floor	Toronto	ON	M7A 2E6	(416) 325-4044	heather.levecque@ontario.ca
Ms.	Ashley	Johnson	Advisor, Strategic Policy and Planning Division	Ministry of Aboriginal Affairs	160 Bloor Street East		9th Floor	Toronto	ON	M7A 2E6	(416) 326-6313	ashley.johnson@ontario.ca
Mr.	Wallace	Walker	Technical Services Supervisor	Ministry of Transportation	207 Main Street West			Huntsville	ON	P1H 1Z9	(705) 789-2391 ext. 231	wallace.walker@ontario.ca
Mr.	Jim	Murphy	Park Planner	Algonquin Provincial Park	P.O. Box 219			Whitney	ON	K0J 2M0	(613) 637-2780 ext 244	jim.m.murphy@ontario.ca
Mr.	Tim	Ruthenberg	Mineral Development Consultant	Ministry of Northern Development and Mines	B6-933, Willet Green Miller Centre		933 Ramsey Lake Road	Sudbury	ON	P3E 6B5	705-670-3002	tim.ruthenberg@ontario.ca
Mr.	Jim	Mills	Senior Environmental Officer	Ministry of the Environment	191 Booth Road, Units 16 & 17			North Bay	ON	P1A 4K3	705-497-6873	Jim.Mills@ontario.ca
Ms.	Katherine	Kirzati	Heritage Planner, Culture Services Unit	Ministry of Tourism and Culture	401 Bay Street		Suite 1700	Toronto	ON	M7A 0A7	(416) 314-7643	katherine.kirzati@ontario.ca
Mr.	Allan	Jenkins	Senior Policy Specialist, Renewable and Clean Energy, Energy Sup	Ministry of Energy and Infrastructure	880 Bay Street		3rd Floor	Toronto	ON	M7A 2C1	(416) 325-6926	allan.jenkins@ontario.ca
Mr.	Hartley	Springman	Senior Policy Advisor, Strategic Policy Branch, Conservation & Str	Ministry of Energy and Infrastructure	880 Bay Street		2nd Floor	Toronto	ON	M7A 2C1	(416) 327-7276	hartley.springman@ontario.ca
			Engineering Office, Northeastern Region	Ministry of Transportation	Ontario Government Bldg., Suite 301		447 McKeown Ave.	North Bay	ON	P1B 9S9	(705) 497-6932	
Ms.	Paula	Allen	Supervisor, Air, Pesticides Environmental Planning	Ministry of the Environment	12th Flr		199 Larch St	Sudbury	ON	P3E 5P9	(705) 564-3273	paula.allen@ontario.ca
Ms.	Agatha	Garcia-Wright	Director, Environmental Assessment and Approvals Branch	Ministry of the Environment	2 St. Clair Ave. W.		Floor 12A	Toronto	ON	M4V 1L5	416-314-8171	doris.dumais@ontario.ca
<b>Municipal</b>												
Mr.	Tony	Clement	Member of Parliament (MP)	House of Commons				Ottawa	ON	K1A 0A6	(613) 944-7740	tony.clement@parl.gc.ca
Mr.	Norm	Miller	Local MPP	Queen's Park		Room 348, Legislative Building		Toronto	ON	M7A 1A8	(416) 325-1012	norm.millerco@pc.ola.org
Mr.	Steve	Sainsbury	Town Councillor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	stevesainsbury1@gmail.com
Mr.	Barry	Dingwall	Town Councillor (& Environmental Committee Chair)	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	barryinbarrie@yahoo.ca
Mr.	Kenneth	Ball	Town Councillor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	kenball4U@gmail.com
Ms.	Yvonne	Wills	Town Councillor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	cricket8@xplornet.com
Ms.	Louise	Wadsworth	Town Councillor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	louisein Kearney@gmail.com
Ms.	Yvonne	Aubichon	Clerk/Administrator	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	ClerkAdministrator@townofkearney.com
Ms.	Keven	Allen	Deputy Clerk/Treasurer	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752 ext. 201	kevenkearney1@vianet.ca
Mr.	Dave	Hunks	Economic Development Officer	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	David.Hunks@TownofKearney.com
Mr.	Dean	Hall	Operations Manager	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	Dean.Hall@TownofKearney.com
Mr.	Henry	Hess		Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	cbo@townofkearney.com
Ms.	Liz	Stermsek	Assistant to the C/A	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	elizabeth.stermsek@TownofKearney.com
Mr.	Arthur	Murdy	Deputy Mayor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	amurdy@bradleycoredrilling.com
Mr.	Paul	Tomlinson	Mayor	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	kearneytomlinson@gmail.com
Mr.	Rick	Philip	Fire Department, Fire Chief	Town of Kearney		111 Main Street		Kearney	ON	P0A 1M0	(705) 636-7402	kearneyfire@vianet.ca
Mr.	Ross	Gattozzi	Public Works, Foreman	Town of Kearney		Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7029	kearney1@vianet.ca
<b>Non-governmental organizations/Environmental non-governmental organizations</b>												
Mr.	Mike	Wilton	President	Algonquin Ecowatch		RR#1		Spring Bay	ON	P0P 2B0	1-888-894-8733	wilton@algonquin-eco-watch.com
Mr.	Ramsey	Hart	Canada Program Coordinator	Mining Watch Canada	Suite 508, City Centre Building		250 City Centre Avenue	Ottawa	ON	K1R 6K7	(613) 569-3439	ramsey@miningwatch.ca
Ms.	Carol	Adamthwaite	President	Kearney Watershed Environmental Foundation	P.O. Box 165			Kearney	ON	P0A 1M0		carol.adamthwaite@gmail.com
Ms.	Janet	Sumner	Executive Officer	Wildlands League	380-401 Richmond Street West			Toronto	ON	M5V 3A8	(416) 971-9453 ext. 39	janet@wildlandsleague.org
<b>First Nation</b>												
Chief	Denise	Restoule	Chief	Dokis First Nation		P.O. Box 62	940-A Main Street	Via Monetville	ON	P0M 2K0	(705) 763-2200	denise.r@dokisfirstnation.com
Mr.	Gerry	Duquette Jr.	Lands Management Coordinator	Dokis First Nation		P.O. Box 62	940-A Main Street	Via Monetville	ON	P0M 2K0		wabmkwa@hotmail.com
Chief	M. Wayne	McQuabbie	Chief	Henvey Inlet First Nation		295 Pickerel River Road		Pickerel	ON	P0G 1J0	(705) 857-2331	wayne_mcquabbie@hotmail.com

**Kearney Graphite Mine  
Notice of Project Commencement**

Salutation	First Name	Last Name	Department/Title	Agency	Address	Contact List	Address 2	City	Province	Postal Code	Phone	Email
Ms.	Sherry	Contin	Land Code Coordinator	Henvey Inlet First Nation								sherry.con@hotmail.com
Mr.	Ray	Kagagins	Land Code Coordinator	Henvey Inlet First Nation								ray.kagagins@henveyinlet.com
Chief	Orlin (Joe)	Noganosh	Chief	Magnetawan First Nation	RR#1 P.O. Box 15		10 Hwy 529 North	Britt	ON	P0G 1A0	(705) 383-2477	larc@magnetawanfirsnation.com
Mr.	Richard	Noganosh	Lands & Resource Consultant	Magnetawan First Nation								
Mr.	Dan	Pawis	Chief	Shawanaga First Nation	RR#1		2 Village Road	Nobel	ON	P0G 1G0	(705) 366-2526	sfnchief@hughes.net
Mr.	Adam	Good	Consultation Point Person	Shawanaga First Nation								chidamoo@hotmail.com
Mr.	Robert	Tabobandung	Chief	Wasauksing First Nation (Parry Island)	P.O. Box 250		1508 Lane "G" Geewadin Road	Parry Sound	ON	P2A 2X4	(705) 746-2531	chief@wasauksing.ca
Ms.	Jodi	Baker		Wasauksing First Nation (Parry Island)								
Mr.	Gary	Lipinski	President	Métis Nation of Ontario	500 Old St. Patrick St		Unit 3	Ottawa	ON	K1N 9G4	(613) 798-1488	consultations@metisnation.org
Ms.	Melanie	Paradis	Director, Lands, Resources and Consultations Branch	Métis Nation of Ontario	75 Sherbourne St		Suite 222	Toronto	ON	M5A 2P9	416-977-9881 xt.114	melaniep@metisnation.org
Mr.	James	Wagar	Coordinator, Lands & Resources	Métis Nation of Ontario	75 Sherbourne St.		Suite 222	Toronto	ON	M5A 2P9	416-977-9881 xt.107	jamesw@metisnation.org
Mr.	Alden	Barty	Coordinator, Lands & Resources	Métis Nation of Ontario	355 Cranston Cres.			Midland	ON	L4R 4K6	705-526-6335 ext. 210	aldenb@metisnation.org
<b>Associations</b>												
Mr.	Peter	McBride	Manager of Communications	Ontario Mining Association	5775 Yonge Street, Suite 520			North York	ON	M2M 4J1	(416) 364-9301	pmcbride@oma.on.ca
Mr.	Chris	Hodgson	President	Ontario Mining Association	5775 Yonge Street, Suite 520			North York	ON	M2M 4J1	(416) 364-9301	chodgson@oma.on.ca
Ms.	Michelle	Lewin	Communications and Development Coordinator	Federation of Ontario Cottagers Association	#201-159 King Street			Peterborough	ON	K9J 2R8	(705) 749-3622	communications@foca.on.ca
Mr.	Ron	Duff	President	Grass Lake/Long Lake Cottagers Association	1058 Grass Lake			Kearney	ON	P0A 1M0	(705) 636-7075	ron@gusgotrans.com
Mr.	Bob	Goodings	Chairman	Sand Lake Area Property Owners Association	294 Douglas Drive			Toronto	ON	M4W 2C2	(705) 636-7998 (summer)	goodings@slapoa.ca
Mr.	Clinton	Brooks	President	Magnetawan River Watershed Association	Box 26			Magnetawan	ON	P0A 1P0	(705)387-1206	magriverwatershed@comcast.net
Ms.	Peggy	Frederikse	President	Cecebe Waterways Association	25 Fourth Street			Etobicoke	ON	M8V 2Y2	416-259-5530	pfrederikse@sympatico.ca
<b>Other</b>												
Mr.	Eldon	Ayers				RR#2		Hawkestone	ON	L0L 1T0		
Mr.	Vince	Sheehan									705.636.5632	gramazeta@sympatico.ca

Appendix B3      Cover Letters – General, First Nations, Metis Nation  
of Ontario, and AANDC and MAA



**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

---

**Stantec**

September 29, 2011  
File: 160923504

«Salutation» «First\_Name» «Last\_Name»  
«DepartmentTitle»  
«Agency»  
«Address»  
«Address\_2»  
«City», «Province» «Postal\_Code»

**Attention:** «Salutation» «First\_Name» «Last\_Name», «DepartmentTitle»

Dear «Salutation» «Last\_Name»:

**Reference:** **Notice of Study Commencement of an Environmental Screening under the  
*Environmental Assessment Act* – Kearney Graphite Mine Power Supply**

### **The Project**

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in 1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

**The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

**Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submission outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

In addition, we would like to request any information regarding Aboriginal claims and litigation within the Project area. As part of the larger process to re-activate the Kearney Graphite Mine, we have been in contact with Aboriginal communities to discuss the development of the Kearney Graphite Mine Closure Plan in accordance with Ontario Regulation 240/00 (as amended), promulgated under Part VII of the *Ontario Mining Act*. To date, we have identified and corresponded with the following Aboriginal communities who may be interested in this Project:

Chief M. Wayne McQuabbie  
Henvey Inlet First Nation  
295 Pickerel River Road  
Pickerel ON P0G 1J0

Chief Dan Pawis  
Shawanaga First Nation  
RR#1  
2 Village Road  
Nobel ON P0G 1G0

Chief Orlin (Joe) Noganosh  
Magnetawan First Nation  
RR#1 P.O. Box 15  
10 Hwy 529 North  
Britt ON P0G 1A0

Chief Robert Tabobandung  
Wasauksing First Nation (Parry Island)  
P.O. Box 250  
1508 Lane "G" Geewadin Road  
Parry Sound ON P2A 2X4

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

Chief Denise Restoule  
Dokis First Nation  
P.O. Box 62  
940-A Main Street  
Via Monetville ON P0M 2K0

Melanie Paradis  
Director, Lands, Resources and  
Consultations Branch  
Métis Nation of Ontario  
75 Sherbourne St, Suite 222  
Toronto ON M5A 2P9

Gary Lipinski  
President  
Métis Nation of Ontario  
500 Old St. Patrick St, Unit 3  
Ottawa ON K1N 9G4

Alden Barty  
Coordinator, Lands & Resources  
Métis Nation of Ontario  
355 Branston Cres.  
Midland, ON L4R 4K6

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the *Environmental Assessment Act*. Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and  
Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphiteme@stantec.com](mailto:kearneygraphiteme@stantec.com)

Sincerely,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act

c. Mr. Jerry Janik, General Manager, Kearney Graphite Mine



**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

---

**Stantec**

September 29, 2011  
File: 160923504

ADDRESS

**Attention:      NAME**

Dear NAME:

**Reference:      Notice of Study Commencement of an Environmental Screening under the  
                         *Environmental Assessment Act* – Kearney Graphite Mine Power Supply**

As part of the re-activation of the Kearney Graphite Mine, Ontario Graphite Limited's environmental consultant, Stantec Consulting Ltd. (Stantec), is currently commencing an Environmental Screening under the *Environmental Assessment Act* for the proposed installation of three diesel generators. As noted in our previous correspondence to you, Ontario Graphite Limited is very interested in forming a meaningful and cooperative relationship with your community in regards to this Project. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

As you are aware, in addition to this undertaking, Ontario Graphite Limited is preparing a revised Closure Plan to be submitted to and approved by Ministry of Northern Development, Mines and Forestry prior to the mine being re-activated, and we have requested a meeting with you to inform you of our closure plans and to discuss any concerns the First Nation may have respecting our proposed mine reactivation. Installation of the diesel generators at the site, in accordance with this Notice, would only occur after the appropriate approvals, including that for the Closure Plan, are received from the respective regulatory agencies.

### **The Project**

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

**The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment.

**Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submission outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the *Environmental Assessment Act*. Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:



**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Sincerely,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act

c. Mr. Jerry Janik, General Manager, Kearney Graphite Mine



**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

---

**Stantec**

September 29, 2011  
File: 160923504

«Salutation» «First\_Name» «Last\_Name»  
«DepartmentTitle»  
«Agency»  
«Address»  
«Address\_2»  
«City», «Province» «Postal\_Code»

**Attention:** «Salutation» «First\_Name» «Last\_Name», «DepartmentTitle»

Dear «Salutation» «Last\_Name»:

**Reference:** **Notice of Study Commencement of an Environmental Screening under the  
*Environmental Assessment Act* – Kearney Graphite Mine Power Supply**

As part of the re-activation of the Kearney Graphite Mine, Ontario Graphite Limited's environmental consultant, Stantec Consulting Ltd. (Stantec), is currently commencing an Environmental Screening under the *Environmental Assessment Act* for the proposed installation of three diesel generators. As noted in our previous correspondence to you, Ontario Graphite Limited is very interested in forming a meaningful and cooperative relationship with your community in regards to this Project. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

As you are aware, in addition to this undertaking, Ontario Graphite Limited is preparing a revised Closure Plan to be submitted to and approved by Ministry of Northern Development, Mines and Forestry prior to the mine being re-activated. Installation of the diesel generators at the site, in accordance with this Notice, would only occur after the appropriate approvals, including that for the Closure Plan, are received from the respective regulatory agencies.

### **The Project**

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in 1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

**The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment.

**Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submission outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the *Environmental Assessment Act*. Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

September 29, 2011  
Page 3 of 3

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Sincerely,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act

c. Mr. Jerry Janik, General Manager, Kearney Graphite Mine



**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

---

**Stantec**

September 29, 2011  
File: 160923504

«Salutation» «First\_Name» «Last\_Name»  
«DepartmentTitle»  
«Agency»  
«Address»  
«Address\_2»  
«City», «Province» «Postal\_Code»

**Attention:** «Salutation» «First\_Name» «Last\_Name», «DepartmentTitle»

Dear «Salutation» «Last\_Name»:

**Reference:** **Notice of Study Commencement of an Environmental Screening under the  
*Environmental Assessment Act* – Kearney Graphite Mine Power Supply**

### **The Project**

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the Environmental Assessment Act) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in 1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

**The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

**Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submission outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the *Environmental Assessment Act*. Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

September 29, 2011  
Page 3 of 3

**Reference: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act**

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Sincerely,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act

c. Mr. Jerry Janik, General Manager, Kearney Graphite Mine

Appendix B4

Consultation Summary Tracking Table



## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
Email	AANDC	September 29, 2011	<ul style="list-style-type: none"> <li>▪ Thank you for your email. The Department will respond to your request.</li> <li>▪ Any questions may be directed to Shafiul Alam at 416 954-0600.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not required.</li> </ul>
Email	Councillor, Town of Kearney	October 1, 2011	<ul style="list-style-type: none"> <li>▪ I would like to be placed on the Power Supply Project mailing list.</li> <li>▪ I would also like to recommend that you request the Town of Kearney to publish the questions you receive and your answers on the Town website.</li> <li>▪ In the past misinformation has been an issue.</li> <li>▪ It is important to keep the public information flowing in a timely fashion!</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ October 3, 2011 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ Please note that your name has been placed on the Project mailing list to receive future correspondence regarding this Project. Once completed, we will circulate a copy of the Environmental Screening Report to the Town of Kearney and request that the Town of Kearney make the Report available to the public. If possible, we would also make an electronic version of the report available to the Town of Kearney to post on its website. As part of the Report, a comment response table will be created to document all comments/questions received and the appropriate response.</li> <li>▪ Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.</li> </ul>
		October 3, 2011	<ul style="list-style-type: none"> <li>▪ Your recommended actions are good ones.</li> <li>▪ Should I receive any questions or concerns I will ensure that you are informed.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not required.</li> </ul>
Phone	Department of Fisheries and Oceans	October 4, 2011	<ul style="list-style-type: none"> <li>▪ Received Notice of Commencement.</li> <li>▪ Do not foresee any impacts to fish or fish habitat.</li> <li>▪ Would like to know if there are any upcoming in-water works.</li> <li>▪ Thanks for keeping me in the loop.</li> <li>▪ DFO file number is PS085045.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Piero Amodeo (Stantec)</li> <li>▪ October 12, 2011 by phone.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Confirmed receipt of DFO's voice message.</li> <li>▪ Provided update on larger Project (i.e., not just the ESR).</li> </ul>

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
Email	Magnetawan River Watershed Association	October 4, 2011	<ul style="list-style-type: none"> <li>▪ Provided an update to the mailing address.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ October 5, 2011 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ Please note that I have updated our mailing list as per your request and any future correspondence will be sent to your P.O. Box number.</li> </ul>
Email	Resident	October 11, 2011	<ul style="list-style-type: none"> <li>▪ We were so pleased to hear that the graphite mine is soon to be opened and know it will bring a big boom to the economy in our area.</li> <li>▪ I understand it is to employ quite a number of people and figure there will be more families moving into the area.</li> <li>▪ My husband and I have reached a point where we are ready to down size and therefore would like to be able to sell our present home.</li> <li>▪ We are located just outside of Emsdale on Old Government Road.</li> <li>▪ We have 31 acres of land and a lovely home in a private setting.</li> <li>▪ It is near snowmobile trails and on the pipe line which is great for cross country skiing.</li> <li>▪ The house is large and would make a wonderful family home or a great bed and breakfast.</li> <li>▪ It is easy access to Hwy. #11 by exiting the highway at #248.</li> <li>▪ We presently have it listed with Len Clarke of Royal Lepage and the MLS #491400000329700A will allow you to see it and have a tour on line.</li> <li>▪ I hope you don't mind me bringing this to your attention as I thought maybe you or one of your employees may be interested.</li> <li>▪ May we wish you the best of luck in your endeavours at the mine.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ October 12, 2011 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.</li> </ul>
Email	MOE	October 21, 2011	<ul style="list-style-type: none"> <li>▪ Attached is MOE response to the Notice of Commencement.</li> <li>▪ The signed original will be provided when printer service is restored here.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tom Myatt (OGL)</li> <li>▪ October 21, 2011 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There was no attachment with your email, please resend.</li> </ul>

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
Email	MOE	October 26, 2011	<ul style="list-style-type: none"> <li>▪ Sent attachment:</li> <li>▪ This acknowledges receipt via email of the Notice of Project Commencement on September 29, 2011. At this early stage in the screening process, we are obviously unable to offer detailed and specific comments. The ministry is generally interested in potential for leakage and spills arising from the storage (and use) of fuels and related maintenance materials. We expect this subject to be appropriately considered and addressed from the perspectives of minimization of the potential for leaks and spills and, where material reaches the natural environment via leaks or spills, mitigation (e.g. containment), clean-up and remediation/restoration where necessary.</li> <li>▪ I understand that ministry staff have been in contact with Ontario Graphite with respect to its proposed Closure Plan and Certificate of Approval (industrial waste). We expect these matters to be dealt with prior to re-opening the mine and use of the proposed generation facility (presuming the screening process is completed and subsequent approvals granted)</li> <li>▪ If questions arise or if clarification is needed please contact the undersigned.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Comments noted.</li> </ul>
Email	Resident	October 23, 2011	<ul style="list-style-type: none"> <li>▪ Public Input: Environmental Screening Process</li> <li>▪ Installation of three 4.0 Mega Watt Diesel Generators at the Kearney Graphite Mine.</li> <li>▪ (Please include this submission as part of the public record files)</li> <li>▪ Questions;</li> <li>▪ How long will the graphite mine be in operation?</li> <li>▪ Will each of the three 4.0 Mega Watt Generators be running 24 hours a day, 7 days a week for as long as the mine is in operation?</li> <li>▪ What is the estimated total volume of diesel exhaust that will be produced from the three 4.0 Mega Watt diesel generators during the entire time the graphite mine will be in operation?</li> <li>▪ What is the estimated amount of air and noise pollution from the three 4.0 Mega Watt generators that will be carried on the prevailing winds 4 km eastward over Algonquin Provincial Park.</li> <li>▪ What effects will this air and noise pollution from the Mega Watt generators have on the natural ecosystem of Algonquin Provincial Park and the area surrounding the mine?</li> <li>▪ Why was the Kearney Graphite mine initially shut down?</li> <li>▪ What socio-economic losses will occur when people, who have enjoyed the peace and quiet of the west side of Algonquin Park (a place where large spaces are still quiet and free of exhaust), have to travel elsewhere to find that experience?</li> <li>▪ Will this open pit be used as a garbage dump after the graphite has been extracted?</li> <li>▪ What amount of metals (such as aluminum) will be dissolved from the tailings and be absorbed by; the surrounding ecosystem, the human and non-human communities living downstream, the fish consumed by fishermen, the bones of the people drinking the water downstream from the Mine site?</li> <li>▪ Comments;</li> <li>▪ The Kearney Graphite mine is located at the top of three main watersheds. The mine is located next to Graphite Lake at the top of the North Arm of the Magnetawan Watershed which flows through Pickerel Lake and through Burks Falls on its way out to Georgian Bay. The tailings pond for the mine is located next to the top of the South Arm of the Magnetawan River Watershed, flowing through the community of Kearney and joining up with the North Arm at Burk's Falls. The Mine is also located next to the Tim River Watershed which flows eastward into Algonquin Provincial Park.</li> <li>▪ The West side of Algonquin is a prime tourist destination in Ontario. This area welcomes 1000's</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ October 24, 2011</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ We have added you to our mailing list and you will be notified when the Environmental Screening Report is released for comment. At that time you will have an opportunity to review the Environmental Screening Report and provide further comments if you feel your concerns have not been addressed.</li> <li>▪ Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.</li> </ul>

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
			of visitors every year who travel long distances to enjoy and experience a natural setting that does not exist where they live. Many businesses and livelihoods in the small communities that are located downstream from the open pit mine depend on the natural integrity of this area. Eco-tourism in this area already has a good foothold, and if nurtured, can grow and be developed into a truly sustainable industry which will provide jobs for generations while preserving the natural landscape. Resource extraction will provide a few good jobs for the short term, however once the Graphite is gone, that supporting economic pillar will collapse.		
Email	Resident	November 9, 2011	<ul style="list-style-type: none"> <li>▪ I am requesting that my name and e-mail address be added to your mailing list for all information released regarding the Kearney Graphite Mine going forward from this date.</li> <li>▪ Please e-mail all information and correspondence to this address: [e-mail address]</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ November 9, 2011 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ We have added you to our mailing list and you will be notified when the Environmental Screening Report is released for comment. At that time you will have an opportunity to review the Environmental Screening Report and provide further comments.</li> <li>▪ Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.</li> </ul>
Phone	Ministry of Aboriginal Affairs (MAA)	December 21, 2011	<ul style="list-style-type: none"> <li>▪ Received Notice of Commencement.</li> <li>▪ It is unclear from the Notice what the timelines are for the Mine.</li> <li>▪ Based on list of Aboriginal communities contacted, it appears there may be a couple of communities missing.</li> <li>▪ Formal letter will follow, but can contact at [phone number removed] in the meantime.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Piero Amodeo (Stantec)</li> <li>▪ January 16, 2012 by phone.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Left a voicemail with the MAA contact regarding her December 21, 2011 message.</li> <li>▪ MAA contact's voicemail indicated she would be out of the office for a period of time.</li> <li>▪ Also left a message regarding the letter with the alternate contact identified in the original contact's voicemail.</li> </ul>
Letter	MAA	January 13, 2012	<ul style="list-style-type: none"> <li>▪ Thank you for your inquiry regarding the above-noted project. We acknowledge that you have been in contact with the following Aboriginal communities/organizations: <ul style="list-style-type: none"> <li>○ Henvey Inlet First Nation</li> <li>○ Magnetawan First Nation</li> <li>○ Shawanaga First Nation</li> <li>○ Wausauksing First Nation</li> <li>○ Dokis First Nation</li> <li>○ Métis Nation of Ontario</li> </ul> </li> <li>▪ As a member of the government review team, the Ministry of Aboriginal Affairs (MAA) identifies First Nation and Métis communities who may have the following interests in the area of your project:</li> </ul>	<ul style="list-style-type: none"> <li>▪ Piero Amodeo (Stantec)</li> <li>▪ January 16, 2012 by phone.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Left a voicemail with the MAA contact regarding her December 21, 2011 message.</li> <li>▪ MAA contact's voicemail indicated she would be out of the office for a period of time.</li> <li>▪ Also left a message regarding the letter with the alternate contact identified in the original contact's voicemail.</li> <li>• The Closure Plan for the Kearney Graphite Mine was filed with the Ministry of Northern Development and Mines (MNDM) in December</li> </ul>

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
			<ul style="list-style-type: none"> <li>○ reserves;</li> <li>○ land claims or claims in litigation against Ontario;</li> <li>○ existing or asserted Aboriginal or treaty rights, such as harvesting rights; or</li> <li>○ an interest in your project's potential environmental impacts.</li> <li>▪ MAA is not the approval or regulatory authority for your project, and receives very limited information about projects in the early stages of their development. In circumstances where a Crown-approved project may negatively impact a claimed Aboriginal or treaty right, the Crown may have a duty to consult the Aboriginal community advancing the claim. The Crown often delegates procedural aspects of its duty to consult to proponents. Please note that the information in this letter should not be relied on as advice about whether the Crown owes a duty to consult in respect of your project, or what consultation may be appropriate. Should you have any questions about your consultation obligations, please contact the appropriate ministry.</li> <li>▪ You should be aware that many First Nations and/or Métis communities either have or assert rights to hunt and fish in their traditional territories. For First Nations, these territories typically include lands and waters outside of their reserves.</li> <li>▪ In some instances, project work may impact aboriginal archaeological resources. If any Aboriginal archaeological resources could be impacted by your project, you should contact your regulating or approving Ministry to inquire about whether any additional Aboriginal communities should be contacted. Aboriginal communities with an interest in archaeological resources may include communities who are not presently located in the vicinity of the proposed project.</li> <li>▪ With respect to your project, and based on the brief materials you have provided, we can advise that the project appears to be located in an area where First Nations may have existing or asserted rights or claims in MAA's land claims process or litigation, that could be impacted by your project. Contact information is below: <ul style="list-style-type: none"> <li>○ Chippewas of Georgina Island</li> <li>○ RR#2, P.O. Box 12</li> <li>○ Sutton West, Ontario</li> <li>○ L0E 1R0</li> <li>○ Chief Donna Big Canoe</li> <li>○ (705) 437-1337</li> <li>○ Fax (705) 437-4597</li> <li>○ <a href="mailto:dbigcanoe@georginaisland.com">dbigcanoe@georginaisland.com</a></li> <li>○ Beausoleil First Nation (Christina Island</li> <li>○ 1 O-Gema Street</li> <li>○ Christian Island, Cedar Point, Ontario</li> <li>○ L0K 1C0</li> <li>○ Chief Roalnd Monague</li> <li>○ (705) 247-2051</li> <li>○ Fax (705) 247-2239</li> <li>○ <a href="mailto:rolymonague@shimnissing.ca">rolymonague@shimnissing.ca</a></li> <li>○ Chippewas of Rama</li> <li>○ 5884 Rama Road, Suite 200</li> <li>○ Rama, Ontario</li> <li>○ L0K 1T0</li> </ul> </li> </ul>		<p>2011. On February 13, 2012, the Director of Mine Rehabilitation, MNDM notified Ontario Graphite that the Closure Plan was deemed filed (see Section 3.2.2 of the ESR for further information).</p> <ul style="list-style-type: none"> <li>• The Closure Plan process originally commenced in 2008.</li> <li>• As part of the Closure Plan process, Ontario Graphite Limited engaged with the six Aboriginal communities that have been identified by the lead agency, the Ministry of Northern Development and Mines, for the Project.</li> <li>• As this Power Supply Project focuses on the Kearney Graphite Mine it was deemed appropriate to continue engaging the six Aboriginal communities identified through the MNDM as most likely to be affected by the Mine.</li> </ul>

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
			<ul style="list-style-type: none"> <li>○ Chief Sharon Stinson Henry</li> <li>○ (705) 325-3611</li> <li>○ Fax (705) 325-0879</li> <li>○ <a href="mailto:chiefofmnjikaningfirstnations@mnjikaning.ca">chiefofmnjikaningfirstnations@mnjikaning.ca</a></li> <li>▪ For your information, MAA is aware of Métis communities that have asserted rights near your project. Contact information is below:               <ul style="list-style-type: none"> <li>○ Moon River Métis Council</li> <li>○ 7678 McNiece Cres.</li> <li>○ Box 386</li> <li>○ Washago, Ontario</li> <li>○ L0K 2B0</li> <li>○ Larry Duval, President</li> <li>○ (705) 689-3941</li> <li>○ <a href="mailto:jungquewithaq@aol.com">jungquewithaq@aol.com</a></li> <li>○ <a href="http://www.moonrivermetis.com">www.moonrivermetis.com</a></li> </ul> </li> <li>▪ Please copy any correspondence to Moon River Métis Council to the Métis Nation of Ontario. Contact information is below:               <ul style="list-style-type: none"> <li>○ Métis Nation of Ontario Head Office</li> <li>○ 500 Old St. Patrick Street, Unit D</li> <li>○ Ottawa, Ontario</li> <li>○ K1N 9G4</li> <li>○ Métis Consultation Unit</li> <li>○ Fax (613) 725-4225</li> </ul> </li> <li>▪ For your information, MAA notes that the following First Nations may be interested in your project given the proximity of their reserve lands to the area of the proposed project or because of your project's potential environmental impacts:               <ul style="list-style-type: none"> <li>○ Wahta Mohawks (Mohawks of Gibson)</li> <li>○ 2664 Muskoka Road</li> <li>○ P.O. Box 260</li> <li>○ Bala, Ontario</li> <li>○ P0C 1A0</li> <li>○ Chief Blaine Commandant</li> <li>○ (705) 762-2354</li> <li>○ Fax (705) 762-2376</li> <li>○ <a href="mailto:chief@wahta.ca">chief@wahta.ca</a></li> <li>○ Algonquins Consultation Office</li> <li>○ 31 Riverside Drive, Suite 101</li> <li>○ Pembroke, ON</li> <li>○ K8A 8R6</li> <li>○ Mr. Jim Hunton</li> <li>○ (613) 735-3759</li> <li>○ Fax (613) 735-6307</li> </ul> </li> <li>▪ The government of Canada sometimes receives claims that Ontario does not receive, or with which Ontario does not become involved. For information about possible claims or litigation in</li> </ul>		

## Kearney Graphite Mine Power Supply Project Comment Response Table

Activity	Commenter	Date of Comment	Comment Received	Responder and Date of Response	Response
			<p>the area, MAA recommends you contact the following federal contact:</p> <ul style="list-style-type: none"> <li>o Allison Berman</li> <li>o Regional Subject Expert for Ontario</li> <li>o Consultation and Accommodate Unit</li> <li>o Aboriginal Affairs and Northern Development Canada</li> <li>o Rm. 205, 300 Sparks Street</li> <li>o Ottawa, ON K1A 0H4</li> <li>o (613) 943-5488</li> </ul> <ul style="list-style-type: none"> <li>▪ Additional details about your project or changes to it that suggest impacts beyond what you have provided to date may necessitate further consideration of which Aboriginal communities may be affected by or interested in your undertaking. If you think that further consideration may be required, please bring your inquiry to whatever government body oversees the regulatory process for your project.</li> <li>▪ The information upon which the above comments are based is subject to change. First Nation or Métis communities can make claims at any time and other developments can occur that could result in additional communities being affected by or interested in your undertaking.</li> </ul>		
Email	Municipality	February 10, 2012	<ul style="list-style-type: none"> <li>▪ This segment was on the Business News Network today – follow the link: <a href="http://watch.bnn.ca/featured-bin-/clip616911#clip616911">http://watch.bnn.ca/featured-bin-/clip616911#clip616911</a></li> <li>▪ Kearney sure can use all the infrastructure support it can get and through there can only be many spin off economic benefits to be enjoyed by all and by this much needed employment for the Almaguin Highlands! It is my understanding that the mine featured in this segment will not commence operation for some time and will be of a smaller scale and operate for a shorter time line. Ontario Graphite Ltd. On the other hand will commence operations in 2012 with a known quantity of quality sought after large flake graphite. We need everyone on board to see that they receive all the possible support available.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lindsay Frith (Stantec)</li> <li>▪ February 23, 2012 by email.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.</li> <li>▪ Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.</li> </ul>

Appendix B5

Agency Correspondence



**From:** [Armstrong, Bill \(ENE\)](#)  
**To:** [Kearney Graphite Mine: tmyatt@ontariographite.com](#)  
**Cc:** [Mills, Jim \(ENE\)](#)  
**Subject:** Screening Process - generation facility - Kearney Graphite Mine  
**Date:** Friday, October 21, 2011 2:44:58 PM

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Attached is MOE response to the Notice of Commencement. The signed original will be provided when printer service is restored here.

## Bill Armstrong

W. Armstrong M.E.S., RPP  
Regional Environmental Planner  
Southwestern Region  
Ministry of the Environment  
733 Exeter Road  
London, On  
519-873-5013  
519-873-5020(fax)  
email: [bill.armstrong@ontario.ca](mailto:bill.armstrong@ontario.ca)



**From:** [Tom Myatt](#)  
**To:** [Armstrong, Bill \(ENE\)](#); [Kearney Graphite Mine](#)  
**Cc:** [Mills, Jim \(ENE\)](#)  
**Subject:** Re: Screening Process - generation facility - Kearney Graphite Mine  
**Date:** Friday, October 21, 2011 4:53:51 PM

---

Bill,

There was not attachment with your email, please resend.

Thank,

Tom Myatt

-

----- Original Message -----

**From:** [Armstrong, Bill \(ENE\)](#)

**To:** [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com) ; [tmyatt@ontariographite.com](mailto:tmyatt@ontariographite.com)

**Cc:** [Mills, Jim \(ENE\)](#)

**Sent:** Friday, October 21, 2011 11:44 AM

**Subject:** Screening Process - generation facility - Kearney Graphite Mine

Attached is MOE response to the Notice of Commencement. The signed original will be provided when printer service is restored here.

**Bill Armstrong**

W. Armstrong M.E.S., RPP  
Regional Environmental Planner  
Southwestern Region  
Ministry of the Environment  
733 Exeter Road  
London, On  
519-873-5013  
519-873-5020(fax)  
email: [bill.armstrong@ontario.ca](mailto:bill.armstrong@ontario.ca)



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----- Original Message -----

**From:** [Armstrong, Bill \(ENE\)](#)

**To:** [Tom Myatt](#)

**Sent:** Wednesday, October 26, 2011 9:12 AM

**Subject:** RE: Screening Process - generation facility - Kearney Graphite Mine

*My apologies, Tom, software problems resulting from reconfiguration.....or that's my story....not human error*

**Bill Armstrong**

W. Armstrong M.E.S., RPP  
Regional Environmental Planner  
Southwestern Region  
Ministry of the Environment  
733 Exeter Road  
London, On  
519-873-5013  
519-873-5020(fax)  
email: [bill.armstrong@ontario.ca](mailto:bill.armstrong@ontario.ca)

---

**From:** Tom Myatt [<mailto:tmyatt@ontariographite.com>]

**Sent:** October 21, 2011 4:54 PM

**To:** Armstrong, Bill (ENE); [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

**Cc:** Mills, Jim (ENE)

**Subject:** Re: Screening Process - generation facility - Kearney Graphite Mine

Bill,

There was not attachment with your email, please resend.

Thank,

Tom Myatt

-

----- Original Message -----

**From:** [Armstrong, Bill \(ENE\)](#)

**To:** [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com) ; [tmyatt@ontariographite.com](mailto:tmyatt@ontariographite.com)

**Cc:** [Mills, Jim \(ENE\)](#)

**Sent:** Friday, October 21, 2011 11:44 AM

**Subject:** Screening Process - generation facility - Kearney Graphite Mine

Attached is MOE response to the Notice of Commencement. The signed original will be provided when printer service is restored here.

## Bill Armstrong

W. Armstrong M.E.S., RPP  
Regional Environmental Planner  
Southwestern Region  
Ministry of the Environment  
733 Exeter Road  
London, On  
519-873-5013  
519-873-5020(fax)  
email: [bill.armstrong@ontario.ca](mailto:bill.armstrong@ontario.ca)

Ministry of the Environment

733 Exeter Road  
London ON N6E 1L3  
Tel: 519 873-5000  
Fax: 519 873-5020

Ministère de l'Environnement

733, rue Exeter  
London ON N6E 1L3  
Tél.: 519 873-5000  
Télééc.: 519 873-5020



October 21, 2011

Piero Amodeo  
Discipline Leader  
Assessment, Permitting & Compliance  
Stantec Consulting  
203-3430 South Service Road  
Burlington, Ontario  
L7N 3T9

Dear Mr. Amodeo:

RE: Environmental Screening Process – Kearney Graphite Mine Power Supply

---

This acknowledges receipt via email of the Notice of Project Commencement on September 29, 2011. At this early stage in the screening process, we are obviously unable to offer detailed and specific comments. The ministry is generally interested in potential for leakage and spills arising from the storage (and use) of fuels and related maintenance materials. We expect this subject to be appropriately considered and addressed from the perspectives of minimization of the potential for leaks and spills and, where material reaches the natural environment via leaks or spills, mitigation (e.g. containment), clean-up and remediation/restoration where necessary.

I understand that ministry staff have been in contact with Ontario Graphite with respect to its proposed Closure Plan and Certificate of Approval (industrial waste). We expect these matters to be dealt with prior to re-opening the mine and use of the proposed generation facility (presuming the screening process is completed and subsequent approvals granted)

If questions arise or if clarification is needed please contact the undersigned at (519) 873-5013 or via email at [bill.armstrong@ontario.ca](mailto:bill.armstrong@ontario.ca).

Yours truly,

*W. Armstrong*

W. Armstrong, M.E.S, RPP  
Regional Environmental Planner  
Southwestern Region

cc. T. Myatt, Ontario Graphite  
J. Mills, MOE

**Ministry of Aboriginal Affairs**

160 Bloor St. East, 9<sup>th</sup> Floor  
Toronto, ON M7A 2E6  
Tel: (416) 326-4740  
Fax: (416) 325-1066  
[www.aboriginalaffairs.gov.on.ca](http://www.aboriginalaffairs.gov.on.ca)

**Ministère des Affaires Autochtones**

160, rue Bloor Est, 9<sup>e</sup> étage  
Toronto ON M7A 2E6  
Tél. : (416) 326-4740  
Télééc. : (416) 325-1066  
[www.aboriginalaffairs.gov.on.ca](http://www.aboriginalaffairs.gov.on.ca)



JAN 13 2012

RECEIVED  
JAN 19 2012

Reference: 499

Mr. Piero Amodeo  
Discipline Leader, Assessment Permitting AR Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON, L7N 3T9

**Re: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act – Kearney Graphite Mine Power Supply**

Dear Mr. Amodeo:

Thank you for your inquiry regarding the above-noted project. We acknowledge that you have been in contact with the following Aboriginal communities/organizations:

- Henvey Inlet First Nation
- Magnetawan First Nation
- Shawanaga First nation
- Wausauksing First Nation
- Dokis First Nation
- Métis Nation of Ontario

As a member of the government review team, the Ministry of Aboriginal Affairs (MAA) identifies First Nation and Métis communities who may have the following interests in the area of your project:

- reserves;
- land claims or claims in litigation against Ontario;
- existing or asserted Aboriginal or treaty rights, such as harvesting rights; or
- an interest in your project's potential environmental impacts.

MAA is not the approval or regulatory authority for your project, and receives very limited information about projects in the early stages of their development. In circumstances where a Crown-approved project may negatively impact a claimed Aboriginal or treaty right, the Crown may have a duty to consult the Aboriginal community advancing the claim. The Crown often delegates procedural aspects of its duty to consult to proponents. Please note that the information in this letter should not be relied on as advice about whether the Crown owes a duty to consult in respect of your project, or what consultation may be appropriate. Should you have any questions about your consultation obligations, please contact the appropriate ministry.

You should be aware that many First Nations and/or Métis communities either have or assert rights to hunt and fish in their traditional territories. For First Nations, these territories typically include lands and waters outside of their reserves.

In some instances, project work may impact aboriginal archaeological resources. If any Aboriginal archaeological resources could be impacted by your project, you should contact your regulating or approving Ministry to inquire about whether any additional Aboriginal communities should be contacted. Aboriginal communities with an interest in archaeological resources may include communities who are not presently located in the vicinity of the proposed project.

With respect to your project, and based on the brief materials you have provided, we can advise that the project appears to be located in an area where First Nations may have existing or asserted rights or claims in MAA's land claims process or litigation, that could be impacted by your project. Contact information is below:

Chippewas of Georgina Island R.R. #2, P.O. Box 12 SUTTON WEST, Ontario L0E 1R0	Chief Donna Big Canoe (705) 437-1337 (Fax) 437-4597 <a href="mailto:dbigcanoe@georginaisland.com">dbigcanoe@georginaisland.com</a>
Beausoleil First Nation (Christian Island) 1 O-Gema Street Christian Island, CEDAR POINT, Ontario L0K 1C0	Chief Roland Monague (705) 247-2051 (Fax) 247-2239 <a href="mailto:rolymonague@chimnissing.ca">rolymonague@chimnissing.ca</a>
Chippewas of Rama 5884 Rama Road, Suite 200 RAMA, Ontario L0K 1T0	Chief Sharon Stinson Henry (705) 325-3611 (Fax) 325-0879 <a href="mailto:chiefofmnjikaningfirstnations@mnjikaning.ca">chiefofmnjikaningfirstnations@mnjikaning.ca</a>

For your information, MAA is aware of Métis communities that have asserted rights near your project. Contact information is below:

Moon River Métis Council 7678 McNiece Cres., Box 386 Washago, Ontario L0K 2B0	Larry Duval, President (705) 689-3941 e-mail: <a href="mailto:junquewithaq@aol.com">junquewithaq@aol.com</a> website: <a href="http://www.moonrivermetis.com">www.moonrivermetis.com</a>
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Please copy any correspondence to Moon River Métis Council to the Métis Nation of Ontario. Contact information is below:

Métis Nation of Ontario Head Office 500 Old St. Patrick Street, Unit D Ottawa, Ontario, K1N 9G4	Métis Consultation Unit Fax: (613) 725-4225
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For your information, MAA notes that the following First Nations may be interested in your project given the proximity of their reserve lands to the area of the proposed project or because of your project's potential environmental impacts:

Wahta Mohawks, (Mohawks of Gibson) 2664 Muskoka Road P. O. Box 260 BALA, Ontario POC 1A0	Chief Blaine Commandant (705) 762-2354 (Fax) 762-2376 <a href="mailto:chief@wahta.ca">chief@wahta.ca</a>
Algonquins Consultation Office 31 Riverside Drive Suite 101 Pembroke, ON K8A 8R6	Mr. Jim Hunton (613) 735-3759 (Fax) 735-6307

The Government of Canada sometimes receives claims that Ontario does not receive, or with which Ontario does not become involved. For information about possible claims or litigation in the area, MAA recommends you contact the following federal contact:

Allison Berman  
Regional Subject Expert for Ontario  
Consultation and Accommodation Unit  
Aboriginal Affairs and Northern Development Canada (AANDC)  
Rm 205, 300 Sparks Street  
Ottawa, ON. K1A 0H4  
tel: 613-943-5488

Additional details about your project or changes to it that suggest impacts beyond what you have provided to date may necessitate further consideration of which Aboriginal communities may be affected by or interested in your undertaking. If you think that further consideration may be required, please bring your inquiry to whatever government body oversees the regulatory process for your project.

The information upon which the above comments are based is subject to change. First Nation or Métis communities can make claims at any time, and other developments can occur that could result in additional communities being affected by or interested in your undertaking.

Yours truly,



Pam Wheaton  
A/Manager, Consultation Unit  
Aboriginal Relations and Ministry Partnerships Division

Appendix B6

Stakeholder Correspondence

**To:** [Kearney Graphite Mine](#)  
**Subject:** Kearney Graphite Mine  
**Date:** Wednesday, November 09, 2011 7:23:25 AM

---

Dear Sir,

I am requesting that my name and e-mail address be added to your mailing list for all information released regarding the Kearney Graphite Mine going forward from this date.

Please e-mail all information and correspondence to this address: [kearny@graphitemine.com](mailto:kearny@graphitemine.com)

Best regards,

**From:** Kearney Graphite Mine  
**To:**  
**Subject:** RE: Kearney Graphite Mine  
**Date:** Wednesday, November 09, 2011 8:53:00 AM

---

Dear Mr. [REDACTED]

Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.

We have added you to our mailing list and you will be notified when the Environmental Screening Report is released for comment. At that time you will have an opportunity to review the Environmental Screening Report and provide further comments.

Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.

Sincerely,

Lindsay Frith  
Kearney Graphite Mine Project Coordinator  
Stantec Consulting Ltd.

---

**From:**  
**Sent:** Wednesday, November 09, 2011 7:23 AM  
**To:** Kearney Graphite Mine  
**Subject:** Kearney Graphite Mine

Dear Sir,

I am requesting that my name and e-mail address be added to your mailing list for all information released regarding the Kearney Graphite Mine going forward from this date.

Please e-mail all information and correspondence to this address: [REDACTED]

**From:**  
**To:** [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com); [Kearney Graphite Mine](#)  
**Date:** Sunday, October 23, 2011 1:36:17 PM

---

Public Input: Environmental Screening Process

Installation of three 4.0 Mega Watt Diesel Generators at the Kearney Graphite Mine.

(Please include this submission as part of the public record files)

Questions;

How long will the graphite mine be in operation?

Will each of the three 4.0 Mega Watt Generators be running 24 hours a day, 7 days a week for as long as the mine is in operation?

What is the estimated total volume of diesel exhaust that will be produced from the three 4.0 Mega Watt diesel generators during the entire time the graphite mine will be in operation?

What is the estimated amount of air and noise pollution from the three 4.0 Mega Watt generators that will be carried on the prevailing winds 4 km eastward over Algonquin Provincial Park.

What effects will this air and noise pollution from the Mega Watt generators have on the natural ecosystem of Algonquin Provincial Park and the area surrounding the mine?

Why was the Kearney Graphite mine initially shut down?

What socio-economic losses will occur when people, who have enjoyed the peace and quiet of the west side of Algonquin Park (a place where large spaces are still quiet and free of exhaust), have to travel elsewhere to find that experience?

Will this open pit be used as a garbage dump after the graphite has been extracted?

What amount of metals (such as aluminum) will be dissolved from the tailings and be absorbed by; the surrounding ecosystem, the human and non-human communities living downstream, the fish consumed by fishermen, the bones of the people drinking the water downstream from the Mine site?

Comments;

The Kearney Graphite mine is located at the top of three main watersheds. The mine is located next to Graphite Lake at the top of the North Arm of the Magnetawan Watershed which flows through Pickerel Lake and through Burks Falls on it's way out to Georgian Bay. The tailings pond for the mine is located next to the top of the South Arm of the Magnetawan River Watershed, flowing through the community of Kearney and joining up with the North Arm at Burk's Falls. The Mine is also located next to the Tim River Watershed which flows eastward into Algonquin Provincial Park.

The West side of Algonquin is a prime tourist destination in Ontario. This area welcomes 1000's of visitors every year who travel long distances to enjoy and experience a natural setting that does not exist where they live. Many businesses and livelihoods in the small communities that are located downstream from the open pit mine depend on the natural integrity of this area. Eco-tourism in this area already has a good foothold, and if nurtured, can grow and be developed into a truly sustainable industry which will provide jobs for generations while preserving the natural landscape. Resource extraction will provide a few good jobs for the short term, however once the Graphite is gone, that supporting economic pillar will collapse.

**From:** Kearney Graphite Mine  
**To:**  
**Cc:** [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)  
**Subject:** RE:  
**Date:** Monday, October 24, 2011 9:58:00 AM

---

Dear Mr.

Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.

We have added you to our mailing list and you will be notified when the Environmental Screening Report is released for comment. At that time you will have an opportunity to review the Environmental Screening Report and provide further comments if you feel your concerns have not been addressed.

Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.

Sincerely,

Lindsay Frith  
Kearney Graphite Mine Project Coordinator  
Stantec Consulting Ltd.

---

**From:**  
**Sent:** Sunday, October 23, 2011 1:36 PM  
**To:** [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com); Kearney Graphite Mine  
**Subject:**

Public Input: Environmental Screening Process

Installation of three 4.0 Mega Watt Diesel Generators at the Kearney Graphite Mine.

(Please include this submission as part of the public record files)

Questions;

How long will the graphite mine be in operation?

Will each of the three 4.0 Mega Watt Generators be running 24 hours a day, 7 days a week for as long as the mine is in operation?

What is the estimated total volume of diesel exhaust that will be produced from the three 4.0 Mega Watt diesel generators during the entire time the graphite mine will be in operation?

What is the estimated amount of air and noise pollution from the three 4.0 Mega Watt generators that will be carried on the prevailing winds 4 km eastward over Algonquin Provincial Park.

What effects will this air and noise pollution from the Mega Watt generators have on the natural ecosystem of Algonquin Provincial Park and the area surrounding the mine?

Why was the Kearney Graphite mine initially shut down?

What socio-economic losses will occur when people, who have enjoyed the peace and quiet of the west side of Algonquin Park (a place where large spaces are still quiet and free of exhaust), have to travel elsewhere to find that experience?

Will this open pit be used as a garbage dump after the graphite has been extracted?

What amount of metals (such as aluminum) will be dissolved from the tailings and be absorbed by; the surrounding ecosystem, the human and non-human communities living downstream, the fish consumed by fishermen, the bones of the people drinking the water downstream from the Mine site?

Comments;

The Kearney Graphite mine is located at the top of three main watersheds. The mine is located next to Graphite Lake at the top of the North Arm of the Magnetawan Watershed which flows through Pickerel Lake and through Burks Falls on it's way out to Georgian Bay. The tailings pond for the mine is located next to the top of the South Arm of the Magnetawan River Watershed, flowing through the community of Kearney and joining up with the North Arm at Burk's Falls. The Mine is also located next to the Tim River Watershed which flows eastward into Algonquin Provincial Park.

The West side of Algonquin is a prime tourist destination in Ontario. This area welcomes 1000's of visitors every year who travel long distances to enjoy and experience a natural setting that does not exist where they live. Many businesses and livelihoods in the small communities that are located downstream from the open pit mine depend on the natural integrity of this area. Eco-tourism in this area already has a good foothold, and if nurtured, can grow and be developed into a truly sustainable industry which will provide jobs for generations while preserving the natural landscape. Resource extraction will provide a few good jobs for the short term, however once the Graphite is gone, that supporting economic pillar will collapse.

**From:**  
**To:** [kearneygraphitemine](mailto:kearneygraphitemine)  
**Subject:** housing  
**Date:** Tuesday, October 11, 2011 6:20:43 AM

---

Dear Sir: We were so pleased to hear that the graphite mine is soon to be opened and know it will bring a big boom to the economy in our area. I understand it is to employ quite a number of people and figure there will be more families moving into the area.

My husband and I have reached a point where we are ready to down size and therefore would like to be able to sell our present home. We are located just outside of Emsdale on Old Government Road. We have 31 acres of land and a lovely home in a private setting. It is near snowmobile trails and on the pipe line which is great for cross country skiing. The house is large and would make a wonderful family home or a great bed and breakfast. It is easy access to Hwy. #11 by exiting the highway at #248.

We presently have it listed with Len Clarke of Royal LePage and the MLS #49140000329700A will allow you to see it and have a tour on line.

I hope you don't mind me bringing this to your attention as I thought maybe you or one of your employees may be interested.

May we wish you the best of luck in your endeavours at the mine.



## Frith, Lindsay

---

**From:** kearneygraphitemine  
**Sent:** Wednesday, October 12, 2011 10:44 AM  
**To:** -----  
**Subject:** RE: housing

**This message has been archived.**

Dear \_\_\_\_\_,

Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.

Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.

Sincerely,

Lindsay Frith  
Kearney Graphite Mine Project Coordinator  
Stantec Consulting Ltd.

From: -----  
Sent: Tuesday, October 11, 2011 6:21 AM  
To: kearneygraphitemine  
Subject: housing

Dear Sir: We were so pleased to hear that the graphite mine is soon to be opened and know it will bring a big boom to the economy in our area. I understand it is to employ quite a number of

**From:**  
**To:** [kearneygraphitemine](#)  
**Cc:** [Clinton Brooks](#)  
**Subject:** Information Mailing Address  
**Date:** Tuesday, October 04, 2011 5:22:36 PM

---

The Postal Service requests that we use my P.O. Box Number on my address. You have for me:

**From:** kearneygraphitemine  
**To:** [\[redacted\]](#)  
**Subject:** RE: Information Mailing Address  
**Date:** Wednesday, October 05, 2011 8:34:00 AM

---

Dear Mr.

Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.

Please note that I have updated our mailing list as per your request and any future correspondence will be sent to your P.O. Box number.

Sincerely,

Lindsay Frith  
Kearney Graphite Mine Project Coordinator  
Stantec Consulting Ltd.

-----Original Message-----

**From:** [\[redacted\]](#)  
**Sent:** Tuesday, October 04, 2011 5:22 PM  
**To:** kearneygraphitemine  
**Cc:**  
**Subject:** Information Mailing Address

The Postal Service requests that we use my P.O. Box Number on my address. You have for me:

**From:**  
**To:** [kearneygraphitemine](mailto:kearneygraphitemine@stantec.com)  
**Subject:** Re: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act - Kearney Graphite Mine Power Supply  
**Date:** Saturday, October 01, 2011 6:56:54 AM

---

Good Morning!

I would like to be placed on the Power Supply Project mailing list. I would also like to recommend that you request the Town of Kearney to publish the questions you receive and your answers on the town WEB site. In the past misinformation has been an issue. It is important to keep the public information flowing in a timely fashion!

On Thu, Sep 29, 2011 at 4:11 PM, kearneygraphitemine <[kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)> wrote:

*\*A hardcopy of the Notice of Study Commencement (attached) and cover letter (below) will follow by mail.*

Good afternoon,

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the Environmental Assessment Act) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in 1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

### **The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

### **Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submissions outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

**From:** kearneygraphitemine  
**To:**  
**Subject:** RE: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act - Kearney Graphite Mine Power Supply  
**Date:** Monday, October 03, 2011 3:01:00 PM

---

Dear Mr.

Thank you for your comments regarding the Kearney Graphite Mine Power Supply Project. Your comments will become part of the public record and will be considered during the development of the Environmental Screening Report. A section summarizing the results of the public consultation activities undertaken during the development of the Environmental Screening Report will be developed and submitted to the Ministry of the Environment.

Please note that your name has been placed on the Project mailing list to receive future correspondence regarding this Project. Once completed, we will circulate a copy of the Environmental Screening Report to the Town of Kearney and request that the Town of Kearney make the Report available to the public. If possible, we would also make an electronic version of the report available to the Town of Kearney to post on its website. As part of the Report, a comment response table will be created to document all comments/questions received and the appropriate response.

Again, thank you for your interest in the Kearney Graphite Mine Power Supply Project.

Sincerely,

**Lindsay Frith**

Kearney Graphite Mine Project Coordinator  
Stantec Consulting Ltd.

**From:**  
**Sent:** Saturday, October 01, 2011 6:57 AM  
**To:** kearneygraphitemine  
**Subject:** Re: Notice of Study Commencement of an Environmental Screening under the Environmental Assessment Act - Kearney Graphite Mine Power Supply

Good Morning!

I would like to be placed on the Power Supply Project mailing list. I would also like to recommend that you request the Town of Kearney to publish the questions you receive and your answers on the town WEB site. In the past misinformation has been an issue. It is important to keep the public information flowing in a timely fashion!

On Thu, Sep 29, 2011 at 4:11 PM, kearneygraphitemine <[kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)> wrote:

*\*A hardcopy of the Notice of Study Commencement (attached) and cover letter (below) will follow by mail.*

Good afternoon,

Ontario Graphite Limited is undertaking an Environmental Screening (as required under Ontario Regulation 116/01 of the Environmental Assessment Act) for the proposed installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW at the Kearney Graphite Mine (the Project). The Kearney Graphite Mine is located approximately 12 kilometres north of the town centre of Kearney and 4 kilometres west of Algonquin Provincial Park.

The Mine previously operated during the period from 1989 to 1994, and has been in a State of Temporary Suspension since then. It has had several ownership changes until the current firm, Ontario Graphite Limited, acquired the Kearney Graphite Mine in 2006. Ontario Graphite Limited has conducted ongoing maintenance activities and environmental monitoring at the mine site since 2006. Ontario Graphite Limited proposes to re-start production at the Kearney Graphite Mine within the next two years and operate the Mine for six to seven years.

As it did in past, the re-activated Kearney Graphite Mine will produce flake graphite, a valuable mineral product used in refractory materials, powder metallurgy, flame retardants, catalysts, and battery anodes and in brake pads, fuel cells, and advanced composites. This Environmental Screening is being undertaken in order for the Kearney Graphite Mine to have a reliable power supply. Although the Kearney Graphite Mine was operational in the past, components necessary to supply power for mining operations were removed in 1994 when the Kearney Graphite Mine entered into a State of Temporary Suspension. The installation of three diesel generators with a total nameplate capacity of approximately 4.0 MW will generate the energy required to operate the Kearney Graphite Mine for the anticipated operational period of six or seven years.

Given the Kearney Graphite Mine is a brownfield site and based on the nature of the surrounding land uses, we do not anticipate significant environmental impacts from the diesel generators on climate, bedrock, groundwater/soils, aquatic habitats and fisheries, vegetation, wildlife, air quality, noise/social impacts and heritage resources. However, we are interested in any feedback you may have on the proposed installation of the three diesel generators.

### **The Process**

The Project is subject to a Category B screening-level assessment as outlined in the Ministry of the Environment's Environmental Screening Process for electricity projects, as set out in its "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011).

The environmental study will assess the potential impact of the installation of the diesel generators on the bio-physical and socio-economic environment. The purpose of this letter and the attached Notice of Study Commencement is to bring to your attention that an Environmental Screening Report is under preparation and will be available for your review and comment in the near future.

### **Request for Comment and Information**

You are invited to provide comments on the proposed study, and/or to ask to be placed on the Power Supply Project's mailing list. In order to further the consultation process, we are requesting submissions outlining any comments, concerns or additional information that you may have regarding the proposed Power Supply Project. Submissions may be in reference to any facet of the Project including, for instance, potential impacts to:

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community

## Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the *Environmental Assessment Act*. Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik

General Manager, Kearney Graphite Mine

Ontario Graphite Limited

2142 Forestry Tower Road

P.O. Box 138

Kearney, ON P0A 1M0

Phone: [\(705\) 340-0664](tel:7053400664)

Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo

Discipline Leader, Assessment, Permitting and Compliance

Stantec Consulting Ltd.

203-3430 South Service Road

Burlington, ON L7N 3T9

Phone: [\(905\) 631-3920](tel:9056313920)

Fax: [\(905\) 631-8960](tel:9056318960)

Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Sincerely,

STANTEC CONSULTING LTD.

Piero Amodeo

Discipline Leader - Assessment, Permitting and Compliance

Stantec Consulting Ltd.

[stantec.com](http://stantec.com)

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

 Please consider the environment before printing this email.

- Surface and Ground Water
- Natural Environment
- Air Quality and Noise
- Resources
- Socio-Economic Features
- Heritage and Culture
- Aboriginal Communities
- Land Uses
- Residential/Community Facilities

After completion of the assessment of potential impacts, an Environmental Screening Report will be prepared and made available for a 30-day public review period. The public and other stakeholders will be notified of this review opportunity at the appropriate time through a newspaper advertisement.

Comments and information regarding this Project are being collected to assist the Project Team in meeting the requirements of the **Environmental Assessment Act**. Any comments received will be maintained for reference and will become part of the public record. Under the **Freedom of Information and Protection of Privacy Act** and the **Environmental Assessment Act**, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

Comments, information requests or questions, including a request to be placed on the mailing list for the Project, may be directed to:

Mr. Jerry Janik  
 General Manager, Kearney Graphite Mine  
 Ontario Graphite Limited  
 2142 Forestry Tower Road  
 P.O. Box 138  
 Kearney, ON POA 1M0  
 Phone: [\(705\) 340-0664](tel:7053400664)  
 Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
 Discipline Leader, Assessment, Permitting and Compliance  
 Stantec Consulting Ltd.  
 203-3430 South Service Road  
 Burlington, ON L7N 3T9  
 Phone: [\(905\) 631-3920](tel:9056313920)  
 Fax: [\(905\) 631-8960](tel:9056318960)  
 Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Sincerely,  
 STANTEC CONSULTING LTD.  
 Piero Amodeo  
 Discipline Leader - Assessment, Permitting and Compliance  
 Stantec Consulting Ltd.  
[stantec.com](http://stantec.com)

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

 Please consider the environment before printing this email.



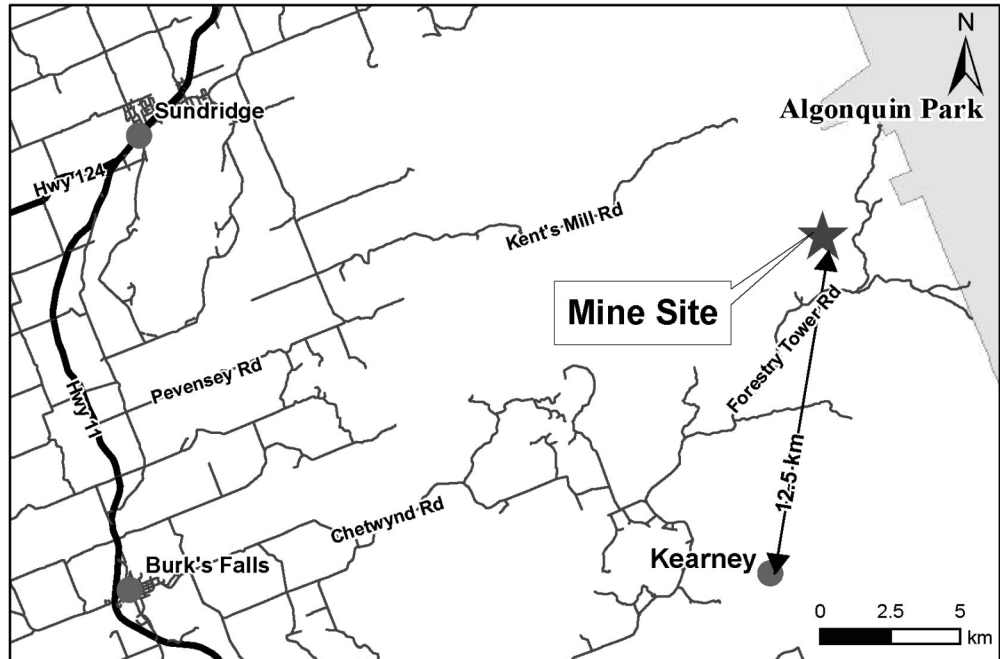
Appendix B7

Notice of Completion

# NOTICE OF STUDY COMPLETION OF AN ENVIRONMENTAL SCREENING UNDER THE ENVIRONMENTAL ASSESSMENT ACT ONTARIO GRAPHITE LIMITED - KEARNEY GRAPHITE MINE POWER SUPPLY

Ontario Graphite Limited (Ontario Graphite) has completed an Environmental Screening for a Category B Project (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW at the Kearney Graphite Mine (Power Supply Project).

The Kearney Graphite Mine consists of an open pit mine and a milling facility, located near the Town of Kearney, Ontario. The Mine is located on Crown land southeast of Graphite Lake and 1.5 kilometres west of Algonquin Park. The Kearney Graphite Mine has been inactive since 1994, but is scheduled for re-activation by 2013. A reliable power supply is required for operation of the Kearney Graphite Mine. The Environmental Screening Process assessed the potential impacts of the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW on the bio-physical and socio-economic environment during its construction/modification, operation and decommissioning.



Ontario Graphite has now completed its Environmental Screening Report for this Power Supply Project as a Category B project according to the requirements of the MOE's "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011) (EA Guide). Based on the Environmental Screening results, Ontario Graphite does not anticipate any significant adverse effects to the environment during either the construction or operational phases of this Power Supply Project. Therefore, Ontario Graphite intends to proceed with the Power Supply Project subject to mitigation, stakeholder commitments and further approvals. The Environmental Screening Report is available for review for 30 days by any interested parties, and can be reviewed online at <http://www.ontariographite.com/s/researchreports.asp> or at the following locations beginning on March 14, 2012:

Kearney and Area Public Library  
8 Main St.  
P.O. Box 220  
Kearney, ON P0A 1M0

The Town of Kearney  
8 Main St.  
P.O. Box 38  
Kearney, ON P0A 1M0

Kearney Graphite Mine  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0

Any interested person or party with a concern, issue or information request regarding this Power Supply Project should contact Ontario Graphite. Ontario Graphite is committed to resolving concerns to the best of its ability.

If Ontario Graphite and the concerned person or party are unable to resolve the matter, the concerned party may make a written request to the MOE to elevate the Power Supply Project to either an Environmental Review or to an individual Environmental Assessment. An elevation request must be made in accordance with the provisions set out in the MOE's Environmental Screening Process which is described in the EA Guide (available online at [http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/std01\\_079064.pdf](http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/std01_079064.pdf)). MOE contact information:

Ministry of the Environment  
Director, Environmental Approvals Branch  
2 St. Clair Ave. W., Floor 12A  
Toronto, ON M4V 1L5  
Fax: 419-314-8452

The last date on which elevation requests can be submitted is April 13, 2012. A copy of the elevation request must also be sent to Ontario Graphite at either:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Any comments received will be maintained for reference and will become part of the public record. Under the *Freedom of Information and Protection of Privacy Act* and the *Environmental Assessment Act*, unless otherwise stated in the submission, any personal information such as name, address, telephone number and property location included in a submission will become part of the public record files for this matter and will be released, if requested, to any person.

This Notice was first issued on March 14, 2012.

Appendix B8

Notice of Completion Distribution List

## Kearney Graphite Mine Notice of Completion

Salutation	First Name	Last Name	Department/Title	Agency	Address 1	Address 2	City	Province	Postal Code	Phone	Email
<b>Federal</b>											
Mr.	Don	Boswell	Senior Claims Analyst, Ontario Research Team Specific Claims Branch	Aboriginal Affairs and Northern Development Canada	10 Wellington St.	Room 1310	Gatineau	QU	K1A 0H4	(819) 953-1940	boswelld@inac.gc.ca
Ms.	Allison	Berman	Program Officer, Consultation & Accommodation Unit	Aboriginal Affairs and Northern Development Canada	300 Sparks Street		Ottawa	ON	K1A 0A4	613-943-5488	allison.berman@inac-ainc.gc.ca
Mr.	Bryan	O'Meara	Litigation Case Manager, Litigation Management and Resolution Branch	Aboriginal Affairs and Northern Development Canada	25 Eddy Street	Room 1430	Gatineau	QU	K1A 0H4	819-994-8647	
Mr.	Jeffrey	Betker	Senior Policy Analyst, Office of the Federal Interlocutor for Métis and Non-Status Indians	Aboriginal Affairs and Northern Development Canada	66 Slater Street	Room 1218	Ottawa	ON	K1A 0H4	(613) 992-7037	jeffrey.betker@inac.gc.ca
			Environmental Unit, Environment & Natural Resources Lands and Trusts Services	Aboriginal Affairs and Northern Development Canada	25 St. Claire Avenue East, 8th Floor		Toronto	ON	M4T 1M2		Eacoordination_ON@inac-ainc.gc.ca
Mr.	Rob	Dobos	Environmental Assessment Section, Environmental Protection Operations Division - Ontario Region	Environment Canada	P.O. Box 5050	867 Lakeshore Road	Burlington	ON	L7R 4A6	(905) 336-4953	rob.dobos@ec.gc.ca
Ms.	Sheila	Allan	Senior EA Officer	Environment Canada	P.O. Box 5050	867 Lakeshore Road	Burlington	ON	L7R 4A6	(905) 336-4948	sheila.allan@ec.gc.ca
Ms.	Louise	Knox	Regional Director, Ontario Region	Canadian Environmental Assessment Agency	55 St. Clair Avenue East	9th Floor	Toronto	ON	M4T 1M2	(416) 952-1575	louise.knox@ceaa-acee.gc.ca
Ms.	Kelly	Eggers	Fish Habitat Biologist	Fisheries and Oceans Canada	28 Waubek Street		Parry Sound	ON	P2A 1B9	(705) 746-2196	kelly.eggers@dfo-mpo.gc.ca
Ms.	Amy	Liu	Project Manager	Canadian Environmental Assessment Agency	55 St-Clair Avenue East, Room 907		Toronto	ON	M4T 1M2	(416) 952-1585	amy.liu@ceaa-acee.gc.ca
			Environmental Assessment Coordinator	Transport Canada	4900 Yonge Street	4th Floor	Toronto	ON	M2N 6A5		enviroont@tc.gc.ca
<b>Provincial</b>											
Mr.	Ken	Lacroix	Acting Zone Manager - Central Park Zone	Arrowhead Provincial Park (Ontario Parks)	451 Arrowhead Park Road	R.R.3	Huntsville	ON	P1H 2J4	(705) 789-0368	ken.lacroix@ontario.ca
Mr.	Ramesh	Mandal	Regional Supervisor	Ministry of Northern Development and Mines	Level B6, Willet Green Miller Centre	933 Ramsey Lake Road	Sudbury	ON	P3E 6B5	(705) 670-5827	ramesh.mandal@ontario.ca
Ms.	Sherry	Ilersich	Area Supervisor, North Bay	Ministry of the Environment	191 Booth Road, Unit 16 & 17		North Bay	ON	P1A 4K3	(705) 497-6869	sherry.ilersich@ontario.ca
Mr.	Andy	Heerschap	District Manager	Ministry of Natural Resources	7 Bay Street		Parry Sound	ON	P2A1S4	(705)-773-4236	andy.heerschap@ontario.ca
Ms.	Dorothy	Shaver	District Planner	Ministry of Natural Resources	7 Bay Street		Parry Sound	ON	P2A1S4	(705) 773-4231	dorothy.shaver@ontario.ca
Ms.	Nicole	Tuyten	Area Supervisor - Bracebridge Area Office	Ministry of Natural Resources	1350 High Falls Rd		Bracebridge	ON	P1L 1W9	(705) 646-5519	nicole.tuyten@ontario.ca
Ms.	Pam	Wheaton	Director, Aboriginal and Ministry Relationships Branch - Resource	Ministry of Aboriginal Affairs	160 Bloor Street East	9th Floor	Toronto	ON	M7A 2E6	(416) 326-4053	pam.wheaton@ontario.ca
Ms.	Heather	Levecqque	Manager, Consultation Unit, Aboriginal Relations and Ministry Pa	Ministry of Aboriginal Affairs	160 Bloor Street East	9th Floor	Toronto	ON	M7A 2E6	(416) 325-4044	heather.levacqua@ontario.ca
Ms.	Ashley	Johnson	Advisor, Strategic Policy and Planning Division	Ministry of Aboriginal Affairs	160 Bloor Street East	9th Floor	Toronto	ON	M7A 2E6	(416) 326-6313	ashley.johnson@ontario.ca
Mr.	Wallace	Walker	Technical Services Supervisor	Ministry of Transportation	207 Main Street West		Huntsville	ON	P1H 1Z9	(705) 789-2391 ext. 231	wallace.walker@ontario.ca
Mr.	Jim	Murphy	Park Planner	Algonquin Provincial Park	P.O. Box 219		Whitney	ON	K0J 2M0	(613) 637-2780 ext 244	jim.murphy@ontario.ca
Mr.	Tim	Ruthenberg	Mineral Development Consultant	Ministry of Northern Development and Mines	B6-933, Willet Green Miller Centre	933 Ramsey Lake Road	Sudbury	ON	P3E 6B5	(705) 670-3002	tim.ruthenberg@ontario.ca
Mr.	Jim	Mills	Senior Environmental Officer	Ministry of the Environment	191 Booth Road, Units 16 & 17		North Bay	ON	P1A 4K3	(705) 497-6873	Jim.Mills@ontario.ca
Ms.	Katherine	Kirzati	Heritage Planner, Culture Services Unit	Ministry of Tourism and Culture	401 Bay Street	Suite 1700	Toronto	ON	M7A 0A7	(416) 314-7643	katherine.kirzati@ontario.ca
Mr.	Allan	Jenkins	Senior Policy Specialist, Renewable and Clean Energy, Energy Sup	Ministry of Energy and Infrastructure	880 Bay Street	3rd Floor	Toronto	ON	M7A 2C1	(416) 325-6926	allan.jenkins@ontario.ca
Mr.	Hartley	Springman	Senior Policy Advisor, Strategic Policy Branch, Conservation & Str	Ministry of Energy and Infrastructure	880 Bay Street	2nd Floor	Toronto	ON	M7A 2C1	(416) 327-7276	hartley.springman@ontario.ca
	Manager		Engineering Office, Northeastern Region	Ministry of Transportation	Ontario Government Bldg., Suite 301	447 McKeown Ave.	North Bay	ON	P1B 9S9	(705) 497-6932	
Ms.	Paula	Allen	Supervisor, Air, Pesticides Environmental Planning	Ministry of the Environment	12th Flr	199 Larch St	Sudbury	ON	P3E 5P9	(705) 564-3273	paula.allen@ontario.ca
Ms.	Agatha	Garcia-Wright	Director, Environmental Assessment Branch	Ministry of the Environment	2 St. Clair Ave. W.	Floor 12A	Toronto	ON	M4V 1L5	(416) 314-8171	doris.dumais@ontario.ca
Mr.	Bill	Armstrong	Regional Environmental Planner, Southwestern Region	Ministry of the Environment	733 Exeter Road		London	ON	N6E 1L3	(519) 873-5013	bill.armstrong@ontario.ca
<b>Municipal</b>											
Mr.	Tony	Clement	Member of Parliament (MP)	House of Commons			Ottawa	ON	K1A 0A6	(613) 944-7740	tony.clement@parl.gc.ca
Mr.	Norm	Miller	Local MPP	Queen's Park	Room 348, Legislative Building		Toronto	ON	M7A 1A8	(416) 325-1012	norm.millerco@pc.ola.org
Mr.	Steve	Sainsbury	Town Councillor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	stevesainsbury1@gmail.com
Mr.	Barry	Dingwall	Town Councillor (& Environmental Committee Chair)	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	barryinbarrie@yahoo.ca
Mr.	Kenneth	Ball	Town Councillor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	kenball4U@gmail.com
Ms.	Yvonne	Wills	Town Councillor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	cricket8@xplornet.com
Ms.	Louise	Wadsworth	Town Councillor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	louiseinkearney@gmail.com
Ms.	Yvonne	Aubichon	Clerk/Administrator	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	ClerkAdministrator@townofkearney.com
Ms.	Keven	Allen	Deputy Clerk/Treasurer	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752 ext. 201	kevenkearney1@vianet.ca
Mr.	Dave	Hunks	Economic Development Officer	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	David.Hunks@TownofKearney.com
Mr.	Dean	Hall	Operations Manager	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	Dean.Hall@TownofKearney.com
Mr.	Henry	Hess		Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	cbo@townofkearney.com
Ms.	Liz	Stermsek	Assistant to the C/A	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	elizabeth.stermsek@TownofKearney.com
Mr.	Arthur	Murdy	Deputy Mayor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	amurdy@bradleycoredrilling.com
Mr.	Paul	Tomlinson	Mayor	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7752	kearneytomlinson@gmail.com
Mr.	Rick	Philip	Fire Department, Fire Chief	Town of Kearney	111 Main Street		Kearney	ON	P0A 1M0	(705) 636-7402	kearneyfire@vianet.ca
Mr.	Ross	Gattozzi	Public Works, Foreman	Town of Kearney	Town of Kearney Municipal Office	P.O. Box 38, 8 Main Street	Kearney	ON	P0A 1M0	(705) 636-7029	kearney1@vianet.ca
<b>Non- governmental organizations/Environmental non-governmental organizations</b>											
Mr.	Mike	Wilton	President	Algonquin Ecowatch	RR#1		Spring Bay	ON	POP 2B0	1-888-894-8733	wilton@algonquin-eco-watch.com
Mr.	Ramsey	Hart	Canada Program Coordinator	Mining Watch Canada	Suite 508, City Centre Building	250 City Centre Avenue	Ottawa	ON	K1R 6K7	(613) 569-3439	ramsey@miningwatch.ca
Ms.	Carol	Adamthwaite	President	Kearney Watershed Environmental Foundation	P.O. Box 165		Kearney	ON	P0A 1M0		carol.adamthwaite@gmail.com
Ms.	Janet	Sumner	Executive Officer	Wildlands League	380-401 Richmond Street West		Toronto	ON	M5V 3A8	(416) 971-9453 ext. 39	janet@wildlandsleague.org
<b>First Nation</b>											
Chief	Denise	Restoule	Chief	Dokis First Nation	P.O. Box 62	940-A Main Street	Via Monetville	ON	P0M 2K0	(705) 763-2200	denise.r@dokisfirstnation.com
Mr.	Gerry	Duquette Jr.	Lands Management Coordinator	Dokis First Nation	P.O. Box 62	940-A Main Street	Via Monetville	ON	P0M 2K0		wabmka@hotmail.com
Chief	M. Wayne	McQuabbie	Chief	Henvey Inlet First Nation	295 Pickerel River Road		Pickerel	ON	POG 1J0	(705) 857-2331	wayne_mcquabbie@hotmail.com
Ms.	Sherry	Contin	Land Code Coordinator	Henvey Inlet First Nation							sherry.con@hotmail.com
Mr.	Ray	Kagagins	Land Code Coordinator	Henvey Inlet First Nation							rayk1763@gmail.com

**Kearney Graphite Mine  
Notice of Completion**

Salutation	First Name	Last Name	Department/Title	Agency	Address 1	Address 2	City	Province	Postal Code	Phone	Email
Chief	Orlin (Joe)	Noganosh	Chief	Magnetawan First Nation	RR#1 P.O. Box 15	10 Hwy 529 North	Britt	ON	P0G 1A0	(705) 383-2477	chief@magnetawanfirstnation.com
Ms.	Angie	Noganosh	Executive Assistant	Magnetawan First Nation							chiefea@magfn.com
Chief	Dan	Pawis	Chief	Shawanaga First Nation	RR#1	2 Village Road	Nobel	ON	P0G 1G0	(705) 366-2526	sfchief@hughes.net
Mr.	Adam	Good	Consultation Point Person	Shawanaga First Nation							chidamoo@hotmail.com
Chief	Robert	Tabobandung	Chief	Wasauksing First Nation (Parry Island)	P.O. Box 250	1508 Lane "G" Geewadin Road	Parry Sound	ON	P2A 2X4	(705) 746-2531	chief@wasauksing.ca
Ms.	Jodi	Baker		Wasauksing First Nation (Parry Island)							
Mr.	Gary	Lipinski	President	Métis Nation of Ontario	500 Old St. Patrick St	Unit 3	Ottawa	ON	K1N 9G4	(613) 798-1488	consultations@metisnation.org
Ms.	Melanie	Paradis	Director, Lands, Resources and Consultations Branch	Métis Nation of Ontario	75 Sherbourne St	Suite 222	Toronto	ON	M5A 2P9	(416) 977-9881 xt.114	melaniep@metisnation.org
					75 Sherbourne St.					(416) 977-9881 xt.107	
Mr.	James	Wagar	Coordinator, Lands & Resources	Métis Nation of Ontario		Suite 222	Toronto	ON	M5A 2P9		jamesw@metisnation.org
Mr.	Alden	Barty	Coordinator, Lands & Resources	Métis Nation of Ontario	355 Cranston Cres.		Midland	ON	L4R 4K6	(705) 526-6335 ext. 210	aldenb@metisnation.org
<b>Associations</b>											
Mr.	Peter	McBride	Manager of Communications	Ontario Mining Association	5775 Yonge Street, Suite 520		North York	ON	M2M 4J1	(416) 364-9301	pmcbride@oma.on.ca
Mr.	Chris	Hodgson	President	Ontario Mining Association	5775 Yonge Street, Suite 520		North York	ON	M2M 4J1	(416) 364-9301	chodgson@oma.on.ca
Ms.	Michelle	Lewin	Communications and Development Coordinator	Federation of Ontario Cottagers Association	#201-159 King Street		Peterborough	ON	K9J 2R8	(705) 749-3622	communications@foca.on.ca
Mr.	Ron	Duff	President	Grass Lake/Long Lake Cottagers Association				ON		(705) 636-7075	ron@gusgotrans.com
Mr.	Bob	Goodings	Chairman	Sand Lake Area Property Owners Association	294 Douglas Drive		Toronto	ON	M4W 2C2	(705) 636-7998 (summer)	goodings@slapoa.ca
Mr.	Clinton	Brooks	President	Magnetawan River Watershed Association	Box 26		Magnetawan	ON	P0A 1P0	(705)387-1206	magriverwatershed@comcast.net
Ms.	Peggy	Frederikse	President	Cecebe Waterways Association	25 Fourth Street		Etobicoke	ON	M8V 2Y2	(416) 259-5530	pfrederikse@sympatico.ca
<b>Other</b>											
Mr.	Eldon	Ayers			RR#2		Hawkestone	ON	L0L 1T0		
Mr.	Vince	Sheehan								(705) 636-5632	gramazeta@sympatico.ca
Mr.	Dan	Willmore									dan_willmore@hotmail.com
Mr.	Wilson	Boynnton									jetblast@sympatico.ca
Mr and Mrs.	Gerry and Enid	Stoehr									estoehr@vianet.ca

Appendix B9      Cover Letter – General, Viewing Locations, MOE



**Stantec**

**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

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March 9, 2012  
File: 160923504

«Agency»  
«Address»  
«Address\_2»  
«City», «Province» «Postal\_Code»

**Attention:** «Salutation» «First\_Name» «Last\_Name», «DepartmentTitle»

Dear «Salutation» «Last\_Name»:

**Reference: Notice of Completion – Kearney Graphite Mine Power Supply Environmental Screening Report**

Ontario Graphite Limited (Ontario Graphite) has completed an Environmental Screening for a Category B Project (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW at the Kearney Graphite Mine (Power Supply Project) (see attached Notice of Completion).

The Kearney Graphite Mine consists of an open pit mine and a milling facility, located near the Town of Kearney, Ontario. The Mine is located on Crown land southeast of Graphite Lake and 1.5 kilometres west of Algonquin Park. The Kearney Graphite Mine has been inactive since 1994, but is scheduled for re-activation by 2013. A reliable power supply is required for operation of the Kearney Graphite Mine. The Environmental Screening Process assessed the potential impacts of the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW on the bio-physical and socio-economic environment during its construction/modification, operation and decommissioning.

Ontario Graphite has now completed its Environmental Screening Report for this Power Supply Project as a Category B project according to the requirements of the MOE's "Guide to Environmental Assessment Requirements for Electricity Projects" (January 2011) (EA Guide). Based on the Environmental Screening results, Ontario Graphite does not anticipate any significant adverse effects to the environment during either the construction or operational phases of this Power Supply Project. Therefore, Ontario Graphite Limited intends to proceed with the Power Supply Project subject to mitigation, stakeholder commitments and further approvals. The Environmental Screening Report is available for review for 30 days by any interested parties, and can be reviewed online at <http://www.ontariographite.com/s/researchreports.asp> or at the following locations beginning on March 14, 2012:

Kearney and Area Public Library  
8 Main St.  
P.O. Box 220  
Kearney, ON P0A 1M0

The Town of Kearney  
8 Main St.  
P.O. Box 38  
Kearney, ON P0A 1M0

Kearney Graphite Mine  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0

March 9, 2012

«Salutation» «First\_Name» «Last\_Name», «DepartmentTitle»

Page 2 of 2

**Reference: Notice of Completion – Kearney Graphite Mine Power Supply Environmental Screening Report**

Any interested person or party with a concern, issue or information request regarding this Power Supply Project should contact Ontario Graphite Limited by April 13, 2012. Ontario Graphite Limited is committed to resolving concerns to the best of its ability. Correspondence can be directed to:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and  
Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

Respectfully,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Kearney Graphite Mine Power Supply Notice of Completion

- c. Jerry Janik, General Manager, Kearney Graphite Mine  
Mina McCluskey, Project Manager, Stantec Consulting Ltd.





**Stantec**

**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

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March 12, 2012  
File: 160923504

Town of Kearney  
P.O. Box 38  
8 Main Street  
Kearney, ON P0A 1M0

**Attention: Yvonne Aubichon, Clerk Administrator**

Dear Ms. Aubichon:

**Reference: Kearney Graphite Mine Power Supply Environmental Screening Report**

Ontario Graphite Limited has completed an Environmental Screening Report for the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW at the Kearney Graphite Mine in accordance with the Ministry of the Environment's Guide to Environmental Assessment Requirements for Electricity Projects under Ontario Regulation 116/01 of the *Environmental Assessment Act*.

Ontario Graphite Limited kindly requests that you make the attached document available for public review at the Kearney and Area Public Library, from March 14 to April 13, 2012.

If you have any questions, concerns or require additional information, please do not hesitate to contact me.

Respectfully,

**STANTEC CONSULTING LTD.**

Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Kearney Graphite Mine Power Supply Environmental Screening Report

c. Jerry Janik, General Manager, Kearney Graphite Mine  
Mina McCluskey, Project Manager, Stantec Consulting Ltd.



**Stantec Consulting Ltd.**  
3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

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**Stantec**

March 12, 2012  
File: 160923504

Kearney and Area Public Library  
P.O. Box 220  
8 Main Street  
Kearney, ON P0A 1M0

**Attention: Ms. Brandi Nolan, CEO/Librarian**

Dear Ms. Nolan:

**Reference: Kearney Graphite Mine Power Supply Environmental Screening Report**

Ontario Graphite Limited has completed an Environmental Screening Report for the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW at the Kearney Graphite Mine in accordance with the Ministry of the Environment's Guide to Environmental Assessment Requirements for Electricity Projects under Ontario Regulation 116/01 of the *Environmental Assessment Act*.

Ontario Graphite Limited kindly requests that you make the attached document available for public review at the Kearney and Area Public Library, from March 14 to April 13, 2012.

If you have any questions, concerns or require additional information, please do not hesitate to contact me.

Respectfully,

**STANTEC CONSULTING LTD.**

Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Kearney Graphite Mine Power Supply Environmental Screening Report

c. Jerry Janik, General Manager, Kearney Graphite Mine  
Mina McCluskey, Project Manager, Stantec Consulting Ltd.



**Stantec**

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3430 South Service Road Suite 203  
Burlington ON L7N 3T9  
Tel: (905) 631-8684  
Fax: (905) 631-8960

---

March 12, 2012  
File: 160923504

Ministry of the Environment  
Southwestern Region  
733 Exeter Road  
London, ON N6E 1L3

**Attention: Mr. Bill Armstrong, Regional Environmental Planner**

Dear Mr. Armstrong:

**Reference: Notice of Completion – Kearney Graphite Mine Environmental Screening Report**

Ontario Graphite Limited (Ontario Graphite) has completed an Environmental Screening for a Category B Project (as required under Ontario Regulation 116/01 of the *Environmental Assessment Act*) for the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW at the Kearney Graphite Mine (Power Supply Project) (see attached Notice of Completion).

The Kearney Graphite Mine consists of an open pit mine and a milling facility, located near the Town of Kearney, Ontario. The Mine is located on Crown land southeast of Graphite Lake and 1.5 kilometres west of Algonquin Park. The Kearney Graphite Mine has been inactive since 1994, but is scheduled for re-activation by 2013. A reliable power supply is required for operation of the Kearney Graphite Mine. The Environmental Screening Process assessed the potential impacts of the installation of four diesel generators with a total nameplate capacity of approximately 4.96 MW on the bio-physical and socio-economic environment during its construction/modification, operation and decommissioning.

Based on the Environmental Screening results, Ontario Graphite does not anticipate any significant adverse effects to the environment during either the construction or operational phases of this Power Supply Project. Therefore, Ontario Graphite Limited intends to proceed with the Power Supply Project subject to mitigation, stakeholder commitments and further approvals.

The Environmental Screening Report is enclosed for your review. If you have any concerns, issues or information requests regarding this Power Supply Project, please contact Ontario Graphite Limited no later than April 13, 2012 at either:

Mr. Jerry Janik  
General Manager, Kearney Graphite Mine  
Ontario Graphite Limited  
2142 Forestry Tower Road  
P.O. Box 138  
Kearney, ON P0A 1M0  
Phone: (705) 340-0664  
Email: [jjanik@ontariographite.com](mailto:jjanik@ontariographite.com)

Mr. Piero Amodeo  
Discipline Leader, Assessment, Permitting and  
Compliance  
Stantec Consulting Ltd.  
203-3430 South Service Road  
Burlington, ON L7N 3T9  
Phone: (905) 631-3920  
Fax: (905) 631-8960  
Email: [kearneygraphitemine@stantec.com](mailto:kearneygraphitemine@stantec.com)

March 12, 2012

Mr. Bill Armstrong, Regional Environmental Planner

Page 2 of 2

**Reference: Notice of Completion – Kearney Graphite Mine Environmental Screening Report**

Respectfully,

**STANTEC CONSULTING LTD.**



Piero Amodeo  
Discipline Leader - Assessment, Permitting and Compliance  
Stantec Consulting Ltd.

Attachment: Notice of Completion  
Kearney Graphite Mine Power Supply Environmental Screening Report

c. Jerry Janik, General Manager, Kearney Graphite Mine  
Mina McCluskey, Project Manager, Stantec Consulting Ltd.

# **Appendix C**

## **Air Assessment**

**Environmental Screening Report**  
**Ontario Graphite- Kearney Mine**  
**Air Assessment**

## **1.1 Purpose and Scope**

Ontario Graphite Limited (OGL) is proposing to restart mining activities at its proposed site in Kearney, Ontario in 2012. Permanent generator sets are planned for installation inside the existing on-site Generator Building. This section presents an assessment of air emissions derived exclusively from operation of the generators. Dispersion modelling was carried out to estimate the influence of three (3) simultaneously operating diesel generators on ambient air quality in the vicinity of the Mine site. The potential for adverse environmental effects due to air emissions were assessed by comparing the dispersion model predictions to Ontario Ministry of the Environment (MOE) air quality criteria.

Four 1.24 MW diesel generators are proposed to be installed at the Generator Building located east of the Mill Building to provide power to the facility process equipment, and for general heating/lighting of the various site buildings. The maximum theoretical power output of the four generators will be 4.96 MW. During normal mill operation, a maximum of three generators will be in operation and one will be on standby.

The North American Industry Classification System (NAICS) code for the graphite mine is *212399 – All other nonmetallic mineral mining*. The NAICS code for the facility is not listed in Schedules 4 or 5 of the relevant air quality regulation in Ontario (Regulation 419/05). Therefore, to assess the potential for adverse environmental effects, the dispersion model predictions were compared to Schedule 2 standards in Regulation 419/05.

## **1.2 Operations and Operating Schedule**

During normal mill operation, three of the four generators will be in operation, providing a maximum of 3.72 MW of power, with the fourth on standby. Mill operations are expected to operate 24 hours per day, 7 days per week. During normal operation, the majority (17,600 kg/hour) of the hot exhaust gases from the three generators will be ducted to the Mill building, mixed with ambient process air at a rate of 4,400 kg/hour, and used in the graphite dryer. Emissions from the dryer are ultimately vented to the atmosphere through an exhaust stack on the Mill Building. The remainder of the generator exhaust will be emitted through separate stacks for each generator on the Generator Building.

During Mill down time, the Mill processes will not be in operation, and only one of the generators will be operated to provide general power for lighting and heating the various buildings as

required. In this operating scenario, all the generator exhaust is emitted through the dedicated exhaust stack for that generator.

### 1.3 Operating Conditions and Identification of Sources and Contaminants

Following the requirements of the O. Reg 419/05, worst case emissions from the generator operations were modelled and compared to ½ hour Point of Impingement (POI) criteria using the model in the Appendix to Regulation 346. It was assumed for the worst-case emission scenario that the generators were operating simultaneously at their individual maximum rates of production as per the two scenarios described in the section above. The averaging time for this operating condition was a half-hour.

The significant contaminants emitted from the generators are products from diesel fuel combustion including nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), particulate matter (PM) and carbon monoxide (CO). These are identified in Table 1-1 - Sources and Contaminants Identification Table together with their assigned reference source IDs.

**Table 1-1 Sources and Contaminant Identification Table**

Source Information			Expected Contaminants	Included in Modeling?	Rationale
Source ID	Description	General Location		Significant (Yes/No)	
GEN1 GEN2 GEN3 GEN4	Four 1.24 MW Diesel Generators. During the worst-case Normal Mill Operation Scenario, three generators will be in operation. A portion of the exhaust gases are ducted to the Mill Building. During the Mill Down Time Scenario, only one generator will be in operation and exhaust gases are emitted from its dedicated stack on the generator building. Emissions at the Generator Building are exhausted through separate stacks for each generator.	Generator Building at Mill Site	NO <sub>2</sub> , CO, PM, SO <sub>2</sub>	Yes	N/A
MILL	Exhaust gases are ducted from the Generator Building to Mill Building and exhausted through the Mill Building Dryer Stack.	Mill Building	NO <sub>2</sub> , CO, PM, SO <sub>2</sub>	Normal Operation - Yes Mill Down Time - No	Exhaust gases are ducted to Mill Building and exhausted through the Mill Building dryer stack during Normal Mill Operation. During the Mill Down Time, there are no emissions from the dryer stack as exhaust gases will not be ducted to the Mill Building.

Figure 1-1 illustrates the property fence line, general emission source locations and the coordinate system used in the Appendix to Regulation 346 dispersion modelling and Figure 1-2 illustrates the locations of the discharges from the sources, and the related coordinates used for modelling. As described in the above section, emissions from the generators are exhausted from both the Mill Building dryer stack and the Generator Building stacks during normal mill operation.

**Figure 1-1 Site Plan and Co-ordinate System**

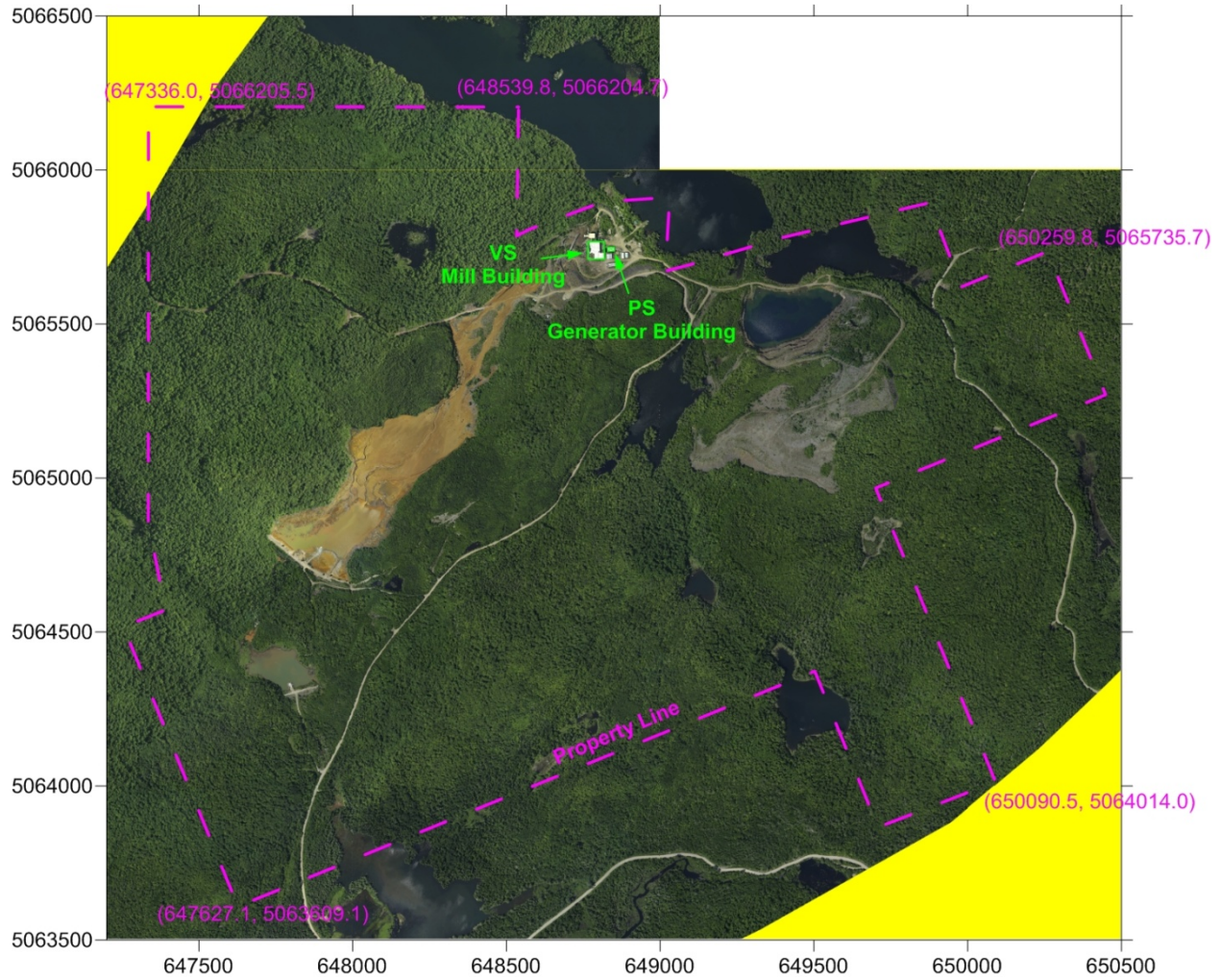




Figure 1- 2 Mill Layout and Emission Sources Locations



## **1.4 Explanation of Methods Used to Calculate Emission Rates**

The generators will be used to power the mill operations and for general use (light, heat). The significant contaminants emitted to the atmosphere from the generators are NO<sub>x</sub>, SO<sub>2</sub>, PM and CO. Emissions were calculated based on a worst-case half-hour period with all generators running at full load (i.e. full load re-rated at 1.24 MW). Emissions from the generators were based on emissions data from the manufacturer's specifications. The assumptions and methodologies used are expected to result in conservative emission rates for the contaminants of concern.

The maximum half-hour emission rates for the contaminants of concern emitted from the facility-wide air emission sources were calculated in accordance with the requirements of the MOE ESDM Procedure Document.

Information and manufacturer's specifications for the Graphite Drying Plant and the generators are provided in **Appendix 1 and 2**, respectively and detailed emissions calculations are provided in **Appendix 3**. The source summaries for the two operating scenarios are presented in Tables 1-2 and 1-3.

**Table 1-2 Source Summary Table – Normal Operation Scenario**

Source ID	Description	Source Data <sup>a</sup>						Emission Data <sup>a</sup>						
		Flow rate (m <sup>3</sup> /s)	Stack Exit Gas Temp (°C)	Diameter (m)	Height above grade (m)	Height above roof (m)	Stack Coord	Contaminant	CAS #	Emission Rate (g/s)	Averaging Period (hour)	Data Quality	Estimation Technique	% of Overall Emission
GEN1	1240 KW Diesel Generators	4.5	446.1	0.91	17.2	9.0	48836, 5065743	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
GEN2	1240 KW Diesel Generators	4.5	446.1	0.91	17.2	9.0	48840, 5065743	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
GEN3	1240 KW Diesel Generators	4.5	446.1	0.91	17.2	9.0	48844, 5065743	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
MILL	Exhaust gases piped to Mill Building for Dryer and exhausted from Mill Building	7.8	150	N/A	N/A	N/A	N/A	NO <sub>2</sub>	10102-44-0	4.4	1/2	Average	EF	68.8%
								CO	7446-09-5	0.4	1/2	Average	EF	68.8%
								PM	<<PM>>	0.02	1/2	Average	EF	68.8%
								SO <sub>2</sub>	7446-09-5	0.08	1/2	Average	EF	68.8%

Notes:

During normal mill operation, it was assumed that GEN1, GEN2, GEN3 are in operation, and GEN4 is on standby.

a. Source data and emissions data for generators are based on manufacturer's specifications. Mill Building is modelled as a virtual source.

**Table 1-3 Source Summary Table – Mill Down Time Scenario**

Source ID	Description	Source Data <sup>a</sup>						Emission Data <sup>a</sup>						
		Flow rate (m <sup>3</sup> /s)	Stack Exit Gas Temp (°C)	Diameter (m)	Height above grade (m)	Height above roof (m)	Stack Coord	Contaminant	CAS #	Emission Rate (g/s)	Averaging Period (hour)	Data Quality	Estimation Technique	% of Overall Emission
GEN1	1240 KW Diesel Generators	4.5	446.1	0.91	17.2	9.0	48836, 5065743	NO <sub>2</sub>	10102-44-0	2.9	1/2	Average	EF	100%
								CO	7446-09-5	0.24	1/2	Average	EF	100%
								PM	<<PM>>	0.02	1/2	Average	EF	100%
								SO <sub>2</sub>	7446-09-5	0.06	1/2	Average	EF	100%

Notes:

During mill down time operation, it was assumed that GEN1 is in operation, and GEN2, GEN3, and GEN4 are on standby. Exhaust gases are not ducted to the Mill Building, therefore there are no emissions from the Mill Building dryer stack.

a. Source data and emissions data for generators are based on manufacturer's specifications.

## 1.5 Dispersion Modelling

The MOE Appendix to Regulation 346 air dispersion model was used to predict the estimated maximum off-site half-hour average ground level concentrations (GLC) as required by the O. Reg 419/05. In the Regulation 346 dispersion model, an air emission source may be modelled as a point or virtual source, depending on the source and building configurations. The point source algorithm models the source as a stack, with buoyancy and momentum fluxes. The virtual source algorithm assumes that adjacent or attached buildings will significantly influence the dispersion of contaminants, and models the source as having the dimensions of the adjacent or attached building. The virtual source routine accounts for the initial dispersion of air contaminants as a result of the turbulence and wake created by the building.

The Appendix to the Regulation 346 dispersion model requires the following data as modelling input:

- Stack physical dimensions (height above ground, diameter, source x and y coordinates);
- Stack exit properties (velocity and temperature for point sources);
- Species emission rate;
- Building dimensions (length, width, height and virtual source centre x and y coordinates);
- Property line data; and,
- Receptor locations (used to assess the impact on receptors).

Based on the stack and building dimension data for the facility, the Mill Building emissions were modelled as a virtual source, which was the constructed rectangle of best fit around the mill building (including a proposed expansion to the warehouse area) and the Generator Building emission sources were modelled as point sources. The heights of the highest point on the building or group of buildings were used for the virtual source heights. It was assumed that all the facility air emission sources are operating at the same time.

The property line of the subject Mine site is shown in Figure 1-1. The coordinates of the property line are shown in Universal Transverse Mercator (UTM) geographic coordinate system and presented in Table 1-4.

**Table 1-4 Coordinates of the Subject Property**

Vertex	Property Line	
	X (m)	Y (m)
1	647627.1	5063609.1
2	649502.7	5064373.0
3	649708.6	5063866.0
4	650090.5	5064014.0
5	649700.9	5064967.6
6	650448.6	5065270.4
7	650259.8	5065735.7
8	649979.9	5065620.8
9	649875.7	5065893.9
10	649399.0	5065781.2
11	649095.7	5065692.3
12	649017.0	5065671.9
13	649031.1	5065911.3
14	648813.7	5065896.9
15	648574.7	5065807.5
16	648533.3	5065786.2
17	648539.8	5066204.7
18	647336.0	5066205.5
19	647335.4	5064854.4
20	647391.9	5064572.0
21	647254.5	5064517.2

Table 1-5 presents the input source data into the REG 346 model for the virtual and point sources considered for the modelling scenario. The locations of the sources are shown in Figure 1-2.

**Table 1-5 Point Source and Virtual Source Input Data**

Source Type	Description	Dimensions			Source Orientation	Source Coordinates			
		Length	Width	Height	degrees	X (m)	Y (m)		
		(m)	(m)	(m)					
Virtual Source (VS)	<b>Normal Operation</b>								
	MILL - Mill Building	60	81	24.9	0	648794	5065727		
	<b>Mill Down Time Operation</b>								
	MILL - Mill Building	Not in operation							
Source Type	Description	Height above roof	Height above ground	Exit velocity	Stack Diameter	Stack Exit Gas Temp.	Source Coordinates		
		(m)	(m)	(m/s)	(m)	( °C)	X (m)	Y (m)	
Point Source (PS)	<b>Normal Operation</b>								
	GEN1 - Generator 1 Stack	9.0	17.2	45.8	0.2	446.1	648836	5065744	
	GEN2 - Generator 2 Stack	9.0	17.2	45.8	0.2	446.1	648840	5065744	
	GEN3 - Generator 3 Stack	9.0	17.2	45.8	0.2	446.1	648844	5065744	
	GEN4 - Generator 4 Stacks	Not in operation							
	<b>Mill Down Time Operation</b>								
	GEN1 - Generator 1 Stack	9.0	17.2	45.8	0.2	446.1	648836	5065744	
	GEN2, GEN3, GEN4	Not in operation							

## 1.6 Emission Summary and Conclusion

The maximum POI concentration for the significant contaminants emitted from the subject facility were calculated based on the emission rates listed in Table 1-1 and 1-2 (Source Summary Tables), and the output from the dispersion modelling. Table 1-6 summarizes the maximum model predictions for the contaminants of concern (maximum half-hour POI concentrations) for both scenarios. The relevant MOE criteria and the percentage of the criteria are also presented in the Emission Summary Table. Table 1-7 presents the maximum predicted concentrations at the nearest point in Algonquin Park, and at the two nearest First Nations community (the Shawanaga First Nation and the Dokis First Nation) to the Mine. Algonquin

Park is located approximately 1500 m from the Mine, and the two First Nations are located more than 50 km to the southwest and northwest.

The maximum off-property ground level concentrations (GLC) for the significant contaminants for both scenarios were predicted to be below their respective MOE POI limits. The maximum off-property GLC occurs to the north, northeast and northwest of the mill area along the north property line. Levels of GLCs are predicted to decrease with increased distances from the mine.

At the nearest locations to the Mine in Algonquin Park, the Shawanaga First Nation and the Dokis First Nation, the maximum predicted concentrations were at most 9% (for NO<sub>x</sub>) and less than 1% (for the other contaminants) of the relevant air quality criteria during normal mill operation, and at the most 5% (for NO<sub>x</sub>) and less than 1% (for the other contaminants) during mill down time operation.

Based on a comparison of the dispersion model predictions to the relevant MOE air quality criteria, no adverse effects on local air quality were predicted due to implementation of the Project.



**Table 1-6 Emission Summary Table – Normal Operation Scenario**

Normal Operation Scenario									
Contaminant	CAS No.	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (ug/m <sup>3</sup> )	Averag -ing Period (hours)	MOE POI Limit (ug/m <sup>3</sup> )	Limiting Effect	Regulation Schedule # <sup>1</sup>	% of MOE POI Limit (%)
NO <sub>2</sub>	10102-44-0	8.75	Appendix to Reg346	419.1	1 / 2	500	Health	Schedule 2	84%
CO	7446-09-5	0.72		35.3		6000	Health	Schedule 2	<1%
PM	<<PM>>	0.05		2.1		100	Visibility	Schedule 2	2%
SO <sub>2</sub>	7446-09-5	0.17		7.7		830	Health	Schedule 2	<1%
Mill Down Time Scenario									
Contaminant	CAS No.	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (ug/m <sup>3</sup> )	Averag -ing Period (hours)	MOE POI Limit (ug/m <sup>3</sup> )	Limiting Effect	Regulation Schedule # <sup>1</sup>	% of MOE POI Limit (%)
NO <sub>2</sub>	10102-44-0	2.92	Appendix to Reg346	74.6	1 / 2	500	Health	Schedule 2	15%
CO	7446-09-5	0.24		6.2		6000	Health	Schedule 2	<1%
PM	<<PM>>	0.02		0.5		100	Visibility	Schedule 2	<1%
SO <sub>2</sub>	7446-09-5	0.06		1.5		830	Health	Schedule 2	<1%

**Table 1-7 Emission Summary Table – Special Receptors**

Contaminant	CAS No.	Total Facility Emission Rate (g/s)	MOE POI Limit <sup>1</sup> (ug/m <sup>3</sup> )	POI Concentration (ug/m <sup>3</sup> )	% of MOE POI Limit (%)	POI Concentration (ug/m <sup>3</sup> )	% of MOE POI Limit (%)	POI Concentration (ug/m <sup>3</sup> )	% of MOE POI Limit (%)
<b>Normal Operation Scenario</b>				<b>Algonquin Park (651585, 5066841)</b>		<b>Shawanaga FN (572378, 5029210)</b>		<b>Dokis FN (574803, 5108903)</b>	
NO <sub>2</sub>	10102-44-0	8.75	500	46.1	9%	0.41	<1%	0.40	<1%
CO	7446-09-5	0.72	6000	3.9	<1%	0.03	<1%	0.03	<1%
PM	<<PM>>	0.05	100	0.2	<1%	0.002	<1%	0.002	<1%
SO <sub>2</sub>	7446-09-5	0.17	830	0.9	<1%	0.01	<1%	0.01	<1%
<b>Mill Down Time Scenario</b>				<b>Algonquin Park (651585, 5066841)</b>		<b>Shawanaga FN (572378, 5029210)</b>		<b>Dokis FN (574803, 5108903)</b>	
NO <sub>2</sub>	10102-44-0	2.92	500	22.8	5%	0.2	<1%	0.2	<1%
CO	7446-09-5	0.24	6000	1.9	<1%	0.02	<1%	0.02	<1%
PM	<<PM>>	0.02	100	0.2	<1%	0.001	<1%	0.001	<1%
SO <sub>2</sub>	7446-09-5	0.06	830	0.5	<1%	0.004	<1%	0.004	<1%

Note:

1. Schedule 2 - O.Reg. 419/05 Schedule 2 Standards to be used with dispersion models in the Appendix to Regulation 346

# Appendix 1

## Graphite Drying System Specifications

Document No			
749	PR	004	Rv. A



# Proposal

Project: Graphite Drying System  
 Issue date: 22 Dec 2011  
 Project Site: Kearney Mine, Ontario  
 Prepared by: M. Hodson

*Leaders in process reactor  
 development with the  
**TORBED** \* Technologies*

Subject: **Proposal to Supply –  
 5MTPH TORBED Graphite Drying System.**

To: Name: Bob Mather, Jerry Janik  
 Representing: Bechma, Ontario Graphite

Submitted By: Name: Michael Hodson  
 Representing: Torftech (Canada) Inc. - TCI

With assistance from: Martin Groszek, Bob Laughlin, Pasco Iannetelli  
 Representing: Torftech Ltd. - TL, TCI, TL

This document is issued as a Proposal to Supply (1) Torbed Graphite Dryer System for use with the proposed Ontario Graphite's re-start of the Kearney Mine production facility.

The dryer will be based on Torftech's proprietary TORBED® technology and utilize the heat in the exhaust gases from the proposed diesel powered generator(s) to accomplish the drying operation. The operation of the diesel powered generator(s) will provide all of the required energy for the drying operation of the flake graphite following the filter press. Additionally since the drying action happens extremely rapidly due to the exceptionally energetic mixing of the graphite with the heating gases, there is a very low inventory of graphite in the reactor at any one time. This allows very precise process control of the drying operation.

This proposal is the culmination of the various discussions between Torftech and Ontario Graphite/ Bechma personnel as well as the Drying tests conducted on Kearney Mine graphite on the pilot scale TORBED reactor in October, 2011.

The scope, cost and implementation plan as described herein may be considered a firm offer to supply, however substantial deviations from this scope may be required to accommodate site conditions, interfaces to other contract supply (i.e. generator package etc.). These deviations will be considered on a case by case basis.

## **1 PROJECT ASSUMPTIONS**

Ontario Graphite Inc is re-opening a closed graphite mine to generate a high quality flake graphite product. After wet processing, the flake graphite concentrate will be filtered to produce a material containing 15-25% moisture. Prior to sale, the wet graphite must be dried to a residual moisture content of <1%.

Because of its location off the grid, Ontario Graphite will be installing 3 or 4 diesel powered engine generator sets each capable of generating about 1.25 - 1.5 MWe. Two or three of these will be operated at full power with one on standby. Exhaust from each of these units is generated at a rate of about 11,000 kg/hr at a temperature of 400°C, which provides more than sufficient energy to dry the planned maximum throughput of 5333 kg/hr of graphite flake at 25% moisture.

Torftech's TORBED gas solids contacting reactors are ideal units to utilize waste heat to dry fine particulates such as this wet graphite feed.

The basic assumption is that Torbed Graphite Drying System process basis of design is derived from the test work conducted at Torftech's Pilot Plant in October 2011, and reported in Torftech Project Document 749-RP-02. Pilot scale tests have shown that the TORBED Expanded Bed Reactor (EBR) can dry flake graphite from Ontario Graphite's mine to substantially less than 1% moisture over a drying temperature range of 150-200°C with estimated solids residence times of 40-60 seconds.

The tests also showed that the EBR affected a separation of the product by size: approximately 80% of the dry product was discharged from the base of the reactor as a coarse stream 96% >75µm. The balance of the dried material exited with the drying gas to be caught in a dust collector. This fine stream had a particle size distribution essentially 100% <150µm and 75% <75µm.

## 2 **BASIS OF DESIGN**

The reader is encouraged to review the attached flow sheet (appendix A), in conjunction with the following technical description.

The units of measure in the following are SI unless noted. In some cases for reference, imperial units are noted as such [imp. units]. Further, the designation MTPH= Metric Tonnes Per Hour.

The basis of design, as discussed above, is a single system of nominal capacity of 5 MTPH of Crystalline Graphite Filter Cake materials up to 20% moisture content to generate 4,000 kg/hr of dried Graphite feed at >1% residual moisture.

- Feed Material.

Torftech have been asked to assume a maximum dry graphite production rate of 4000 kg/hr to be generated from a feed of 4700 to 5333 kg/hr of wet material with a moisture content between 15 and 25%. This maximum design capacity needs to be confirmed as sizing will be based on this value.

The solids/ water separation operation is outside the Torftech scope of supply, but must be understood by Torftech so that the process objectives and process control can be defined effectively. Torftech's preliminary understanding is that the feed to the dryer will be variable and that the dryer design must be capable of handling these variations. An assessment of likely ranges and rates of change will be established. Torftech understands that the selection of the graphite filtering process has not yet been made. The discussed range of moisture content (15% to 25% moisture by weight) of the filter cake requires drying is well within the energy availability from the engines. Torftech needs to understand the physical nature of the cake and whether any materials handling issues might be encountered. At this point, it is assumed that the filter cake will be sufficiently 'broken' up and suitable for conveyance via standard bulk material conveying methods (ie screw conveyor into the Reactor).

- Drying Performance

The process objective is a steady exit flow of 4000 kg/ hr of dried Graphite at <1% moisture.

Process engineering suggests that there is sufficient energy in the diesel exhaust to provide all of the energy required. Consideration will be given to providing a system which could incorporate a stand-by burner in future, to be used in the event that this energy is insufficient. The proposed size of this auxiliary burner and recommended fuel type will be defined, as well as the suggested mounting point in the system.

The results of the pilot scale tests suggest that at temperatures of approximately 150°C, the performance of the dryer is relatively accommodating to changes in drying temperatures and feed flows, with the dried product consistently showing a residual moisture content of about 0.1%. For a maximum feed rate of 5333 kg/hr of material with a 25% moisture it is anticipated that an EBR with an internal diameter of about 1.5m will be utilized. Torftech will work with the diesel generator supplier to design for a "no interference" condition with respect to the operation of the engines. This will determine the pressures required to be maintained in the system. Materials of construction will be selected to allow for a maximum inlet temperature of 400°C and maximum dryer operating temperature of 200°C (dryer outlet control point). Insulation requirements for the

reactor will be determined and specified during detailed engineering to address thermal losses for efficiency as well as OSHA requirements.

- Linking the generator exhaust to the dryer

The dryer will be operated with an approximately constant mass flow of dryer gas entering the unit. The temperature of the incoming dryer gas will be modulated to maintain a set dryer exhaust temperature. This temperature will be modulated by varying the proportion of engine exhaust and cold air entering the dryer. Thus, a varying mass flow of gas engine exhaust will be used in the dryer, with the balance being exhausted directly to the atmosphere. The flow of engine exhaust will be modulated by a motorized valve responding to signals generated by the dryer outlet thermocouple. The flow of cold air will also be modulated by a motorized valve that will respond to a flow meter in the dryer exhaust to maintain the total flow of dryer exhaust constant. This control strategy is proposed because it will allow for variations in the temperature of the engine exhaust delivered to the dryer, caused either by engine operations or changes in the temperature losses in the delivery ducts at different seasons of the year. Since this links directly to the gas engines, Torftech will refine this design element in consultation with the diesel generator supplier, to avoid any negative impact on the engine operations. Assistance with facilitating these discussions will be required from Ontario Graphite and/ or its designate(s).

- Dry Graphite Removal and storage

Initially, it is planned to configure the drying system to discharge at least two different dry graphite streams via rotary airlock valves. The larger stream will discharge from the base of the TORBED EBR dryer (Coarse Flake Graphite) and the second, from the hopper of the bag filter (fine material). Pick up of these two streams separately or combined will be provided by others.

- Project Location/ System Layout

The physical characteristics of the project location need to be confirmed in conjunction with OG/ Bechma, in terms of space, availability of utilities etc. One particularly important consideration is the location of the diesel generator exhaust and the routing of the conveying duct to the dryer location. This proposal is based on initial discussions with OG during the site visit to the Kearney mine site on 14 November.

Specifically the assumptions are that;

- The proposed dryer location is in the main process building in approximately the same position as the original dryer was in. This is the area between columns lines D and F and between columns lines 4 and 5A.
- The gas mixer will be adjacent to or combined with the inlet plenum of the Dryer reactor. Furthermore the gas ratio valves are to be part of the gas mixer assembly.
- Similarly the proposed system dust collector will be located inside the building in the same general area as the dryer, as close as physically possible to the dryer. The dryer scope does not currently include any provision for outdoor (winter) operation.
- The location of the Diesel Powered Generators are within the confines of the existing generator building to the east of the main process building. Further, it is assumed that the exhaust

manifolds of each of the engines are collected into one exhaust plenum and ducted to the west side of this existing building and exhausted to a stack. It is proposed that the interface for the dryer system is a flange on this stack where the dryer ducting will be drawn off via negative pressure.

- It is assumed that the routing of the main exhaust duct can be optimized for the lowest static resistance and also to minimize heat loss of the gas via radiation of the surface of the ducting. At present, we have allowed for approximately 100 m of ducting. Proposed layout is roughly as shown in illustration below.



- Additionally, it has been assumed that the ducting run will be supported by existing structural steel elements forming part of the building frame. There are no specific provisions for free standing duct supports in the scope of supply.
- It is assumed that the new filter press will be situated on the upper mezzanine at the area between columns lines D and E and between columns lines 4 and 5A, at elevation 1556'-8 7/8". It is further assumed that the filter cake will drop through an opening in this mezzanine floor into the in-feed bin provided by Torftech.
- It is assumed that the Dryer ID fan would also be located on the upper mezzanine at the area between columns lines D and E and between columns lines 4 and 5A, at elevation 1556'-8 7/8" and that the discharge for the fan would be out through the side of the building in the same general vicinity. It is not envisioned at present to have a free standing exhaust stack.
- It is assumed that a main control panel would be located in the proposed operators room (location to be finalized).



- Plant Work Schedule.

Assumed to be 24/7 continuous operation.

Utilization calculations will be nominally calculated on 8400 Hours per Annum, allowing for 2 weeks of routine downtime for maintenance etc.

The plant operation is assumed to be completely automated.

### **3 PROPOSED SYSTEM OPERATION**

The system will be run in a steady state mode 24 hours/day 7 days per week, processing wet graphite at a variable feed rate up to the design maximum of 5333 kg/hr and potentially variable moisture content up to the design maximum of 25%. The rate and quality of the wet graphite delivered to the dryer will be determined by the operation of the up-stream graphite de-watering system.

A relatively constant mass flow of gas will be maintained through the dryer which will be operated at a drying temperature of 150°C. The variation in the drying duty caused by variations of moisture or flow in the wet graphite feed will be addressed by modulating the temperature of the gas entering the dryer. The gas temperature modulation will be accomplished by varying the ratio of hot exhaust gas and cold air brought into the dryer. If the drying temperature measured in the dryer outlet begins to fall the mass of hot exhaust entering the dryer will be increased while the mass of cold air entering will be decreased by a similar amount.

Start up of the process will use the hot exhaust gas from the diesel engines to thoroughly warm the entire system to about 175°C with no wet graphite being fed to the dryer. The dryer temperature control loop will protect the bag filter by ensuring that the temperature does not exceed 175°C. With the system warmed through, the wet graphite feed to the unit will be ramped up slowly using manual control. When the feed rate has reached the wet graphite production rate, the time of start up, the system will be passed over to fully automated control.

Three main control loops will be used:

- Changes in the dryer outlet temperature will cause a movement in the motorized control valve on the hot gas exhaust inlet line to increase or decrease the flow of hot gas.
- A flow measurement in the bag-house exhaust will signal a motorized valve on the cold air inlet which will respond by increasing or decreasing the flow of cold air to the system to maintain the total flow in the system constant
- A pressure control loop will maintain a constant negative pressure at the inlet to the dryer, by sending a signal to a VFD controlling the induced draft fan speed. This will compensate for changes in the pressure drop across the bag filter as the loading builds up between bag cleanings.

An appropriate control strategy will be developed to maintain a seal on the feed system, with the variable feed rate of graphite that is anticipated to be generated by the upstream process. Normally, this is accomplished by having a flooded screw feeding into the dryer feeding at a variable rate, roughly in proportion to the filter cake generation rate.

#### 4 SCOPE OF SUPPLY/ EQUIPMENT DESCRIPTION

The proposed scope of supply for the system will include the following major components:

- T1500 TORBED EBR Drying Reactor. The dryer is a fabricated steel unit and sized at 1.5 m basic internal diameter. The unit will be constructed and shipped in as few pieces as practical to minimize assembly time at site. The exterior surfaces of the dryer will be insulated and clad for thermal efficiency (application of insulation and cladding will be done on site). The overall size of the reactor is estimated to be approx 3000 OD x 4500 high. The reactor is complete with a discharge rotary airlock valve to ensure pressure conditions are maintained inside the dryer while providing an outlet for the coarse dried graphite.
- Gas Mixer. The gas mixer is used to blend 2 streams of process gas into one stream for the dryer. The mixer is a fabricated unit with internal insulation.
- Hot Process Gas Valve – Engine Exhaust Gas. High temperature gas flow control valve sized at approx 30" diameter, will be specified to provide the require pressure drop which is used to control approx 18,000 kg/hr of hot process gas at nominally 400c temperature. The valve operator is an electro mechanical motor unit driven via the plant control system.
- Cold Process Gas Valve – Dilution air. Low temperature gas flow control valve sized at approx 12" diameter, will be specified to provide the require pressure drop which is used to control approx 4,500 kg/hr of ambient process air at nominally 20c temperature. The valve operator is an electro mechanical motor unit driven via the plant control system. It is envisioned that this air source will be drawn from within the process building.
- Graphite Feed Bin. Steel fabricated bin is heavy duty design and sized to receive Graphite cake from filter press. Bin will be supported from the mezzanine decking and will interface with the primary screw feeder. Level controls tied into the control system are included to maintain an inventory in this bin.
- Graphite Feed System. Consisting of a specially designed screw conveyor to receive the graphite filter cake from the graphite feed bin and convey it into the dryer reactor. The screw conveyor is a fully sealed unit with a VFD controlled drive to vary the speed and thus the feed rate (VFD by others). The screw conveyor features a floating discharge end to allow the graphite to be discharged inside the dryer reactor without the need for a discharge end bearing in the hot dryer environment. This unit features a tail end drive (approximately 5 HP) and operates in a 'flooded flight mode' to a seal against the controlled atmosphere of the dryer.
- Dryer Fan. Nominal 16,000 ACFM fan to move approx 23,000 kg of dryer gas at 150c from the dust collector outlet. The assumed developed pressure is assumed to be approximately 5.0 kPa. The fan is estimated absorb approx 80 HP (power input) to the backward curved impellor. The fan is to be supplied with a directly driven 100 HP fan motor. Motor is 3/60/575, 1800 RPM TEFC unit suitable for VFD control (VFD by Client in MCC package).
- Bag house Dust Collector. Nominally sized as 20,000 ACFM, at 150c temperature. The collector is complete with an automated bag cleaning system, explosion vents and platform access for maintenance. The bag house is complete with a discharge rotary airlock valve to ensure pressure conditions are maintained inside the collector while providing an outlet for the fine dried graphite.

Additionally the proposed scope of supply for the system will include the following lot/ package items:

- Controls Package. The system controls will comprise an automated control system with a User interface capable of operating the system. Main control panel will be provided to be installed in operators control room and will house the User interface. Includes all instrumentation to support the control loops as described in the Proposed Operation section 3.
- Ducting. Interconnecting ductwork between the various Dryer System components as described above. At this time a provisional allowance has been included in the CAPEX to provide for the interconnecting ductwork between the system components and between the D-G sets as discussed in Section 2 (Basis of Design).
- Support Steel. At this time a provisional allowance has been included in the CAPEX to provide for equipment mounting and support as well as allowing operator and maintenance staff access to equipment.
- Engineering and Project Services. In addition to the component parts listed, Torftech's price includes for;

*Engineering Design*. All engineering required to specify and manufacture the component parts of the system as well as control and integration with interfacing systems, will be undertaken. As part of the engineering, the following project deliverables for the scope and battery limits defined as part of the project, (currently assumed to be as shown on the PFD included in this proposal) and will include:

- Process flow sheet (Drawing with Mass and Energy Balance)
- Outline equipment drawings for major equipment:
  - TORBED T1500 EBR Reactor
  - TORFTECH Gas pre-mixer
  - Dust Collector
  - ID Fan
- General Assembly Drawings:
  - Plan and elevation of the equipment (GA only)
  - Ducting routing diagrams.
  - Graphite Feed System (GA only)
- Engineering and Procurement Specification for balance of major equipment:
  - Gas Flow Control Valves
  - Ducting manufacture.
  - Control system
  - Rotary Airlock Valves
  - Screw Conveyors
  - Ducting; Installation and Insulation scope.
  - Major components; Installation and Insulation scope
  - Support steel etc.
- Control philosophy
- Single line power schematic
- P& I D drawing
- Process description
- Project Time Schedule

Note: It is assumed that Ontario Graphite will be addressing the issues of obtaining any required permits, and as such no provision is made in the engineering to directly prepare applications, etc for permits. Of course, as a project partner we will provide assistance where required and support to OG/ Bechma in these efforts.

*Procurement and Manufacturing Supervision.* This covers the organization of manufacturing and procurement of system components. All the components will be specified, procured (or manufactured) and approved for shipping, by TCI. Where appropriate, the client or client appointed representative, will be invited to review and monitor (or approve) components during manufacture.

*Project Management.* To ensure project schedule and technical objectives are met, a project schedule will be kept up to date and issued to the client on a regular basis. The project plan will incorporate items that need to be accomplished by others and will be used as a guide to the project progress.

*Site Visits for Meetings and Site Inspections.* Typically this includes an initial site inspection and project kick off meeting, as well as a number of regular project review meetings during the engineering phase for detailed discussions concerning equipment specification and integration. Finally, once system design is frozen and component specifications are fixed, an installation meeting will be held to assist the client or clients installation contractor to assess and plan construction and installation requirements. We have provided for meetings at the mine site as well as at the OG/ Bechma offices (or engineering designate) as required.

*HAZOP (Hazards and Operability Assessment).* During the latter stages of the initial engineering, the process should be well enough defined to conduct a HazOp meeting. This meeting should involve Torftech, Bechma and Ontario Graphite staff, plus representatives from the diesel generator supplier and the filter supplier (when known), to review the proposed operation for functionality, operability and any hazards that might be created. This is basically a meeting at which a lot of "what if" questions are posed and addressed.

*Supply of manuals and documentation for the scope of supply.* During the project, documentation will be sent to the client or client appointed representative for information. Prior to final completion, an Installation and Operation manual will be supplied in English as a PDF file in electronic format.

## 5 PROJECT BATTERY LIMITS/ INTERFACE POINTS

- *Graphite Feed* – assumed that OG/ Bechma will provide means of discharging the graphite feed material from the press into the receiving bin as described above. Interface point is the inlet flange of the Feed Bin.
- *Dried Graphite Product.* – assumed that OG/ Bechma will provide a transportation/ inventory control system to receive and transport the dried graphite product from the rotary valves mounted on the Torbed discharge and the Dust Collector discharge. Accordingly the interface points for the dried Graphite stream is assumed to be;
  - the bottom flange of the outlet rotary airlock valve mounted to the bottom of the dryer (Coarse Stream) and,
  - the bottom flange of the outlet rotary airlock valve mounted to the bottom of the Dust Collector (Fine Stream).
- *Process Gas Connections.*
  - Exhaust Flue Gas from Diesel Generator Plant. The interface for the dryer system is a bolted flange on the stack where the dryer ducting will be drawn off via negative pressure. The approximate size of the connection is a 30" diameter ANSI style flange.
  - Process Dilution Air. The ambient dilution air for use in the mixer is proposed to be drawn from inside the process building. a screened safety inlet will be provided on the mixer inlet valve.
  - Process Exhaust. – a short length of ducting is to be provided from the outlet of the ID fan casing to the system discharge point. Client to specify if this point is to be tied into an external building stack or wall Louvre vent port. Approx outlet size will be [24"x22"] -TBC.
- *Electrical Power Supply/ Controls Wiring.*
  - Electric Motor Connections. All motors will be TEFC style and be complete with frame mounted NEMA connection boxes. Installation contractor will be responsible for providing power from MCC room to motor terminations.
  - Control System Elements. Discrete instruments mounted on reactor and ducting will be shipped loose for mounting during installation. Installation contractor will be responsible for providing power from [1] MCC room to control panel terminations, [2] from
  - Main control Panel. Main control panel will be shipped loose for mounting during installation in control room. Installation contractor will be responsible for providing power from [1] MCC room to control panel terminations; [2] from control panel terminations to discrete instrumentation; [3] from control panel terminations to sub component control panel(s) ie Dust Collector; [4] from control panel terminations to MCC and VFD motor control input points.
  - Dust Collector will have control panel. Installation contractor will be responsible for providing power and signal wiring from [1] main control panel to dust collector control panel terminations.

## 6 Not Included/ By Others

- Project supply is based on EXW (ex Works) basis. Client is responsible for Shipping of Torftech Components to site and offloading/ lay-down of equipment at installation site as required.
- Civil engineering/ plant foundations and anchor bolts, site preparation and associated services as required.
- Similarly, support steel and mounting frames will be provided for mechanical mounting of the components by Torftech. Where practical, these frames etc, will mount to existing building steel/ concrete mezzanine etc. The structural steel and mounting frames will be designed and fabricated to support the static and dynamic loading of the components which they service, however the connection details, and verification or structural capacity of the mating support points will be the responsibility of the client.
- As noted in section 2 (basis of design), there is no provisioning this scope for free standing duct supports. If, upon engineering review it is deemed that the existing building structural steel is incapable of carrying the additional load of the main duct run, the additional supports would be supplied by others.
- Installation, including lifting and positioning, and assembling are not included in the scope.
- Electrical power distribution including;
  - MCC and MCC room, main equipment disconnects etc. It is envisioned that the control of two of the process motors will be via VFD drives. These are to be provided by the client as part of the MCC and will be approximately;
    - Dryer Fan Motor VFD. Capable of controlling the 100 HP fan motor, 575 primary c/w input from dryer control system.
    - Feed Screw Conveyor motor VFD. Capable of controlling the 3 HP drive motor, 575 primary c/w input from dryer control system.
    - All other drives would be standard fixed speed motor starters to the clients specification.
  - Electrical installation interconnection wiring and junction boxes (as required by local code), electrical and instrument cables direct to equipment and instruments, cable trays, grounding and plant lighting etc.
- Discharge ducting from Dryer ID fan. As detailed in section 5. (Interface points).
- Building (including control room and MCC room).
- Permits and licences including stack modeling (if required). Of course, as a project partner we will provide assistance where required and support to OG/ Bechma in these efforts.
- Provision of all utilities, instrument air, gas, electrical power and control supplies etc., to battery limit points noted as required. Bulk propane reservoir (or natural gas-line to) and delivery system to Fuel Train(s) is also the responsibility of the customer.

- Site services of Torftech personnel during installation and commissioning. Our standard field rates for both the North American and British offices would prevail if the site services are taken on a per Diem Basis.

## 7 CAPITAL COST

Total firm price for supply of 1 Graphite Dryer System as described herein is. .... CAD \$875,000.00

Price is quoted in Canadian Dollars, based on delivery on EXW basis (per INCOTERMS), exclusive of applicable taxes, brokerage, duties etc. See also section 9 (Project Execution) for further details of shipping considerations.

This offer will be valid for a period of 30 days from date of proposal unless specifically agreed to otherwise.

We typically structure a payment schedule for the project which allows for progress payments against measurable milestones. A suggested schedule for this project would be as such;

Invoice	Milestone for Invoice Submission	%	Due
#1	With PO (to be invoiced and due upon Client placement of PO for work).	20%	Upon Receipt
#2	Submission of Approval Drawings for Client review.	10%	N30
#3	Placement of Major Sub-orders (*list of items below). Client will be provided un-priced copies of TCI PO's.	30%	N30
#4	Client signoff (Reactor ready to ship) at Fabrication shop.	30%	Upon Receipt (to match receipt of goods at site)
#5	"Holdback" invoice issued at time of shipping	10%	After earlier of: (i) commissioning and acceptance or (ii) 90 days after shipment whichever occurs first.

\*Major Sub Orders:

- Reactor and Mixer Fabrication Contract.
- Dust Collector Package.
- Fan Package.

## **8 OPERATING COST ESTIMATE**

*Connected Electrical Load.* The total connected load of the plant will be approximately 80-120 kW. The absorbed power will depend on process and ambient air conditions, but is expected to be in the order of 50-75% of the connected load. The single largest load is the Dryer ID fan which is estimated to be 75 kW [100 HP].

*Compressed Air.* Will be required for the dust collector cleaning system. Specifications and volume of C/A to be advised once dust collector supplier is finalized.

*Water.* There is no foreseen requirement for process water in the drying system.

*Propane.* It is not envisioned that any propane will be required for operation of the dryer. The proposed system start-up is envisioned to use the heat of the generators for pre-heat of the dryer. If the client elects to install a redundant burner system as discussed in preliminary meetings, the specification and volume of gas would be advised once scope is finalized.

*Operators.* It is envisioned that the system is fully automated and does not require a full time attendant. For normal operation, the system would require a normal workforce of 1 part time supervision /plant operator per shift per plant.

*Maintenance.* Generally assumed to be approx 5% of delivered Equipment Cost per year of operation. This is an estimate for the complete drying system. As discussed in earlier correspondence, the design and operation of the Torbed reactor is inherently simpler than that of many conventional dryers, as there are neither wear parts nor any internal moving components. These design features result in very low ongoing maintenance costs for the TORBED Dryer, however the dust collector, fan, screw conveyors etc would all have some PM routines associated with their use. This provisional allowance includes parts, supplies and labour for preventative and routine maintenance.

## **9 PROJECT EXECUTION**

*General Description.* It is assumed that Torftech will undertake the design, specification and supply of all equipment and components as described herein in accordance with the contract to supply TCI document 749AG030 rv A.

*Timescale.* The duration of the modification project is 16-20 weeks, driven mainly by the fabrication schedule and the delivery of the major buy out components.

*Shipping and Transport of Goods, Country of Origin.* This estimate is offered on the basis of delivery of goods to OG/ Bechma on EXW (Ex Works) per INCOTERMS, latest revision). Please note that as the project scope and timetable are refined, vendors and fabricators of goods may change. Currently the proposal as offered is based on primarily North American supply of major components. In all cases, however, North American manufacturing conventions and codes will be the basis of design.

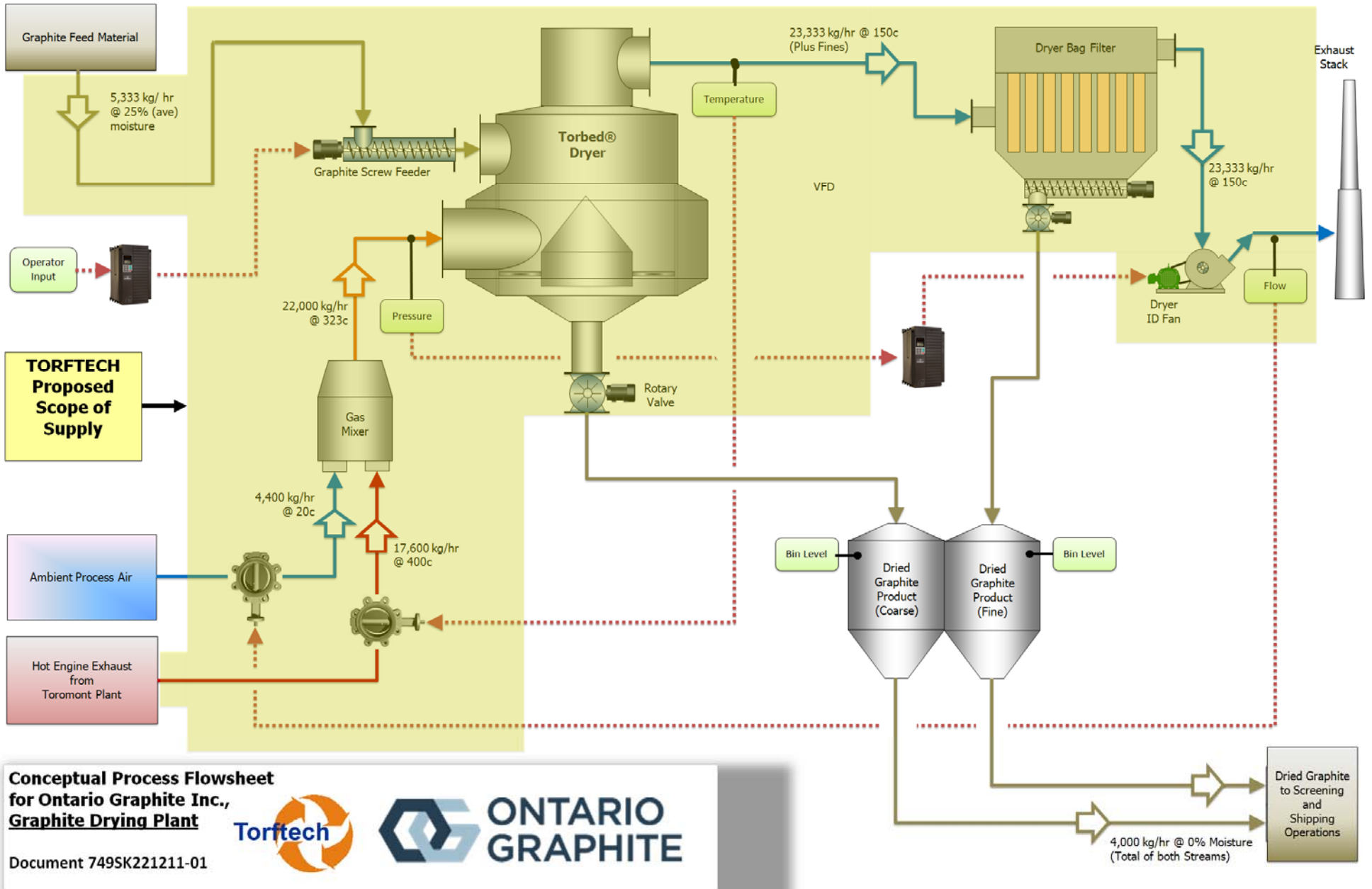
*Shop testing and Preassembly.* In most cases pre assembly and testing of the system components is not possible. Sub assemblies (smaller fans, rotary valves, screw feeders etc.) may be tested prior to shipping if facilities allow.



## **10 NOTICE of IP**

All concepts and designs contained in this proposal are the property of Torftech Canada Inc. and are provided for the purpose of proposal evaluation only. They may not be used for any other purpose, or discussed with others without the expressed written consent of Torftech. All rights of design and invention are reserved.

## Appendix A – System Process Flow Diagram.



# Appendix 2

Diesel Generator Specifications



# Exhaust Emission Data Sheet

## 1500DQGAB

### 60 Hz Diesel Generator Set

**Engine Information:**

Model:	Cummins Inc, QSK50-G4 NR2	Bore:	6.25 in. (159 mm)
Type:	4 Cycle, 60°V, 16 Cylinder Diesel	Stroke:	6.25 in. (159 mm)
Aspiration:	Turbocharged and Low Temperature Aftercooled	Displacement:	3067 cu. In. (50.2 liters)
Compression Ratio:	15.0:1		
Emission Control Device:	Turbocharged and Low Temperature Aftercooled		

	<b>1/4</b>	<b>1/2</b>	<b>3/4</b>	<b>Full</b>	<b>Full</b>
<b>PERFORMANCE DATA</b>	<b>Standby</b>	<b>Standby</b>	<b>Standby</b>	<b>Standby</b>	<b>Prime</b>
BHP @ 1800 RPM (60 Hz)	555	1111	1666	2205	1971
Fuel Consumption (gal/Hr)	32.5	60.2	83.4	109.4	97.8
Exhaust Gas Flow (CFM)	4815	8320	10180	12065	11000
Exhaust Gas Temperature (°F)	665	745	785	915	835
<b>EXHAUST EMISSION DATA</b>					
HC (Total Unburned Hydrocarbons)	0.33	0.19	0.12	0.08	0.09
NOx (Oxides of Nitrogen as NO2)	3.20	3.50	4.90	5.70	5.80
CO (carbon Monoxide)	0.96	0.55	0.40	0.57	0.48
PM (Particular Matter)	0.15	0.05	0.05	0.03	0.03
SO2 (Sulfur Dioxide)	0.13	0.12	0.12	0.11	0.11
Smoke (Bosch)	0.50	0.20	0.20	0.20	0.20

All values are Grams per HP-Hour, Smoke is Bosch#

**TEST CONDITIONS**

Data is representative of steady-state engine speed ( $\pm 25$  RPM) with full load ( $\pm 2\%$ ). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification:	ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and 40-48 cetane number.
Fuel Temperature:	99 $\pm$ 9 °F (at fuel pump inlet)
Intake Air Temperature:	77 $\pm$ 9 °F
Barometric Pressure:	29.6 $\pm$ 1 in. Hg
Humidity:	NOx measurement corrected to 75 grains H2O/lb dry air
Reference Standard:	ISO 8178

The NOx, HC, CO and PM emission data tabulated here are representative of test data taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

# Appendix 3

## Emission Calculations

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Ontario Graphite

Environmental Screening Report for Permanent Generators

Source ID GENSET

Emission Calculations - Four 1240 kW Cummins 1500DQGAB 60 Hz Diesel Generator Sets at the Mill Generator Building

Emissions Scenario

Scenario 1 Normal Mill Operation - Two generators in operation, one on standby. Hot exhaust gases from generators piped to Mill Building

Scenario 2 Mill downtime - Only one generator in operation. Hot exhaust gases from generators are not piped to Mill Building

Based on Cummins 1500 DQGAB, 60 Hz Diesel Generator Set, Model QSK50-G4 NR2

Emission calculations are based on manufacturer's emission rates with generator operating at the rerated power rating of 1240 KW (originally rated at 1350 KW)

Generator Specifications

Number of Units	4		
Make	Cummins		
Model	QSK50-G4 NR2		
Power Rating of model (Original)	1350	eKW	
	1688	kVA	
	1810	HP	
Power Rating (Maximum Re-rated Operating Power)	1240	eKW	91.9%
	1663	HP	
Engine Power (Original)	1470	BKW	
	1971	BHP	
Engine Power (Re-rated)	1350	BKW	
	1810	BHP	
Fuel	Diesel		

Emissions Calculations for Generator

(reference: Manufacturer's Exhaust Emission Data Sheet for 1500DQGAB, Model QSK50-G4 NR2)

Source ID	Source Description	Contaminants	CAS #	Emission Factor <sup>a</sup>		Half-hour Emission Rate	
						1 unit g/s	3 units g/s
GEN1, GEN2, GEN3, GEN4	1350 eKW (re-rated at 1240 eKW) Diesel Generator - 4 units	NOx (as NO <sub>2</sub> )	10102-44-0	5.80	g/HP-hr	2.9	8.8
		CO	7446-09-5	0.48	g/HP-hr	0.24	0.7
		PM	<<PM>>	0.03	g/HP-hr	0.02	0.05
		SO <sub>2</sub>	7446-09-5	1.10E-01	g/HP-hr	0.06	0.2

Notes:

a. Emission rates for NOx, CO, SO<sub>2</sub> and PM are provided in the Manufacturer's Exhaust Emission Data Sheet.

Emission rates are based on Manufacturer's data for Full Prime operation, and pro-rated for generator re-rated at 1240 kW (i.e. 1350 BKW engine power).

During Normal Mill Operation, only 3 of the 4 generators will be operating at any time, and one will be on standby. Exhaust gases are piped to Mill Building based on flow rates indicated in Graphite Drying Plant Process Flow Diagram Document 749SK221211-02 (Torftech Proposal dated Dec 22, 2011).

During Mill Down Time, only 1 generator will be operating, and exhaust gases will not be piped to Mill Building.

**Total Mass Flow with 1 genset in operation**

volume flow	10104 cfm
volume flow	286.3 m3/min
volume flow	17179 m3/hour
volume flow	4.8 m3/s
gas density - dry	0.49 kg/m3
gas density - wet	0.50 kg/m3 (based on 75 grains H2O/lb dry air)
humidity	75 grains H2O/lb of dry air
humidity	0.0107 lb H2O/lb of dry air
humidity	1.07 % humidity
mass flow	8521 kg/hour
exhaust temperature	835.0 deg F
exhaust temperature	446.1 deg C
exhaust temperature	719.3 deg K

**Total Mass Flow with 3 gensets in operation**

mass flow	25564 kg/hour
volume flow	51538.5 m3/hour
volume flow	14.32 m3/s
exhaust temperature	446.1 deg C
exhaust temperature	719.26 deg K

**During Normal Operation with 3 running at 1.24 MW  
Flow piped to Mill Building**

mass flow	17600 kg/hr
% of total flow	68.8%

**Exhaust at Generator Building**

mass flow	7964 kg/hour
volume flow	16056 m3/hour
volume flow	267.60 m3/min
volume flow	4.5 m3/s
% of total flow	31.2%

**Exhaust at Mill Building**

mass flow	23333 kg/hour
air density	0.83 kg/m3
volume flow	27956 m3/hour
volume flow	465.9 m3/min
volume flow	7.8 m3/s
exhaust temperature	150 deg C
exhaust temperature	423.15 deg K

**Summary of Emissions**

**Scenario 1 - During Normal Mill Operation - Three generators in operation, one on standby. Hot exhaust gases from generators piped to Mill Building**

Source ID	Source Description	Contaminants	CAS #	Half-hour Emission Rate g/s
<b>GEN1, GEN2, GEN3, GEN4</b>	1240 KW Diesel Generator - 4 units (3 in operation, 1 standby)	NOx (as NO <sub>2</sub> )	10102-44-0	2.73
		CO	7446-09-5	0.23
		PM	<<PM>>	0.01
		SO <sub>2</sub>	7446-09-5	0.05
<b>MILL</b>	Exhaust gases piped to Mill Building for Dryer and exhausted from Mill Building	NOx (as NO <sub>2</sub> )	10102-44-0	6.0
		CO	7446-09-5	0.50
		PM	<<PM>>	0.03
		SO <sub>2</sub>	7446-09-5	0.11

**Scenario 2 - During Mill down time - Only one generator in operation to run auxillary equipment**

Source ID	Source Description	Contaminants	CAS #	Half-hour Emission Rate g/s
<b>GEN1, GEN2, GEN3, GEN4</b>	1240 KW Diesel Generator - 4 units (only 1 in operation)	NOx (as NO <sub>2</sub> )	10102-44-0	2.9
		CO	7446-09-5	0.24
		PM	<<PM>>	0.02
		SO <sub>2</sub>	7446-09-5	0.06
<b>MILL</b>	Exhaust gases piped to Mill Building for Dryer and exhausted from Mill Building - not in operation	NOx (as NO <sub>2</sub> )	10102-44-0	0
		CO	7446-09-5	0
		PM	<<PM>>	0
		SO <sub>2</sub>	7446-09-5	0



Source Summary Table -Generator Building as point source, and Mill Building as virtual source

Scenario 1 - Normal Mill Operation - Three generators in operation, one on standby. Hot exhaust gases from generators piped to Mill Building

Source ID	Description	Source Data <sup>a</sup>						Emission Data <sup>b</sup>						
		Flow rate (m <sup>3</sup> /s)	Stack Exit Gas Temperature (°C)	Diameter (m)	Height above grade (m)	Height above roof (m)	Stack Coordinates <sup>1</sup>	Contaminant	CAS #	Emission Rate (g/s)	Averaging Period (hour)	Data Quality	Estimation Technique	Percentage of Overall Emission
GEN1	1240 KW Diesel Generator	4.5	446.1	0.20	17.2	9.0	(48836, 5065744)	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
GEN2	1240 KW Diesel Generator	4.5	446.1	0.20	17.2	9.0	(48840, 5065744)	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
GEN3	1240 KW Diesel Generator	4.5	446.1	0.20	17.2	9.0	(48844, 5065744)	NO <sub>2</sub>	10102-44-0	0.91	1/2	Average	EF	10.4%
								CO	7446-09-5	0.08	1/2	Average	EF	10.4%
								PM	<<PM>>	4.70E-03	1/2	Average	EF	10.4%
								SO <sub>2</sub>	7446-09-5	1.72E-02	1/2	Average	EF	10.4%
MILL	Exhaust gases piped to Mill Building for Dryer and exhausted from Mill Building	7.8	150	N/A	N/A	N/A	N/A	NO <sub>2</sub>	10102-44-0	6.0	1/2	Average	EF	68.8%
								CO	7446-09-5	0.5	1/2	Average	EF	68.8%
								PM	<<PM>>	0.03	1/2	Average	EF	68.8%
								SO <sub>2</sub>	7446-09-5	0.11	1/2	Average	EF	68.8%

Note: 1 - Locations of the stacks were assumed to be 4 m apart along east-west direction.

Scenario 2 - During Mill down time - Only one generator in operation to run auxillary equipment

Source ID	Description	Source Data <sup>a</sup>						Emission Data <sup>b</sup>						
		Flow rate (m <sup>3</sup> /s)	Stack Exit Gas Temperature (°C)	Diameter (m)	Height above grade (m)	Height above roof (m)	Stack Coordinates	Contaminant	CAS #	Emission Rate (g/s)	Averaging Period (hour)	Data Quality	Estimation Technique	Percentage of Overall Emission
GEN1	1240 KW Diesel Generator	4.8	446.1	0.20	17.2	9.0	(48836, 5065744)	NO <sub>2</sub>	10102-44-0	2.9	1/2	Average	EF	100%
								CO	7446-09-5	0.24	1/2	Average	EF	100%
								PM	<<PM>>	0.02	1/2	Average	EF	100%
								SO <sub>2</sub>	7446-09-5	0.06	1/2	Average	EF	100%
GEN2	1240 KW Diesel Generator	4.8	446.1	0.20	17.2	9.0	(48840, 5065744)	NO <sub>2</sub>	10102-44-0	0	1/2	Average	EF	0%
								CO	7446-09-5	0	1/2	Average	EF	0%
								PM	<<PM>>	0	1/2	Average	EF	0%
								SO <sub>2</sub>	7446-09-5	0	1/2	Average	EF	0%
GEN3	1240 KW Diesel Generator	4.8	446.1	0.20	17.2	9.0	(48844, 5065744)	NO <sub>2</sub>	10102-44-0	0	1/2	Average	EF	0%
								CO	7446-09-5	0	1/2	Average	EF	0%
								PM	<<PM>>	0	1/2	Average	EF	0%
								SO <sub>2</sub>	7446-09-5	0	1/2	Average	EF	0%
MILL	Exhaust gases piped to Mill Building for Dryer and exhausted from Mill Building - not in operation	N/A	N/A	N/A	N/A	N/A	N/A	NO <sub>2</sub>	10102-44-0	0	1/2	Average	EF	0%
								CO	7446-09-5	0	1/2	Average	EF	0%
								PM	<<PM>>	0	1/2	Average	EF	0%
								SO <sub>2</sub>	7446-09-5	0	1/2	Average	EF	0%

Emissions Summary Table - Genset building as point source, mill building as virtual source

Scenario 1 - During Normal Mill Operation - Three generators in operation, one on standby. Hot exhaust gases from generators piped to Mill Building

Contaminant	CAS No.	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (ug/m <sup>3</sup> )	Averaging Period (hours)	MOE POI Limit (ug/m <sup>3</sup> )	Limiting Effect	Regulation Schedule# <sup>1</sup>	Percentage of MOE POI Limit (%)
NO <sub>2</sub>	10102-44-0	8.75	Appendix to Regulation 346	419.1	1 / 2	500	Health	Schedule 2	84%
CO	7446-09-5	0.72		35.3		6000	Health	Schedule 2	<1%
PM	<<PM>>	0.05		2.1		100	Visibility	Schedule 2	2%
SO <sub>2</sub>	7446-09-5	0.17		7.7		830	Health	Schedule 2	<1%

Scenario 2 - During Mill down time - Only one generator is in operation to run auxillary equipment

Contaminant	CAS No.	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (ug/m <sup>3</sup> )	Averaging Period (hours)	MOE POI Limit (ug/m <sup>3</sup> )	Limiting Effect	Regulation Schedule# <sup>1</sup>	Percentage of MOE POI Limit (%)
NO <sub>2</sub>	10102-44-0	2.92	Appendix to Regulation 346	74.6	1 / 2	500	Health	Schedule 2	15%
CO	7446-09-5	0.24		6.2		6000	Health	Schedule 2	<1%
PM	<<PM>>	0.02		0.5		100	Visibility	Schedule 2	<1%
SO <sub>2</sub>	7446-09-5	0.06		1.5		830	Health	Schedule 2	<1%

Note:

1. Schedule 2 - O.Reg. 419/05 Schedule 2 Standards to be used with dispersion models in the Appendix to Regulation 346

Emissions Summary Table - at Special Receptors

Scenario 1 - During Normal Mill Operation - Three generators in operation, one on standby. Hot exhaust gases from generators piped to Mill Building

Contaminant	CAS No.	Total Facility Emission Rate (g/s)	MOE POI Limit <sup>1</sup> (ug/m <sup>3</sup> )	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)
				Algonquin Park (651585, 5066841)		Shawanaga FN (572378, 5029210)		Dokis FN (574803, 5108903)	
NO <sub>2</sub>	10102-44-0	8.75	500	46.1	9%	0.41	<1%	0.40	<1%
CO	7446-09-5	0.72	6000	3.9	<1%	0.03	<1%	0.03	<1%
PM	<<PM>>	0.05	100	0.2	<1%	0.002	<1%	0.002	<1%
SO <sub>2</sub>	7446-09-5	0.17	830	0.9	<1%	0.01	<1%	0.01	<1%

Scenario 2 - During Mill down time - Only one generator is in operation to run auxillary equipment

Contaminant	CAS No.	Total Facility Emission Rate (g/s)	MOE POI Limit <sup>1</sup> (ug/m <sup>3</sup> )	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)	Maximum POI Concentration (ug/m <sup>3</sup> )	Percentage of MOE POI Limit (%)
				Algonquin Park (651585, 5066841)		Shawanaga FN (572378, 5029210)		Dokis FN (574803, 5108903)	
NO <sub>2</sub>	10102-44-0	2.92	500	22.8	5%	0.2	<1%	0.2	<1%
CO	7446-09-5	0.24	6000	1.9	<1%	0.02	<1%	0.02	<1%
PM	<<PM>>	0.02	100	0.2	<1%	0.001	<1%	0.001	<1%
SO <sub>2</sub>	7446-09-5	0.06	830	0.5	<1%	0.004	<1%	0.004	<1%

Note:

1. Schedule 2 - O.Reg. 419/05 Schedule 2 Standards to be used with dispersion models in the Appendix to Regulation 346

# **Appendix D**

## Acoustic Assessment

**Environmental Screening Report**  
**Ontario Graphite- Kearney Mine**  
**Acoustic Assessment**

*Introduction*

Ontario Graphite Limited (OGL) is proposing to restart mining activities at its proposed site in Kearney, Ontario in 2012. Permanent generator sets are planned for installation inside the existing on-site Generator Building (see **Figure 1-1**). This section presents an assessment of noise emissions derived exclusively from operation of the generators. Predictive acoustical modelling was carried out to estimate the influence of three (3) simultaneously operating diesel generators on the sound level at the nearest hunting and trapping cabins to the Mine site. The potential for adverse environmental effects due to noise emissions were assessed by comparing the model predictions to Ontario Ministry of the Environment (MOE) noise guidelines. The analysis also included recommendations for mitigation measures to limit the maximum sound power level from each noise source (generator exhausts and generator building cladding) to achieve compliance with the MOE noise guidelines.

*Process Description*

The generator sets will be used to provide power to process equipment such as pumps and compressors, and for heating/lighting of the various Mill site buildings. The Mill building process equipment is projected to operate for 24 hours per day, and four (4) generators will be installed with a maximum theoretical power output of 4.96 MW. During normal operation, three generators will be running with the fourth on standby. The majority of the exhaust gases from the generators (17,600 kg/hour, or approximately 70% of the mass flow rate) will be used for drying the graphite with the balance being emitted from individual generator exhaust stacks. The noise associated with the drying process was not included in the screening analysis as this source would be dominated by dryer (and associated dust collector) noise rather than the electrical generators.

This acoustic screening analysis considered an operating scenario with three (3) Cummins 1500DQGAB (or equivalent) generators, rated at 1.24 MW each, running for 24-hours per day (with the fourth on stand-by). It was assumed that three (3) individual exhaust stacks 9.0 m above the roof of the generator building will be used to exhaust the portion of the generator exhaust that is not used in the graphite drying process. The fourth stack for the standby generator was not modelled.

Points of Reception:

The nearest PORs to the Kearney Graphite Mine are located within 1000 m of the property boundary to the south, east, and northeast in wilderness areas. Three (3) of the receptors are seasonally occupied and have single-storey heights, and one (1) was placed along the property boundary of Algonquin Park. The nearest First Nations community (Dokis First Nations) was also included in the assessment. The location of the nearest POR is illustrated in **Figure 1-1**. The PORs, their descriptions, and the heights considered for the modelling and assessment are summarized in **Table 1-1**.

POR01 is located north-east of the Mine property, and it was confirmed by Ontario Graphite staff that there is seasonal activity at this cabin, including personal truck and snowmobile traffic. POR02 is located on a small piece of land directly east of the Mill Site, on the south-east edge of Graphite Lake. The individual who owns this cabin has an agreement in place with Ontario Graphite to maintain the trapping cabin, which is occupied at various times throughout the year. POR03 is located south of the Polishing Pond, and Ontario Graphite staff confirmed that this cabin has been occupied at various times by hunting parties. The three receptors are considered seasonal residences and are only occasionally occupied. It is unknown when the cabins will be occupied during the Mine operation (expected to commence in 2012). Therefore this assessment was conducted by conservatively assuming they will be continuously occupied.

POR04 is a receptor located northeast of the Site on the Algonquin Park (AP) property boundary, at the nearest point to the Kearney Mine. A single-storey receptor was placed at this point and was also included in the modelling assessment. POR05 represents the Dokis First Nations community located to the northwest of the Mine, which is the closest First Nations community to the project site.

**Table 1-1**      **Nearby Points of Reception to the Kearney Graphite Mine**

POR ID	Description	Location	Estimated Receptor Height (m)
POR01	One-storey cabin	Approximately 400 m northeast of the Kearney Mine property boundary	1.5
POR02	One-storey trapping cabin	Located approximately 300 m east of Mill Site	1.5
POR03	One-storey hunting cabin	Approximately 350 m south of the Kearney Mine property boundary	1.5
POR04	Algonquin Park property boundary	Closest point to Kearney Mine (located approximately 1500 m northeast of Kearney Mine property boundary)	1.5
POR05	Dokis First Nations Community	Located approx. 50-km NW of Kearney Mine	1.5

Performance Limits:

The nearest sensitive PORs to the Kearney Graphite Mine are located less than 1 km from the property boundary to the west, east, and south. Based on analysis of satellite imagery and zoning information, the acoustical environment around the PORs was designated as Class 3: an acoustical environment that is dominated by natural sounds having little or no road traffic. This description accurately reflects the site location, not including the presence of the Mine and related activities. Therefore, the MOE's exclusionary limits were applied as outlined in NPC-232, "*Sound Level Limits for Stationary Source in Class 3 Areas (Rural)*."

The MOE Class 3 guidelines outlined in NPC-232 require that the one-hour equivalent sound level ( $L_{eq}(1)$ ) in A-weighted decibels (dBA) from stationary sources cannot exceed the lowest background sound levels at a noise-sensitive location. This is applicable where the background sound level is caused by sources other than those under assessment, such as road and plane traffic, sounds of nature, and other noise-compliant industries. This requirement is based on the premise that source-generated noise is noticeable and considered annoying when it exceeds the ambient environmental noise climate.

The applicable performance limits used to assess compliance in the acoustic assessment are presented in **Table 1-3**.

**Table 1-3 Sound Level Limits for the Class 3 Areas- Kearney Graphite Mine**

Time of Day	NPC-232 Class 3 Exclusionary Limit (dBA)	Applicable Performance Limit (dBA)
Day-time (07:00h – 19:00h)	45	45
Evening (19:00h – 23:00h)	40	40
Night-time (23:00h – 07:00h)		

The Mine will be operational for up to 24 hours per day, so the limiting condition will be performance associated with night-time operation. The predicted noise impacts at the PORs during the predictable worst-case operations of the Mine cannot exceed 40 dBA.

### Modelling Scenario:

A predictive analysis was performed using the commercially available software package CADNA/A, a computerized version of the algorithms contained in the ISO 9613-1 and 9613-2 standards. For the analysis, three (3) generator sets were assumed to operate for one full hour at maximum capacity during the predictable worst case night-time hours. Furthermore, this model accounted for:

- Source sound power levels;
- Source locations and geometrical divergence (distance attenuation);
- Barrier effects due to intervening structures;
- Ground effects and atmospheric absorption; and,
- Meteorological effects.

The model considered a downwind condition, in which for the purpose of this analysis, the wind was always directed from each source location to each POR location. Topography was included in the model to account for the variable topographic profile in the subject area. Shielding and obstacles contained in the model were those associated with the Mill Site buildings; detailed screening effects due to other smaller obstacles were not included.

The generator building stack will emit sound directly into the environment from a stationary point and was therefore modeled as a point source. The generator engines will be installed inside the existing generator building, and the casing-noise was included in the assessment as being emitted by the outer surface areas of generator building (a vertical area source). Sheet steel transmission losses were applied to the generator building walls.

The Mine and surrounding ground surfaces were modeled considering the composition of the ground: gravel (which diffuses sound into different directions) and grass (absorptive), in addition to the presence of some water bodies. Typical northern Ontario meteorological values, such as average annual temperature of 5°C and a relative humidity of 70%, were used to initialize the CADNA/A model.

### Model Results:

The modelling approach for this Environmental Screening Report included determination of the maximum sound power level permissible at each source such that the facility could operate in compliance with MOE guidelines. The maximum overall sound power level at each source was determined using a predictive analysis according to ISO 9613-2 (the CADNA/A model). Preliminary design indicates that each of the three generators will be rated at 1.24 MW, and manufacturer's sound level data were used. The octave band data were obtained from Cummins for the units recommended to Ontario Graphite (model 1500DQGAB or equivalent generators). Based on the analysis, the maximum permissible sound power level and required level of noise control were

estimated, and the results are presented in **Table 1-4**.

**Table 1-4 Acoustic Screening Source Summary Table**

Source ID	Source Description	Actual Overall Source PWL (dBA)	Required Maximum Allowable PWL (dBA)	Predicted Attenuation Requirement (dBA)
S01 to S04	Generator Building-Exhaust (each)	138	102	36
S05	Generator Building-Casing (combined)	106	96	10

The analysis indicated that POR02 is the most sensitive receptor and noise mitigation will be required to achieve compliance with the MOE guidelines. Each of the generator exhaust stacks will require a silencer providing a minimal overall attenuation of 36 dBA, and the generator building will require mitigation with sound attenuating material that provides a minimum overall attenuation of 10 dBA. An appropriate silencer should be selected following confirmation of the generator make and model that will be installed. The estimated sound level at each receptor with the recommended noise mitigation measures in place are presented in **Table 1-5**.

**Table 1-5 Acoustic Screening Sound Levels at Identified Receptors**

Receptor	Performance Limit (L <sub>eq</sub> , dBA)	Predicted Unmitigated Sound Level (dBA)	Predicted Sound Level with Noise Control (dBA)
POR01	40	56	16
POR02		76	39
POR03		50	<10
POR04		49	<10
POR05 <sup>1</sup>		Negligible	Negligible

**Notes:**

- (1) Based on the distance to the Dokis First Nations community (located > 50 km from the Mine), the noise level was assessed to be inaudible.

### Conclusions

An acoustic assessment was conducted to estimate emissions derived exclusively from operation of the Generator Building at the OGL Kearney Mine. Predictive acoustical modelling was carried out to estimate the influence of three (3) simultaneously operating diesel generators on the sound level at the nearest receptors to the Mine site. The results of the acoustical modeling demonstrated that emissions derived from simultaneous operation of the diesel generators can meet the MOE guidelines at all identified points of reception provided that recommended mitigation measures are implemented. At the nearest point to the Mine in Algonquin Park and at the nearest First Nations



reserve, the predicted noise levels due to normal generator operations are expected to be inaudible, relative to normal background noise levels.

With appropriate noise mitigation measures in place, no adverse noise effects are predicted for the Project.

### **References**

Bies, David, and Hansen, Colin. 2009. *Engineering Noise Control – Theory and Practice*, Fourth Edition. Published by Taylor and Francis, New York, NY, USA.

ISO 9613-1. *Acoustics – Attenuation of Sound During Propagation Outdoors*. “Part 1 Calculation of the absorption of sound by the atmosphere”.

ISO 9613-2. *Acoustics – Attenuation of Sound During Propagation Outdoors*. “Part 2 – General Method of Calculation”.

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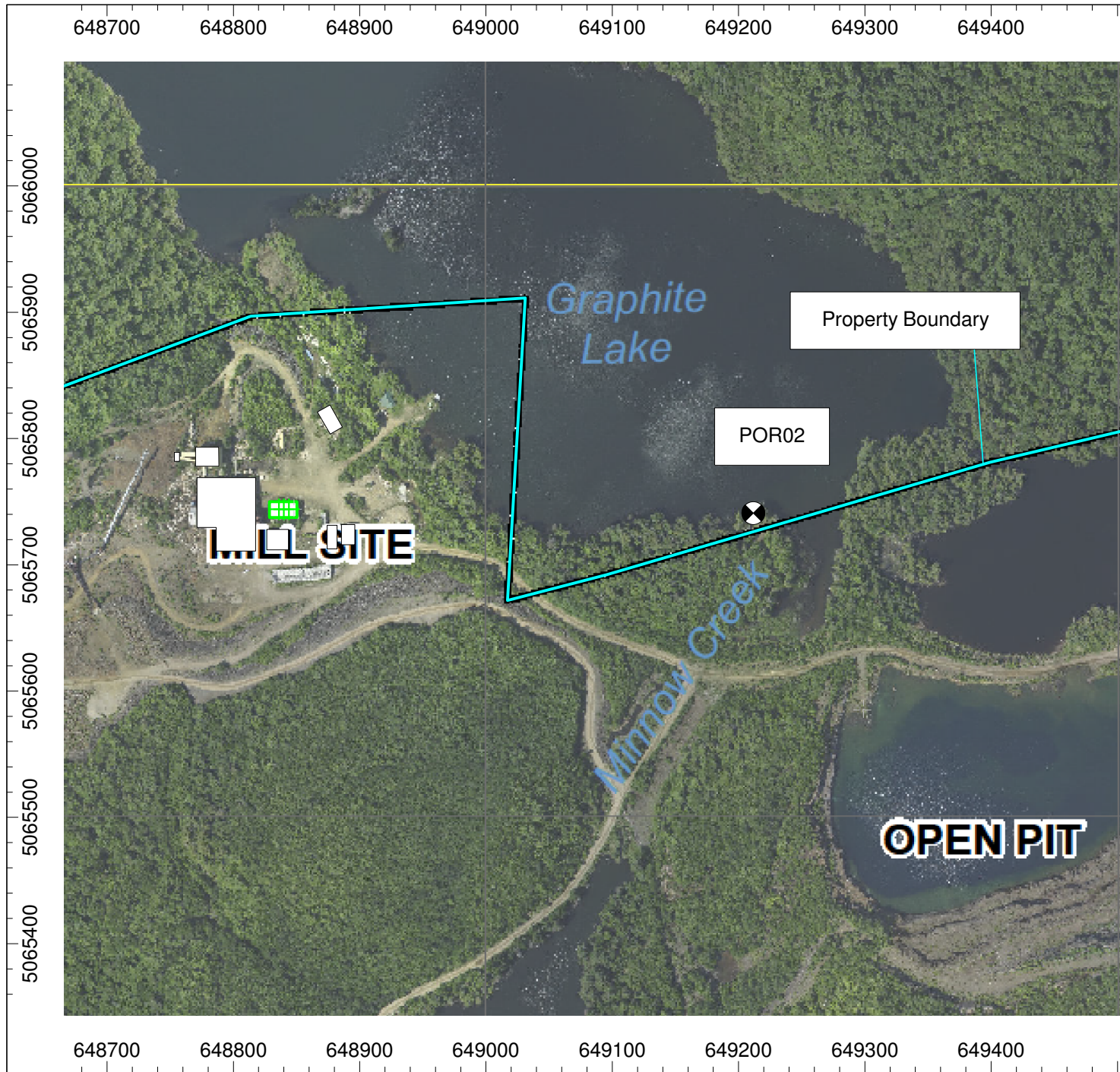
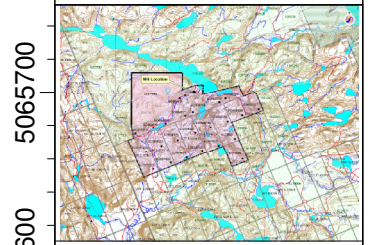


Figure: KM, February 2012  
 Review: GJC, February 2012

- + Point Source
- vert. Area Source
- Building
- Barrier
- Contour Line
- + Receiver

Project:  
 Ontario Graphite  
 Kearney Mine  
 (160923504, Task 507)



Study Area

Prepared For:  
 Ontario Graphite  
 Limited



Figure 1-1- Aerial Image of Mill Site and Nearest Sensitive Receiver (POR02)